

**Proceedings of the 15th Asian Bioethics
Conference (ABC 15)**

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12th Asia Pacific Conference (APC 12)

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**Ritsumeikan Asia Pacific University (APU),
Beppu, Japan (November 1-3)**

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**Kumamoto University, Kumamoto, Japan
(November 6-9)**

Disclaimer: This is a tentative collection of the summary papers of APC 12 and ABC 15 presentations to be made in November 1-3 at APU and November 6-9 at Kumamoto University. While it is hoped that all presentations within the ABC will be made as scheduled, there is a possibility that some will not happen and then be omitted from the Proceedings of the conference.

Notes from the Editor

The 12th annual Asia Pacific Conference at Ritsumeikan Asia Pacific University (APU) is being held in November 1~3, 2014 with the merging of two large conference panels: one of the 15th Asian Bioethics Conference (ABC 15) and the other as of Asia Pacific Conference (APC) which itself is comprised of subpanels on Sociology (APS) and Management (APM) in the Asia Pacific Region. This large gathering of researchers and academicians for an international conference at Ritsumeikan Asia Pacific University (APU) is unprecedented, and would not be possible without cooperation and collaboration between American University of Sovereign Nations (AUSN), Asian Bioethics Association (ABA), Eubios Ethics Institute, Kumamoto University, and Ritsumeikan Center for Asia Pacific Studies (RCAPS) at APU. It is a pleasure for all of us at APU to welcome our distinguished guests from all around the world who have come to discuss significant research and knowledge applications for improving the lives of all people.

The title of the conference in 2014 is “Ethics, Human Security and Sustainability: Knowledge and Practices in Asia Pacific”. Accordingly, the conference will be opened by a welcome speech by Professor Francisco P. Fellizar, Jr., Vice President for Research and International Cooperation at Ritsumeikan Asia Pacific University (APU) under the title of “Resources and Community Actions for Prosperity and Sustainability: A Shared Commitment for a Shared Future”. The text of this speech is included in the Proceedings (pages 4-5).

Also, many keynote speeches have been planned for the conference. On the first day, after the welcome speech, we shall have our first keynote speaker, Professor Aamir Jafarey, the current President of Asian Bioethics Association (ABA) presenting a keynote speech on “Bioethics Beyond Borders: Responding to Challenges of a Globalized World”. Other keynote speakers include Professor Akira Inoue from the Graduate School of Core Ethics and Frontier Sciences at Ritsumeikan University, Kyoto presenting a very interesting keynote speech titled as: “On Institutional Luck Egalitarianism”. Also Mr. Hitoshi Mizuta, Executive Officer at Nuclear Fuel, Nuclear Division of Kansai Electric Power Co., Japan will deliver a keynote speech on “Fukushima nuclear accident and the Post-Fukushima energy issues”. The abstracts of the three keynote speeches by Professor Aamir Jafarey, Mr. Mizuta, and Professor Inoue have been included at the end of this section. Professor Yoshiyuki Sankai, from the Graduate School of Systems and Information Engineering, University of Tsukuba will deliver the last keynote speech of the conference on November 3 titled as “Leading Edge of HAL: Fusion of Human, Robot and Information Systems”. Let me thank Professor Miyako Okada-Takagi from University Research Center at Nihon University, Japan for kindly arranging for the two keynote speeches by Professor Sankai and Mr. Mizuta.

The Conference includes presentations that target a wide range of issues in an ever globalizing world. There will be scholars from about 40 different countries of the world. We welcome everyone from any region of the world, regardless of age, gender, religious beliefs, and philosophy, to engage in a dialogue on research and policy to make the world a better place for all ...

We have attempted to invite senior as well as junior researchers and graduate students to a dynamic discussion in the hope that they will start drafting research papers for publication before they leave the APU campus. All applicants to the Conference were asked to submit an ‘abstract’ of the research they had planned to present at the conference. The abstracts were screened and reviewed by experts in the related fields, and published in two collections as the Book of Abstracts of ABC 15 & APC 12, respectively. At the next stage, the applicants whose abstracts had been accepted for presentation were asked to submit a ‘Summary Paper’ to be edited, formatted and published in the Proceedings of the Conference. It was decided that only the summary papers, with about 1,000~3000 words, would be included at the proceedings, but not presentations with ‘only an abstract’ which were about 150-250 words.

From among more than 170 presentations scheduled in the conference, 85 of them were supplemented with the summary of the paper before the deadline, and thus appear here at the Proceedings of the 2014 Conference. They have been arranged under 8 themes/sections which include: 1- Society, Culture, Media & Ethics; 2- Ethics of Healthcare, Medical Ethics; 3- Environment, Environmental Ethics, Environmental Sustainability, Ecotourism; 4- Education, Education for Sustainability, Ethics Education; 5- Ethics of Disaster, Peace and Conflict, Conflict Resolution, Peace and Democracy; 6- Science and Technology, Science for Sustainability, Ethics of Science and Technology; 7- Philosophy of Justice, Society and Sustainability, Ethics Philosophy; and 8- Ethics and Law, Public Policy and Society, Economy and Society.

Here I would like to mention the names of all our chairmen and thank them for their pure and sincere support of this great annual academic endeavor at Ritsumeikan Asia Pacific University (APU). The following list mentions the names of the said faculty members, arranged alphabetically by their given names:

A. Mani, Professor, APU
Aamir Jarafey, Professor, Sindh Institute of Urology & Transplantation (SIUT)
Ali Haidar, Professor, APU
Darryl Macer, Professor, American University of Severaign Nations (AUSN)
Davar Pishva, Professor, APU
Francisco P. Fellizar, Jr., Professor, APU
Gi-Seung Kim, Professor, Pusan National University
Giguruwa G.D. Nishantha, Associate Professor, APU
Hidetaka Yoshimatsu, Professor, APU
Ken Arii, Associate Professor, APU
Miyako Okada-Takagi, Professor, Nihon University
Munim Kurai Barai, Professor, APU
Nader Ghotbi, Professor, APU
Sangho Kim, Professor, APU
Takao Takahashi, Professor, Kumamoto University
Timothy Lee, Professor, APU
Xuepeng Qian, Associate Professor, APU
Yasushi Suzuki, Professor, APU
Young-Jae Kim, Professor, Pusan National University
Yukiko Takashiba, Assistant Professor, APU

Again, I am pleased to announce that all the researchers who attend the AP Conference 2014, specially those who have submitted a summary version of their research paper, are welcome to submit to us the 'Full Paper' of their presentation for publication at the next issue of "Ritsumeikan Journal of Asia Pacific Studies (RJAPS)". Because their research has already been screened and accepted for presentation at the conference, the review process would be simpler and mainly consist of an editorial check to confirm that the structure and format of the paper follows the guidelines announced in the homepage of the RCAPS as well as in the RJAPS 'Notes for Contributors'. Any issues in the full paper that would require revision would be communicated to the authors through the RCAPS office after consultation by the reviewer and the chief editor of the RJAPS. Authors who would prefer to submit their work to any other journal are also free to do so and the AP Conference 2014 does not hold any copyright claims over the research papers presented at the conference or published as a summary paper in its proceedings.

Let me also express my appreciation for all the support and assistance we received from the APU faculty and the staff of the Research Office, specially its Manager Mr. Kataoka, Mr. Iwayama, Mr. Tau, and Ms. Abe from the RCAPS division as well as other members of the Research Office. This would have not been possible without your work. There were other APU faculty and office staff who in one way or another helped with this conference though I could have not mentioned all their names. We are also grateful to all the researchers and scholars who responded to our conference call and came all the way to the beautiful city of Beppu in Kyushu, Japan.

As for my own efforts in compiling and editing this collection, I would like to dedicate it all to the pioneer in Asia Pacific Studies, Professor Sakamoto, the first president of APU who also founded RCAPS and appreciated its position in research. Thank you!

And thank you all ...

Nader Ghotbi, MD, PhD
Director, Ritsumeikan Center for Asia Pacific Studies (RCAPS)

Bioethics Beyond Borders: Responding to the Challenges of a Globalized Worlds

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Abstract

Despite obvious differences and divisions on geographic, religious, ethnic, economic and numerous other grounds, we are all citizens of one world. Ease of travel and inexpensive communication have shrunk distances and we remain interconnected in numerous ways. We cannot remain dissociated with happenings even in the remotest corners of the globe since they may affect us in ways beyond the limits of our present vision, making it imperative to embrace the challenges of this rapidly globalized world.

Bioethics empowers us in many ways to do just that. It bridges divides and creates a space where the commonality of issues can be discussed and debated. This is important since seemingly regional problems have a global impact. Poverty, lack of healthcare and illiteracy, although ostensibly someone else’s problems, can morph into global threats and should be regarded as global responsibilities.

This presentation will use the example of two apparently local problems, which were neglected for long and now threaten the world, in their own different ways. Just a few years ago Polio and Ebola seem to have nothing in common except that they were infectious diseases that struck the poor, in remote areas of the world. And now they are headline news across the world.

The presentation examines ethical issues that have emerged in the wake of these threats, and the responsibilities of the world community towards tackling them.

In a globalized world, burdens need to be shared. Our efforts to mitigate suffering should not surface only when things spiral out of control, but much before that, to mitigate their occurrence in the first place.

Fukushima nuclear accident and the Post-Fukushima energy issues

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Abstract

In the TEPCO’s Fukushima Daiichi accident in March 2011, the loss of off-site power supply caused by the earthquake and the loss of on-site power supply caused by the ensuing tsunami resulted in a ‘Station Blackout’. This resulted in the failure of safety systems and thus developed into a severe accident (SA) with core melting.

We, nuclear licensees, learned the following three big lessons from the accident:

- 1) Countermeasures toward SA of low probability may have been inadequate,
- 2) The attitude to enhance safety and to stay ahead of the regulatory requirements may have not been strong enough, and
- 3) Voluntary measures to improve safety through learning world best practices may have not been enough.

Therefore, we have been enhancing safety through implementing emergency safety measures since the accident, such as diversifying emergency power supplies, diversifying cooling functions, and improving anti-flooding systems. We are also implementing measures to conform to the new regulations established after the accident. The Nuclear Regulation Authority is currently reviewing the conformity of nuclear power plants (NPPs) to new regulations, but as yet no power plant has passed their review.

Given the circumstances, the supply from NPPs which had been 30% of the total demand until the earthquake was substituted with that from thermal power plants. As a result, dependency on imported fossil fuels, fuel prices and CO₂ emissions have increased. Namely, *e*nergy security, *e*conomy, and *e*nvironmental conservation –“3Es”- have been damaged.

There has been an emphasis on supply from renewable energy sources such as solar and wind since the accident and the utilities are actively developing the renewables. However, they cannot be sufficient alternatives for nuclear energy associated with their low availability and low energy density. From this viewpoint, nuclear power generation is imperative for Japan to restore the “3Es”, with securing safety as its essential premise. We continue to make every effort to restart NPPs timely through a verification of compliance to the new regulations.

On Institutional Luck Egalitarianism

Akira Inoue

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Abstract

Distributive justice has attracted a lot of attention in political philosophy and ethics, and in recent years, ‘luck egalitarianism’ has become a salient theory of distributive justice. Luck egalitarianism fundamentally supports the idea that luck is a responsibility-undermining factor in distributive justice: inequalities influenced by luck are of the non-responsible type while those reflecting choice are of the responsible type. This theory seems of much relevance in considering unjust inequality in the Asia Pacific region and the global context since unchosen inequalities are rampant there. However, more recently, luck egalitarianism has been challenged by many critics:

First, it seems dubious that we should draw a line between luck and choice. This is what we can call “the metaphysical challenge.”

Second, luck egalitarianism has counterintuitive implications when applied in practical contexts. For example, it is too harsh in ways that hold people fully responsible for the consequences of their own choice even in cases where they are extremely worse off (the harshness objection). Also, it is humiliating to allow the authorities to publicly help the worse off simply because they are congenitally untalented (the humiliation objection). Moreover, it seems ridiculous to allow “a proliferation of entitlements” in ways that victims of any bad luck, such as looking ugly, should be compensated (the too leniency objection). It seems that these practical implications run contrary to our intuition. This is what we can call “the practicality challenge.”

Recent luck egalitarians attempt to defend their position, mainly by responding to the practicality challenge. In so doing, they appeal to moral pluralism, based on which the counterintuitive implications of luck egalitarianism can be evaded because relevant policies are determined by not just luck egalitarian justice, but also other morally relevant considerations, such as a consideration of humanitarianism. Among them, Kok-Chor Tan provides a most sophisticated pluralist argument for luck egalitarianism — institutional luck egalitarianism — which can allegedly ward off the metaphysical challenge. My paper argues that Tan’s argument for institutional luck egalitarianism is not successful.

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Resources and Community Actions for Prosperity and Sustainability: A Shared Commitment for a Shared Future

Francisco P. Fellizar, Jr.

Vice President for Research and International Cooperation; Professor, Ritsumeikan Asia Pacific University (APU)

Good morning and a warm welcome to all of you. For and in behalf of the entire faculty, staff, students and officials of the Ritsumeikan Asia Pacific University (APU) allow me to extend my appreciation for your presence and kind acceptance of our invitation to participate in the 12th Asia Pacific Conference on the theme: “Ethics, Human Security and Sustainability”. We are especially thankful for the Asian Bioethics Association for jointly holding their conference with us. Again, welcome to the multi-cultural campus of APU. Enjoy the sights and the healthy environment. Experience the hot springs, the pride of Beppu, the warm hospitality of the people, and the festive atmosphere in the campus.

Let me thank as well the organizers of the Conference, Prof. Ghotbi for his untiring and steadfast leadership, the staff who ably worked out the details of this gathering, the members of the Ritsumeikan Center for Asia Pacific Studies (RCAPS) Steering Committee for their wisdom and guidance, and to the officers and faculty members of the University for their support and encouragement.

Ritsumeikan Asia Pacific University (APU) was established on 01 April 2000 through the joint efforts of the Ritsumeikan Trust, the people of Beppu City and Oita Prefecture together with other individuals and organizations within and outside Japan. Its creation was based on the “vision of freedom, peace and humanity, international understanding, and the future shape of the Asia Pacific Region.” Since its creation, the University has graduated thousands of students who have found their professional and academic niche around the world. Currently, we have 5,745 students (Domestic 3,245, International 2,500) with 44% international students coming from nearly 90 different countries and regions. Fifty percent of our faculty members are foreigners, making us a truly international and multi-cultural campus. Just recently, we have been chosen by the MEXT, the Education Ministry of Japan as one of the top 37 super global universities in Japan, a distinction and pride we want to keep and build upon.

This year’s conference, just like those in the past is our commitment to uphold the belief of APU, “*that co-existence between mankind and nature, as well as between diverse cultures, will be indispensable for the peaceful and sustainable development of the Asia Pacific Region.*” Further, the University aims “*to nurture the young talent and to create a new academic discipline which will help shape the region’s future.*” For these, the Ritsumeikan Center for Asia Pacific Studies was established specifically to: “*establish the field of Asia Pacific Studies and become the global hub in that field.*”

We gather here for the next few days to share our knowledge, experiences and even our dreams in the hope of shaping and securing a desirable and sustainable future for us and for the rest of the world. We all desire a prosperous and peaceful society not only for now but for the long term; and not only for the select and powerful few but for all.

However, our journey could be daunting, fraught with uncertainties; the road is hewn with complex issues and challenges where the only constant is ‘change’. Yes, we live in days of constant changes, of which the scale, magnitude and speed are unprecedented. Think of the threats of climate change, and the pressures of globalization as far as their impacts to societies and resources. In fact, we can expect that in the next five decades, there will be a more pervasive influence of technological innovations, rapid growth of emerging-markets and demographic changes such as aging and massive urbanization.

By 2025, emerging markets will have been the world’s prime growth engine for more than 15 years; China will be home to more large companies than either the United States or Europe, and more than 45 percent of the companies on Fortune’s Global 500 list of major international players will hail from emerging markets—versus just 5 percent in the year 2000. The global urban population is growing by 65 million a year, and nearly half of global GDP growth between 2010 and 2025 will come from 440 cities in emerging markets. All these will influence the way we think and act as individuals, as communities and as nations.

This Conference, I hope, is an affirmation of our shared vision for a shared future. We desire a world of prosperity not only for now and for those living it now but also for the next generations. Prosperity is “*synonymous with wealth, success, profitability, affluence, riches, opulence, the good life, (good) fortune, ease, plenty, welfare, comfort, security,*

and well-being.” Prosperity is largely associated with productivity, protection, peace and safety, property, and provisions for life and dignity, the very cores and threads of human security. The question before us is: Is a prosperous society still possible? If it is, can it be sustained? We dream of a world not only where there is prosperity but one that is sustainable. However, for some the pursuit of prosperity and sustainability remains wishful thinking and elusive dream. How do we stand in this issue? Are we still hopeful? Your presence is a testimony to the belief that prosperity and sustainability are possible. I hope I am not seriously mistaken or being overly presumptuous. I do believe that together the issues at hand could be difficult but not impossible; they are complex but not insurmountable.

What we need are actions, not singly but collectively. We are all in this together as we share the same earth and common aspirations. In this conference we shall examine the actions we have done and those needing to be done. We shall look at the governance and institutional initiatives, the policies and programs and other activities aimed at creating a sustainable and prosperous society. We shall share how much knowledge and information got into the shaping and implementation of such actions. As members of the epistemic community are we able to influence decisions and actions? While we hold information, are they able to transform? While we have publications, how many of these lead to public actions? Ours is a shared responsibility and commitment.

As a community of scholars, we have to think and be concerned with the bigger sets of community we are to serve and work with. After all we are global citizens and at the same time members of local communities. We desire a shared community where individual rights are upheld, diversity is embraced, and mutual cooperation exists. We will examine community values, abilities, aspirations, structure and networks. We need to understand the factors related to community’s capability and vitality, particularly the manner they manage the natural resources and how they cope with external forces and influences. How can we enable communities to work together and make a sustainable and prosperous society possible? This conference I hope will give us more and clear insights on these paramount concerns.

We live in a shared earth. Human communities are dependent on the same earth’s resources that are essential for life and well-being. What is the current status of global natural resources? Are communities’ demands and consumption levels within the biological capacity of the natural resources? More specifically, what about the humanity’s ecological footprint and earth’s biological capacity? Studies have shown that *“for more than 40 years, humanity’s demand has already exceeded the planet’s bio-capacity and that 1.5 Earths would be required to meet the demands humanity currently makes on nature.”* What are the implications of this to achieving prosperity and sustainability?

RCAPS is doing its share. It seeks to contribute to promoting sustainability and prosperity by understanding the nature and consequences of community-resource interactions, including the actions or activities being done and/or to be done and their consequences at the same time exploring new research approaches and strategies. In effect, RCAPS can also be stated as focusing on *“Resources and Community Actions for Prosperity and Sustainability.”* This is our shared commitment for a shared future. Underpinning this are ethical considerations without which a prosperous and sustainable society may not be attainable.

What will all these require from each of us? *“Where you stand depends on where you sit”*. We may look at the same things but see them differently. We have to examine our own values and orientations. As we are confronted with a myriad of complex and inter-related issues we need to re-calibrate our disciplinary lenses. We may need to go beyond the confines and comforts of our disciplinary boundaries and seek ways of effectively working together based on an evolved and common framework. These would require no less than changing our mindset remembering these words from Albert Einstein: *“We cannot solve the same problems with the same minds that created them.”*

Let me close with the hope that we can sail the waves of change with the same resolve as that of Ralph Waldo Emerson when he said: *“Do not go where the paths may lead, go instead where there is no path and leave a trail.”*

Thank you and have a wonderful and meaningful time in APU!

Society, Culture, Media & Ethics

No Charity, but a Chance! The challenge of “Japan Sun Industries” in realization of a society which preserves the dignity of human beings

Dr. Taro NAKAMURA

President of Japan Sun Industries, Beppu, Japan

Abstract

At the closing ceremony of the 1964 Tokyo Paralympics, Dr. Yutaka Nakamura, the founder of Japan Sun Industries (JSI), was determined that “the days of giving charity were over” and, from that moment, “independence and active participation in society through employment were key”. Japan Sun industries was established one year later at the 1964 Tokyo Paralympics and, since then, has continued to provide opportunities to people with disabilities. Dr. Yutaka Nakamura dedicated his passion to hold the Paralympics in Tokyo 1964 to the spreading and promotion of ‘sports of the disabled’. The event succeeded but he was not satisfied and was rather depressed. He noticed a difference between disabled ‘participants’ from other countries and Japanese participant who appeared like ‘patients’. Participants from other countries had jobs and were independent, and thus filled with confidence, while the Japanese participants were dependent on caregivers. JSI was started with 16 people with disabilities, with the purpose to create jobs for people with disabilities and help them gain their true independence. JSI believed that “even if they have disabilities, it does not mean that they do not have the ability to work”. JSI has supported them to create an environment conducive to working and living by themselves. JSI is now a place where people with disabilities work, live and enjoy life. They participate in the local community as other local citizens. Since 1964, the rights for disabled people has come a long way and now, 50 years later, Tokyo has been chosen again to hold the Olympic/Paralympics in 2020. The JSI group which started with 16 people with disabilities now has over 1,200 people with disabilities and over 600 supporting staff in Oita prefecture, Aichi prefecture and Kyoto, Japan.

Introduction

No charity, but a Chance! of Japan Sun Industries (JSI) is a place where people with disabilities work and live. Since 1965 when JSI was established, JSI has been working to create jobs for people with disabilities and a lot of people succeeded to return to the society. “Even though they have disabilities, it does NOT mean that they do not have abilities to work”. JSI has supported them to create universal environment work condition at their work and it has been successful in manufacturing, manual labor, assembly-line work, even skilled work and brain work.

JSI established joint venture companies with Omron, Sony, Honda, Mitsubishi Corporation, Denso and Fujitsu. These companies employed a lot of people with severe disabilities, as well as the people with severe disabilities. JSI has its headquarters in Beppu city and branches in Hiji city and Kitsuki City in Oita prefecture, also in Aichi Prefecture and Kyoto Prefecture.

JSI headquarter is located in Kamegawa, Beppu city. Kamegawa is a small residential area in Beppu city. JSI is surrounded by houses all around. JSI was not established in a remote area just for the sake of cheap land but in a community where people “live” as they are also a part of the society. In those communities an infrastructure exists which helps in creating a comfortable and easy life for both people with and without disabilities. The surrounding area of JSI has all the facilities which include grocery shop, banks, clinic, sport center, hot springs etc.

JSI was established by the orthopedist Dr. Yutaka Nakamura in 1965. In 1961, JSI founder Dr. Nakamura was studying at Stoke Mandeville Hospital in England under the supervision of Sir Ludwig Guttmann who was known as the father of disabled sport. Dr. Nakamura was shocked that sport was incorporated into the rehabilitation program and doctors were working in cooperation with the people of various fields in order to support medical and social both rehabilitation for spinal cord injuries in Stoke Mandeville Hospital. He dedicated himself into the holding of 1964 Tokyo Paralympic and served as the head of Japanese team.

Through various experiences and the meeting with his supporters led him to the belief that the most necessary for people with disabilities was “to be independent with a job”. JSI (Japanese name is “Taiyonoie” which means “home of the Sun”) was established 1965 with the motto of “No Charity but a Chance!” and “Even if there are disabled people,

but there is no disability to work”.

However, it was not easy to provide enough work for them because most of Japanese believed that it was: “So Cruel for people with disabilities to work” in 1960s. Dr. Nakamura had been blamed by people, media and society. The first joint venture company OMRON Taiyo which manufactured modern mechanical products was established with the support by OMRON founder Mr. Kazuma Tateishi in 1972. Even Mr. Tateishi was not expecting that this company could make profit and it was one of CSR. But the result of the first year proved that people with disabilities had enough ability to make profit. With this success, JSI currently has 8 joint venture companies and over 1,000 employees who have disabilities and are working.

The other passion of Dr. Nakamura was promoting disabled sports. He dedicated to hold 1964 Tokyo Paralympics. The “Far East and South Pacific Games for the Disabled (FESPIC)”, currently called Asian Para Games and the International Oita Wheelchair Marathon were launched by his advocacy. On 23rd July 1984, Dr. Nakamura passed away at the age of 57, at the same time of the day when the International Stoke Mandeville Games Opening Ceremony was being held.

Discussion

The JSI’s 50th anniversary will be celebrated in 2015, and Tokyo Paralympics will be held in 2020. The 1964 Tokyo Paralympics triggered a movement to improve the life of people with disabilities. The period of time when people with disabilities were isolated and protected has ended. Since barriers between disabilities and non-disabilities have been removed and we have lots of chances to see people with disabilities in any places. Companies in Japan are obligated to maintain 2% employment rate of disabled people and lots of people with disabilities have become independent.

So what is the situation in your country for people with disabilities? The success of JSI would never happen without economic growth. If you are from a developing country, think about it. It is the time for improving their life.

JSI also supports the people with disabilities all over the world since JSI established. How can JSI participate and contribute to 2020 Tokyo Paralympics? I hope to receive any suggestion or collaboration idea with your country.

“The Yutaka Nakamura Memorial fund celebrates such a great conference here in Beppu City and is glad to have a chance to participate and support this event. The Yutaka Nakamura memorial fund was founded after Dr. Yutaka Nakamura passed away; he was an orthopedist who dedicated his life to the betterment of the lives of people with disabilities. This fund thus follows the goal of improving the life of all people with disabilities.”

A few words about Dr. Yutaka Nakamura

Dr. Yutaka Nakamura, the founder of Japan Sun Industries (JSI), was born in Beppu city, Oita prefecture. He graduated from Kyushu University in 1951 and entered the medical department of Kyushu University. He started his carrier as a researcher in the field of medical rehabilitation studies, which was an undeveloped field at the time, instructed by Emeritus Professor Amako Tamikazu (Kyushu University). Dr. Nakamura also studied at Stoke Mandeville Hospital in England, National Center for Spinal Cord Injuries under the supervision of Sir Ludwig Guttmann. Dr. Nakamura was astonished to observe that sport was incorporated into their rehabilitation program and doctors were working in cooperation with people at various fields in order to support both medical and social rehabilitation of patients with spinal cord injuries at Stoke Mandeville Hospital. This was in the wake of his passion for social participation of people with physical disabilities and their independence through work and sports in particular.



Late Dr. Yutaka Nakamura

He dedicated a lot of effort into the holding of 1964 Paralympics in Tokyo and served as the head of the Japanese team. Through various experiences and meeting with Chieko Akiyama (a famous commentator and radio personality), Tsutomu Minakami (an author) led him to the belief that the most important necessity for 'Persons with Disabilities' was "to be independent with a Job". Japan Sun Industries (in Japanese "Taiyonoie" meaning "home of the Sun", named by T. Minakami) was established in 1965 one year after the Tokyo Paralympics with the motto of "No Charity but a Chance" and "Even if they are disabled people, but there is no disability to work".

JSI established joint venture companies with Omron, Sony, Honda, Mitsubishi Corporation, Denso and etc., employing a lot of people with severe disabilities. JSI promoted the improvement of the working environment and the development and the implement of self-help tools for people with disabilities and has been successful in manufacturing, manual labor, assembly-line work, simple task, even skilled work and brain work. Dr. Nakamura advocated to Oita Prefecture the creation of an "urban development plan of welfare" around Kamegawa ward in Beppu city, where JSI headquarters is located, with the aim that people with disabilities would be actively involved in the community as one citizen rather than facing a closing door from the society.

The other passion of Dr. Nakamura was to dedicate his life to the disabled sports. Dr. Nakamura diligently persuaded his patients, doctors, physical education stakeholders, Oita prefecture office, and physically disabled people, etc. to establish "Oita Sports Association for the Physically Disabled Persons". In 22nd of October 1961, for the first time in the history of Japan, the First Oita Prefecture Physically Disabled Sports Competition was organized. The 1st Fespac (Far East and South Pacific Games for the Disabled) in 1979 and 1st International Oita Wheelchair marathon were launched in Oita through his advocacy. Fespac was held until 2006 with the 9th Fespac in Kuala Lumpur, Malaysia and then renamed as Asian Para Games. The International Oita Wheelchair Marathon succeeded it and has so far reached to its 34th event in 2014.

As a member of The International Society for the Rehabilitation of the Disabled (former International Rehabilitation), Dr. Nakamura also supported the holding of International Abilympics in 1981 and the 1st International Meeting on Leisure, Recreation and Sports for the Disabled (RESPO) in Aichi in 1984. As a medical doctor, he managed two hospitals which provided healthcare services from emergency medical care to medical rehabilitation. Also he served at International Paraplegia Medical Association as Vice-President from 1989~1983 and as the chairman of the Japan Medical Society of Paraplegia during 1979~1980.

On 23rd of July 1984, Dr. Nakamura passed away at the age of 57, at the same day and time when the Opening Ceremony of the International Stoke Mandeville Games was being held. All the participants of the Games from all over the world offered one minute of silence in honor of Dr. Yutaka Nakamura.

Analysis of citizen-based suicide prevention activities in Japan

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Abstract

Since 1998, suicide has been a major social problem in Japan. As observed in the slogan of WHO “*Suicide prevention is everyone’s business*”, all people must be involved in the prevention of suicide. However, there are still many barriers to the participation of the general public in the activities for suicide prevention. In this study, an analysis of the activities of the ‘Tokyo Life Line’ is offered as a case of suicide prevention activities by citizens. Through the interviews and questionnaires to the volunteers, the problems faced by volunteers in the activities were explored. This study attempts to discover measures for enhancing participation in the activities of suicide prevention by all citizens. ‘Tokyo Life Line’ is a volunteer organization that performs activities for suicide prevention by phone. It has been working for many years in the front lines of activity of suicide prevention in Japan. In Japan, there are several private organizations that perform suicide prevention activities. But Tokyo Life Line shows a pioneering presence among them. Their activities not only represent a civil movement, but also have caused a great deal of impact on the study of suicide prevention and the policy of suicide prevention in Japan. By clarifying the issues and effects of these activities, not only clues may be found to help identify the shortcomings of current countermeasures in Japan, but also valuable suggestions may be provided to change the direction of such countermeasures in the future.

Introduction

Since 1998, suicide has been a major social problem in Japan. As observed in the slogan of WHO and International Association for Suicide Prevention (IASP) “*Suicide prevention is everyone’s business*”; all people must be involved in the prevention of suicide. In Article 6 of the Basic Act for Suicide Prevention which was enacted in 2006, it was established that the understanding of the importance of suicide prevention and its countermeasures are the responsibility of the people in Japan. Also in 2007, the General Principles of Suicide Prevention was decided as a guideline for countermeasures of suicide prevention. There, it was stated that, “*the approach to encourage every people to play a leading role in suicide prevention is one of the fundamental concepts*” in the conduct of suicide prevention. However, prejudice and/or misunderstanding against suicide still remain among general public. In Japanese society, there are also deep-rooted voices that have doubts about the need for suicide prevention. These problems make difficulties for citizens to participate in the activities of suicide preventions.

Methodology

In this study, ‘Tokyo Life Line’ was taken up as a case for considering suicide prevention activities by citizens. ‘Tokyo Life Line’ is a volunteer organization that performs activities for suicide prevention by phone. It has been working for many years in the front lines of activity of suicide prevention in Japan. In Japan, there are several private organizations that perform suicide prevention activities. But Tokyo Life Line shows a pioneering presence among them. Their activities are not only a pioneer of civil movement, but also have caused a great deal of impact on the study of suicide prevention and the policy of suicide prevention in Japan.

A survey has investigated the volunteers and has clarified their motivations, reasons, and difficulties for participation in the activities at Tokyo Life Line. These findings would give valuable suggestions to consider for suicide countermeasures of citizens. The methods of survey include interviews and questionnaire from volunteers. The questions of the interviews and the items of the questionnaire were created with reference to the preceding study on counseling or telephone consultation. Questions were composed of a variety of items related to activities (reasons of participation, significance of the activities, fundamental policy of the activities, etc.). The questionnaires were filled

out anonymously, and the answers were treated statistically. In semi-structured interviews, I mainly listened to the joy of the activities, the difficulty of the activities, and also listened to the goals of the activities. The duration of the interviews was 1 to 2 hours per person.

Discussion

From the results of the survey, the volunteers were classified into two groups (Group A and B). The members of Group A were those who found meaning for the activities and got rewards. On the other hand, the members of Group B were confronted with difficulties on the activities. In this study, a discussion took place with a focus on the content of the difficulties of Group B. The difficulties encountered by Group B could be divided into the following two types:

First, volunteers could not understand about goals or purposes of the activities, and they were puzzled by it. For example, in involvement with the person in need of help (“the caller”), it is said that the involvement as “good neighbors” is important at Tokyo Life Line. But the opinion that they “*cannot understand the meaning of good neighbors*” was heard from many volunteers. Because they cannot find the way of appropriate response to the caller, they feel anxiety against their own correspondence.

Second, they were concerned about their attitudes toward the difficult caller (for example, having high suicidal ideation, having mental illness, etc.). They set some goals and expectations of changes in the caller though achievement of those goals is often difficult for the callers. The volunteers are puzzled because they cannot figure out the suitable aid and desirable correspondence toward the caller.

From the result of comparison between Group A and Group B, the difficulties of Group B seemed to result from the fact that they could not have consistent thoughts or beliefs as foundation of activities and support the activities. Because of the lack of consistent thoughts or beliefs, volunteers are strongly affected by the attitude of the caller or by the content of the story by the caller. Then, the volunteers sometimes had skeptical thoughts against the need for suicide prevention. They lost the confidence to their correspondence, and got difficulties for continuing the activities. Volunteers suffer from not finding the results of their activities. In face of suicide ideation of the caller, many volunteers consider what the meaning of their own life or the purpose in life is. And they are distressed by lack of an answer against those questions.

Shneidman, who is famous in suicidology, pointed out that suicide victims are suffering from “psych-ache”. By facing the spiritual pain from the caller, volunteers suffer from the questions like the caller. The important and necessary things to the volunteers seem to be a reconsideration of the meanings of or purposes in their own lives in case of facing these questions from the caller. Finding their own answers to these questions through their activities is essential to volunteers. Such reconsideration will make volunteers not only regenerate their driving forces of the activities but also create or reinforce the thoughts or beliefs of their activities.

Furthermore, the reconsideration of the purpose of life or of the meaning of life itself would also contribute to prevent suicide of volunteers. Volunteers and callers are both a mere citizen, and neither of them is an expert. Their position is not fixed permanently. In other words, it means that volunteers might also face a crisis of the suicide like the caller. Participation in the activities of suicide prevention is not only to prevent the suicide of others; it is also to deal with their own crisis in the future.

To let everyone to participate in the work of suicide prevention requires that everyone pays attention to this problem, and considers about it not only as someone’s problem but also as their own problem. Some results of this survey would provide valuable suggestions on reconsidering the countermeasures of suicide prevention.

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The significance of village associations in maintaining matrilineal roles among Minangkabau female migrants in Jakarta

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Abstract

Known as the largest matrilineal society in the world, worldwide attention has been given to *Minang* matrilineal tradition and Islamic beliefs. Males had always been encouraged to leave their mothers' house to seek education and their fortune in the world. *Minang* women have remained as the central pillar of their matrilineal tradition and the traditional home (*rumah gadang*). They were given special rights to take care of their traditional and their ancestral land passing from mothers to daughters. Privileged rights and special roles provided *Minang* women the authority in their villages. As the head of the family, they were supposed to stay at home but in the last two decades *Minang* women have migrated and left their privileged rights to seek education and work. Their migration crossing their matrilineal borders of village and society has brought about vast changes within their matrilineal community. The paper examines how the changed roles of Minangkabau women in Jakarta is recreating a hybrid form of matriarchal society that is not rooted in the traditional land and home but in the new roles directed towards their natal villages. The paper inquires as to the sustainability of the matrilineal culture in a culturally diverse megacity and how the village associations help maintain their matrilineal hierarchical relationship with their family and relatives in their homeland. The data for the paper was gathered from research conducted among *Minang* women in Jakarta. It involved in-depth conversations and observations of *Minang* women's life in Jakarta. The main conclusions of the study are that Minangkabau women in Jakarta are actively engaged in activities that promote affinity with other *Minang* women and men from the same village. Village gatherings (or *arisan*) have attained importance in exerting their status and role as a Minangkabau woman. Such gatherings have also led to other networked activities that help reinforce their former traditional roles. The paper also examines the dimensions of these new roles that allow them to ameliorate the distance from their village by creating new ties with their villages.

Introduction

Globalization has triggered mass mobility to capital cities in all countries. The analysis of behaviors of female movements to capital cities in capital cities has become an increasing concern. Jakarta, the capital of Indonesia has become a megacity and people thought that their dream could be realized there. Globalization force has generated mass movements around the globe so the study of male and female migrants in the globalization era should be done in different approaches because their behaviors in their destinations are not similar. Former studies have tended to focus on male migrants. In this regard, female migrants have not been given much attention especially their achievements and their identity construction.

Jakarta as the capital of Province Daerah Khusus Istimewa Jakarta has 264,639 Minangkabau people (BPS DKI Jakarta 2000). The census data shows that the number of Minang females in rural and urban areas was 125,149 while the total number of males was 139,490 (BPS DKI Jakarta 2000). This shows that the total number of male and female Minang who live in Jakarta was almost the same. According to the population census in 2000, the number of Minang people who live in Jakarta was the second largest clan after Bataknese (300,562 people).

Minangkabau people, the native of West Sumatra, called their land *Ranah Minang* or *Minangkabau land*. West Sumatra is known as home to the world's largest matrilineal society (Korff 2000; Kato 2005). They are often called as Padang or Minang people. *Marantau* (*merantau* in Indonesian language) or migration has become the tradition for a long time for Minang people. The root of the word *marantau* is *pai rantau*, which means going to any area outside their *nagari* or district. *Rantau* is viewed as *rantau batuah* (*rantau* or the outside world is magical and powerful).

Pai marantau (*pergi merantau* in Indonesian language) is a common expression used by Minang people. It means 'going outside of one's home of origin'. Especially for young men, they were encouraged to go for trade and higher education (see Josselin De Jong, 1952; Kato 2005; Naim, 1979; Chadwick, 1991; Asnan, 2007). Minang young men's movements have gone far beyond their province such as Malaysia and Singapore (Naim, 1979). After the nineteenth century, Minang people time could be found in any big city or town in Indonesia (Graves, 1981). Nitisastro (2006: 87-88) notes that "the population of West Sumatra exhibited a high degree of mobility, many of them leaving their region of birth and settling in East Sumatra and other part of the island".

Minang women's migration had been noted but their involvement was regarded as family's decision. In other words, it was not a woman's individual decision. They migrated to join their parents, brother/sister or *sanak* (siblings or distant relatives) who migrated in an area (Murad, 1980; Kato, 2005; Chadwick, 1991; Graves, 1987; Naim, 1979; Reenen, 1996). They were also presumed to accompany or *ikuik* their *mamak* (means mother's brother or a relative) or *etek* (means mother's sisters or aunts).

The focus of this paper was to study how the changed Minangkabau women's roles in Jakarta is recreating a hybrid form of matriarchal society that is not rooted in their traditional land but in the new roles directed towards their natal villages. The paper also examines how Minang women maintain the sustainability of their matrilineal culture in their destination area and how the village associations help maintain their matrilineal hierarchical relationship with their family and relatives in their homeland. It also presents the theoretical aspects that outline the focus of the paper. The fieldwork and data are discussed to show Minang women's roles in Jakarta and their social activities in their village associations to apply their compassion to *urang sekampung* (people from the same village).

Theoretical considerations: Studies on people's migration have shown that migration from rural to urban areas or cities have been increasing around the globe and especially in developing countries. Recent studies have brought some approaches and interpretations about women's migration. Economic and population have influenced on changing migration patterns and gender roles. Goldscheider (1996) states that overpopulation drives people out of their homelands and it may give them some freedoms from their family responsibilities and traditional roles. Skeldon (1997: 2) mentions that "migration itself encompasses more than a simple unilinear movement between rural and urban sectors and needs to be conceptualized as a complex system of short term, long term, short distance and long distance movements that can be better subsumed under the term mobility." The emergence of labor shortages is one of the main factors that trigger migration to urban areas and big cities. This movement involves low-skilled and high-skilled workers. Some studies have investigated female migrants who worked as domestic workers, entertainers and cheap labors in industries.

Another theory of migration examines the flows of migration and the impacts of migration in sending and receiving areas no matter whether it is an individual or family's decision (Lee, 1996). Individual or household based decision specifies a migrant's motivation and it may indicate the push and pull factors. Davin (1999) shows Chinese rural households make a decision based on the information provided by their networks in the receiving areas. Their networks are their relatives or friends who provide them information about jobs, settlement and some important rules about the new places. In this type of migration provides interpersonal ties that connect migrants with former migrants and non-migrants in origin and destination areas. They have bonds of kinship and friendship. Through these bonds, the migrants could share sense of belonging to a community.

Other earlier study shows that women left their natal villages because they wanted to be free from responsibilities given or attached to them as members of their community. A study from Bah et al. (2003) in Mali, Nigeria and Tanzania shows that the main reason to migrate is economic but at the same time, the single women want to be free from responsibilities and their elder's control. However, Bah et al (2003: 20) mention that women's migration is approved when they send their remittances home to help their parents.

Minang men's migration has been commonly investigated. As a result, Minang women's movements have not been examined as they were presumed to accompany their family members. It means that their decisions, motivations and roles in the receiving areas were regarded as unimportant. It also means that their roles and efforts to reinforce their traditional roles were less valued or noticed. Hugo (1995: 503) shows that there is a significant growth of women's migration in Indonesia because of their changing roles and statuses. Among the many migrating ethnic groups, Minangkabau people are the most mobile. Hugo (1979) described that in 1971 the number of migrants from

West Sumatra to Jakarta was 3.8 percent. He adds that this number was higher than the migrants from North Sumatra that formed 5.6 per cent of Indonesian population. Women have been moving to seek opportunities in order to get out of poverty or to have more freedom and education.

Minang people views success when one has become prosperous and have luxurious materials. Changes in their parents' house are normally a sign of their kid's success. Thus, it is important to gain prosperity and material in order to elevate social status and people's respect. It is a way to achieve a higher social status. Minangkabau matrilineal society is defined as nobles and non-nobles instead based on class system. Graves (1981: 5) points out that there is a continuous effort among everyone and families to get higher social ranks. Family members are encouraged to keep and achieve success, prosperity and power. Having those may bring a higher-class status for lineage members. Therefore, migration is viewed as a path to increase wealth and experiences in order to obtain people's respect. It motivates Minang women to leave their matrilineal boundaries in order to contribute to their family's social status. They believe they also can obtain success outside their homeland as the men do.

In Minangkabau tradition, men were encouraged to migrate but Minang women especially the oldest were expected to take care of their *rumah gadang* (Minangkabau traditional house) and ancestral land. This tradition has limited women's movements. *Minang* women's movement was expected around their own matrilineal territory. It includes her home and her ancestral land. They may leave to accompany their *mamak* (mother's brothers or other relatives), an *etek* (mother's sisters or aunts), a sister or brother or to join their *sanak* (literally siblings, probably close or distant relatives). Graves study (1981: 20) shows that a woman in Bukittinggi was not allowed to leave her mother's home to join her husband abroad.

Kato (2005: 151) mentions that the number of Minang women migrated was doubled to 26% in 1961 but he does not discuss the specific reasons why more women migrated. He (2005) presumes that that single women migrated for higher education and continued to stay in *rantau*. He adds that older divorced women left their homeland with their children. Lenz (2005: 260) categorizes female migration of the mid-twentieth century into three types: migrations for educational purposes; migration for economic reasons; migrations due to the desire to be modern. She remarks that the motivations cannot be simplified to a single motive. Women's motivations for migration range from economic pressure, education, jobs to personal desire for freedom. Recent study shows that most Minang women migrated because of individual reasons or interest (Iman and Mani 2013). It is not poverty that forced them to leave but they were "political uncertainties and lack of opportunities" (Iman and Mani 2013: 121). They left the village with the permission of their parents and relatives.

When Minang people decide to migrate they keep the Minang migration principle which says *sakali kampuang di tinggakan, bapantang pulang marasai*, that means once your village is left behind, it is a taboo to return home in misery (my translation). Although Minang migrants lived far away from their village, in recent decades there have been efforts to keep in touch with other *urang awak* especially from the same village or *nagari* (regency). This has taken place like in Medan, Jakarta, Bandung, Surabaya, and Tangerang, etc. Pelly (1983) studied the differences between Mandailing Batak and Minangkabau internal migration to Medan in the late twentieth century. He describes Mandailing Batak and Minangkabau migrants as using migration as a cultural mission with some goals. He notes that Minang migrants in Medan associated themselves with Muhammadiyah and their Territorial Associations to adapt in Medan for maintaining their identity as Muslims and Minangkabau (Pelly 1983).

In Minangkabau culture, women are placed equal to men in relation to their dignity and their functional values. Naim (1989: 37) describes that culturally Minangkabau *adat* positions Minang women equally with men regarding both rank and dignity. Senior wealthy women have the power to make decisions on her ancestral land and her kin. They receive respect and high status and have the rights to express her opinion in an *adat* meeting. Blackwood (2000: 191) points out that, "Rural Minangkabau women are neither oppressed subjects of the state nor subordinate participants in a masculinist hegemony, but agents and actors in their own lives".

A Minang woman after getting married has more responsibilities. As a mother, she has a very special position in the family. Her basic roles are as the mother of her children and the *induak bako* (the aunt of her brother's children). The oldest woman acts a *Bundo Kanduang* or the semi mythical queen of the Minangkabau. Acting as *Bundo Kanduang* is very important and ultimate. As a *bundo kanduang*, a woman carries ideal values as a Minangkabau mother, a wise and mature guardian, grace, strong and the keeper of ancestral properties (Blackwood 2000, Sanday 2002, Naim 2006, Reenen 1996). Moreover, as *bundo kanduang*, she is the person to consult with and be honored in

her community but males play important roles beside her to speak for her and take the needed action. *Bundo kanduang* is also symbolized as *limpapeh rumah nan gadang* (the butterfly of *rumah gadang*), and *amban puruak* (the key keeper of the heritage/crops). Minang woman would always have the privileged rights to say or make decisions how to conduct a ceremony or how to deal with an errant of family member.

Yet, it is necessary to examine how Minang women maintain their roles as *bundo kanduang* and *Limapapeh rumah gadang* outside their matrilineal society. This paper also investigates how they recreate their matrilineal use their village association in their migration destination in maintaining their matrilineal roles. The paper examines how the changed Minangkabau women's roles in Jakarta is recreating a hybrid form of matriarchal society that is not rooted in the traditional land and home but in the new roles directed towards their natal villages. The paper inquires as to the sustainability of the matrilineal culture in a culturally diverse megacity and how the village associations help maintain their matrilineal hierarchical relationship with their family and relatives in their homeland.

Methodology

To collect data, direct interviews from informants and institutions were conducted in Jakarta. research was conducted in three periods between September 2009 to May 2010. However, data were also collected from women who worked and had activities in Jakarta but they lived in Tangerang City. It is located about 30 kilometers west of Jakarta. People prefer to commute from Tangerang to Jakarta for work. Tangerang as a new urban city has better infrastructure and facilities. It also offers cheaper houses with better quality and less competition. They commuted to work every day.

I recorded the areas of research, jobs and activities of the *Minangkabau* women in Jakarta and Tangerang. Notes were also taken during the interviews. The informants were selected from Minang women from West Sumatra aged 15-70 and village leaders in Jakarta including men. There are 35 informants have been used in this study and they were approached with snowball sampling. Those migrants regarded Jakarta as their second or third destination after migrating for some time in other cities such as Palembang, Medan, Pekanbaru, Surabaya and Pontianak were also included in this study.

Findings and Discussion

Through the narratives of Minang women and some village leaders in Jakarta region, it is clear that Minang women did not they ignore their traditional roles. They neither leave nor completely abandon their roles as a *bundo kanduang* and *limpapeh rumah gadang*. The sense of customs and matrilineal kinship values remained strong despite adjustments to their new life in *rantau*. From the narratives of thirty-five informants, I could examine that generally, they had control over their life in *rantau* and the longing for *kampung* atmosphere.

Minang women take parts in different kind of social activities such as, school alumni, village association, *arisan* group (social gathering with limited membership to rotate some amount of money or certain goods at a fixed time and one's turn is drawn by a lottery), *pengajian* (reciting and learning the holy book, the Quran). In the words of Ella, her activities are enormous such as, discussions of new books, women organizations, art exhibitions, Muslims groups, alumni associations of her previous schools'. She described what she called 'a new trend' among Jakarta people was *pengajian*. However, when she went to Muslim group meetings, she wore a long sleeved blouse and a scarf to cover her head. Ella explained that her worship became stronger since she arrived in Jakarta. She often attended *pengajian* in mosques and other religious activities but she did not participate in any *arisan* because she was not interested in the common topics during *arisan*, which are about shopping, gossip, family matters.

Indeed, Ella also mentioned an interesting phenomenon that took place in the Masjid Agung Sunda Kelapa in Menteng area in central Jakarta. Obviously, the mosque had several functions on Sundays. It was not only for religious activities any more. It became the place to reunite with relatives and have transactions. People also could find different kinds of ethnic food in the food bazar in the mosque yard. Ella described that some people had or family or village *arisan*. After attending a religious preach, they sat together in the yard and ate food that they brought from home.

Those people lived very far from each other around Jakarta so *pengajian* at the Masjid Agung made it possible for them to meet regularly. They could enrich their knowledge on Islam and enlighten their faith.

Eva who worked as a manager in a telecommunication company, sometimes went to the mosque explained, 'It is quite easy to identify Minang people in the mosque. We can see from their appearance. Minang people often wear gold jewelry. Their clothes are expensive and glamorous. Whereas, other ethnic groups normally wear more simple clothes that are less colorful or soft colors'. In fact, going to *arisan* and *pengajian* also became the arena for showing off their achieved statuses for some people. They could show their expensive clothes, jewelry, or car. They also could talk about things they bought and their businesses. Regular meetings in *arisan* and *pengajian* indirectly increased the sense of togetherness and competitiveness among them.

Success in *rantau* is measured from glamorous and expensive clothes, which includes gold jewelry for women and their daughters. Lusi described that women whose husbands were traders and those who had their own businesses usually attended some events to show their wealth and success by wearing expensive clothes or gold jewelry. She stressed that: "*There is pressure among the wives of traders to show how rich they are. Yet, Minang women who work for private companies or as civil servants do not see it as necessary. But it does not mean they are not rich*".

Adek, for instance, was one of an educated young woman, stated that through meetings in *arisan* and *pengajian*, she could play their matrilineal roles as *bundo kanduang* because on some occasions they had to participate in marriage ceremonies and custom ceremonies. Adek said that technology of communication and transportation enabled Minang women to communicate easily with their kinship members in their village and in Jakarta. It is evident that distance does not stop Minang women to keep their responsibilities and play their roles. Minang women could recreate their roles as Minang women among their small village community in Jakarta and extended their roles when they returned home for important ceremonies in the natal villages such as wedding funerals and traditional ceremonies.

In Yoli and Vanda's interviews, their social activities were almost similar because they were sisters who lived on the same street in a housing complex. Vanda worked as government employee and Yoli was as a finance clerk in a private company but they were active in *pengajian* and *arisan*. They were also members of their schools alumni that actively organized reunion events. As their kids had grown up, they had more time to participate in some social activities in Jakarta. Vanda commented, 'I am the treasurer in my ward and we have some activities regularly including *arisan* and *pengajian*. I am also active as the committee board of my high school alumni association. I enjoy doing those activities'. Yarnis who had a stall in Tanah Abang described about social activities of Minang people in Tanah Abang. Minang people in Tanah Abang usually became members of their village associations. For example, she was a member of the Sulik Aia village association. Actually, Suliak Aia was one of the largest village associations. It had about 75 branches. It had established a building where they could hold their events. Although she was not active as the committee member, she often attended the big events like *halal bi halal*, a gathering after *Idul Fitri*. When I asked her what kind of activities she did, she said,

I used to join *arisan* of people from the same clan (village) but now I stopped because I am very busy. I still go to *pengajian* in the mosque near Petamburan area. Yet, I always make a visit to say my condolence when someone I knew or from the same village died. My daughter joined a Minang dance class and she would perform at some events held by Minang associations'.

Yarnis joined an *arisan* in her neighborhood in Tanah Abang whose members were mostly Betawi people. Betawi people in her neighborhood enjoyed her food and she got along well with them. It shows that her participation in social activities is not only focused her village association but also for the social activities in her neighborhood. Kinship networks of Sulit Air people were strong and they also organized "*pulang basamo*" (returning home together) at least every four years. The association assisted its members to organize their return to their home of origin with discounts for plane tickets, bus and car rental or providing seats for people who could not afford it.

Through some activities, the migrants could maintain ties among *perantau*. It became more interesting and challenging because they might get involved in business, marriage, and other activities. Their activities included some arts and handicraft groups. Women who had hobbies such as making crochets, quilts, accessories, cakes, and cookies could expand their relationships with other ethnic groups. Fitra stated, "*I could learn crochet and make friends with other women (from other ethnic groups) and we could share stories and experiences. Even, we could get useful advice regarding herbal medicine*". Fitra whose husband was a Sundanese said that when she went to a *pengajian* in Bintaro area, she could also meet friends from her high school and her husband's relatives and friends.

Chici, who worked for a government research institute, felt responsible to carry out her duties in natal village. Even though she was far away from matrilineal community, she returned to her natal village when she had to. She described, “*I am a Minang woman, felt lucky and proud for being a Minang. If I do not continue to act as I am expected to, who would care for my lineage family member? I love my homeland and it is not a burden for me to continue doing my duties*”. Chici often went home to attend important events in her village and also manage her kin’s matters. She added, “*I also visited my husband’s relatives because I am their in-law*”. I also play my parts in our village association and school alumni association such as my high school and Andalas University Alumni in Jakarta’.

Venny, whose daughter studied in a high school, became the secretary of the board committee of the school operated by parents of its students. It kept her busy besides her teaching and her *arisan* and *pengajian*. However, she said that she decided to stop the *arisan* with her friends in her previous neighborhood because they were kind of “exclusive” to the people who owned the houses in the housing complex. She was not the owner of the house where she lived so she often found out that she was excluded from some activities. Most of the people in the complex were very rich; she could not participate in some activities because she could not afford it. In Venny’s words:

“The activities in my housing complex were like showing off; I am more interested in the activities of my daughter’s school or the university where I teach”. For *pengajian*, she went to a big mosque in her region. She commented: *“If I had time I would go to the mosque. There we could meet some old friends too. It is good to main our bond in rantau”*.

It is clear that her social life was extended and it would bring more impact on educational development and maintaining her tie with Minang relatives and other Minang people in Jakarta.

Ilza who achieved success in her career and life gave attention to the development of her village and people who needed help. She gave contributions not only by her knowledge but also her physical effort in order to approach people in her village. Through her village association, *Yayasan Keluarga Lawang* (Lawang Families Foundation), she tried to design program to develop people’s education and prosperity. The foundation provided scholarships to students not only at the elementary level but also at the university level. She added:

“We also help students in our village by giving them tutorials and we provide them teachers from Bukittinggi. We also send young people who are interested to learn special skills or entrepreneurship”.

The foundation also designed programs to motivate people in Lawang to give contributions to their programs. Moreover, they also tried to coordinate and get support from the local government and the central government so that they could run their programs. They wanted to improve the living standards of people in the village through education, *pengajian*, cooking, sewing, home industry and other activities.

From Ilza’s social activities with the foundation, it could be concluded that as a woman from Lawang, she had a strong commitment to help people in their village to succeed without going to *merantau*. It is clear that Ilza is one of the very successful Minang woman who made efforts to develop her village. Her experiences in different organizations and countries enabled her to perform her role well. She tried to visit her village whenever possible so that the programs that they designed could run well. In her words,

Once a month, people had a meeting to discuss problems in the village so that they could find resolutions. If it is necessary, I will go door to door to talk and approach people in my village. When we had “*pulang basamo*’ (returning home together) not long after *Idul Fitri*, at the same time we had plans to help our relatives ...

Minang women like to participate in organizations both social activities and religious activities. It can be concluded that migrant Minang women were active in numerous social activities. The narratives reveal that *arisan* and *pengajian* are a common activity for Minangkabu people in Jakarta. Minang women realized they need to promote their affinity with other Minang women and me. They are aware it is important to exercise their roles to obtain respect and elevate their social status. Minang people who lived in Tangerang joined *Ikatan Keluarga Minang* (Bond of Minang Families). The organization also provided identification cards to members and had monthly donation. Ferry, the head of Ond Minang Village said, ‘We used the money to help not only our members but also Minang orphans in Tangerang. We also plan to build a *rumah gadang* in Tangerang city’. Clearly, that Minang women in migration area were involved in a larger social network of activities. In Ferry’s word, ‘we feel like a big Minang family here. Many of the mosque committee members in this city are Minang because they had experience before they migrated or they tried

to balance their life with the orientation of 'duniawi' (earth) and 'surgawi' (heaven). Here (*rantau*) is our second home'.

Conclusion

Minang women in their migration area adapted new values. They proved that they could get along well with other ethnic groups but they did not forget the people in their villages. Village associations have strengthened the bond between Minang people in the migration area. At the same time, village association has provided a hybrid Matriarchal society so that Minang women could continue to exercise their roles. The traditional qualities and privileged rights empowered Minang women in socio economic development in their natal villages and Indonesia. Being modern and busy with their work in their migration area does not stop them to carry responsibility out to help others. They could manage to balance their roles as *Bundo Kanduang* and *limpapeh rumah gadang* in Jakarta and their villages. They keep the Minangkabau life philosophy *dima bumi di pijak di situ langik di junjuang* (wherever you tread on the earth, it is right there you hold up its sky). Their changing roles are adjusted to where they are.

Migration allows women to build their confidence and knowledge so that they are able to contribute to the prosperity of their family. While individual reports illustrate their activities in their migration area, it is necessary to note that these experiences could not be generalized in the wider context of all Minang women. They benefit from the easy communication access and transportation that shorten the distance between their natal villages and their migration areas. They could return home for important events and elevate their social status.

It became clear from the interviews that the social control from the hybrid matriarchal community remained strong at certain levels. Minang women's activities in *rantau* were monitored by Minang people who "cared" about them. This showed that Minang women were not culturally free and could not do things that might embarrass their extended families. Their migration does not mean they automatically lost their rights and roles but they maintained their roles through social gatherings and returning homes for important events.

Village association created a warm home atmosphere and reduced the longing for home atmosphere. The sense of sisterhood and togetherness among Minang women in their migration area has reinforced gendered networks and cultural awareness responsibilities. These networks are more intense among females from the same village.

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Correlation between cultural and social identity among Vietnamese spouses living in Taiwan

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Abstract

A considerable number of studies in relation to Vietnamese female spouses in Taiwan have tried to explore many crucial issues such as life adjustment, knowledge empowerment, the life of new generations, marriage motives, post-marital life and the process of matchmaking to facilitate an understanding of this particular ethnic group; however, few studies have focused on their cultural and social identities after they settle down in Taiwan and commence a new life on one hand, and construct their social networks and enhance their social status on the other hand. In this research, three Vietnamese wives in Taiwan were interviewed. The interviews were conducted and recorded in Chinese and then translated into English. Reoccurring themes or ideas from the interviews were categorized as follows: personal abilities and traits, remittances and ethnic identity, filial piety as the eldest daughter and daughter-in-law, holding an incense, male heir in a Taiwanese family, dual and dynamic personal identity, the process of acculturation, culture diffusion including food and karaoke, the maintenance or management of transnational marriage, and a description of social exchange. Through above-mentioned findings, the process of transformation regarding cultural identity and social identity of Vietnamese spouses is to be better perceived and understood in the phenomenon of transnational marriage in Taiwan. The research findings suggest that Vietnamese female spouses have the ability to take advantage of their surroundings by involvement in cultural capital activities such as Vietnamese cooking and language related skills. Moreover, these wives further enhance their cultural capital by spending time to develop their skills in local Taiwanese languages and customs. These Vietnamese spouses have learned how to flexibly utilize their cultural and social capital while interacting with Taiwanese locals, other Vietnamese spouses, and Vietnamese migrant workers inside the family premises or in public places like eateries or factories. Likewise, by participating in more activities held by the government or non-governmental organizations, they have gradually enhanced empowerment and increased their own social status. The findings of this research can both help transnational couples in Taiwan and also provide suggestions for improving their quality of life.

Introduction

There are approximately 240,000 Vietnamese living in Taiwan. Out of the total number, there are about 100,000 Vietnamese who are married to Taiwanese. Others are in Taiwan working as domestic helpers, caregivers, students, and diplomats. There are also about 30,000 undocumented Vietnamese migrants living in Taiwan. Ever since Vietnamese spouses began emigrating to Taiwan through the channel of marriage, there have been a number of public issues of great concern to Taiwanese society including domestic violence, economic dependence, vulnerability, linguistic and cultural isolation, lack of social networks, cultural constraints, fear of deportation, and debt bondage (International Conference on Border Control and Empowerment of Immigrant Brides 2007).

Compared with the 100,000 Vietnamese spouses reported in 2007, the latest 2013 report of 87,357 Vietnamese shows that the number has decreased by 12,643 in those 6 years, which includes about 2,107 divorces per year. This divorce rate is not strictly a phenomenon of Vietnamese brides; in fact around 4,500 Taiwanese men divorce their Southeast Asian brides per year. Since the number of Vietnamese spouses accounts for 75% of these Asian brides, equaling 3,100, it can be assumed that some of Vietnamese divorcees left for their natal homes or remarried while the remaining 1/3 remained in Taiwan (Ministry of Interior 2013).

As an increasing number of young ladies from Southern Asian countries and China marry much older men living in semi-periphery or nucleus areas, this has caused scholars such as Wang and Chang (2002) to point out how marriage brokers have brought up a new model of the market economy to make two recruiting mechanisms join and work effectively together. From the standpoint of labor and social welfare, Hsiao (2003) and Lan (2006) both claim that

foreigners from Southeast Asia migrating to Taiwan have come a long way to seek more equal socioeconomic statuses and better treatments and benefits. In terms of cultural differences respecting gender, Lee (2003) reports that it's not just a cultural difference that Vietnamese spouses face in Taiwan but also women's lower social status as well.

In addition, a majority of research has mainly focused on the anthropologic and socioeconomic structure of the ethnic group and the immigrants' policies (Hsia 2005, Wang 2004). However, few studies have looked into the "foreign spouses" responses and the process of cultural identity and social identity they have been through in a completely new family and an unknown society in the host country. Rather, the general public's knowledge about the so-called "foreign brides" is limited with the stereotyped impression as signified by the prevailing name calling on this ethnic group, such as "*Pilipino Servant*," "*Thai Laborer*," "*Foreign Bride*" and "*Mainland Gal*." As Lan (2006) indicates, part of the society even perceives the Southeast Asian workers and brides dichotomously as 'profit seekers' in a negative way. In other words, they are still perceived with bias and prejudices.

Under such circumstances, it is important for us to gain greater understanding about how the new Southeast Asian immigrants think of, feel and talk about and respond to the huge changes in their lives and the challenging process of their cultural identity and social identity in a new society. Also, Taiwanese should seek to know in depth about these brides perspectives on the roles they play in Taiwan. Hopefully, the information regarding their feelings, responses, and ideas can delineate a clearer picture on what this group of new transnational marriage immigrants have been through and what Taiwan as a society can do in order to support both of the Taiwanese "grooms" and the Vietnamese "brides." Completion of such an investigation can offer a better picture of the emerging Taiwanese "melting pot."

The principal purpose of this dissertation is to focus on the dynamics of the lives of foreign Vietnamese spouses in Taiwan after marriage especially in regards to the four dimensions of cultural identities including: 1) cultural belonging, 2) self-identity, 3) cultural devotion, and 4) cultural integration. The elaboration is presented as follows: how they define their identities or roles as Taiwanese wives while interacting with other Taiwanese or other foreign wives in Taiwan is very significant in understanding the development of their cultural identities and social identities. Therefore, it is hoped that the research reported in this dissertation can benefit not only current and future immigrants but also set an example for research practices for similar veins of research from the perspective of cultural and social identity of Vietnamese and other Southeast Asian spouses.

As a result, the findings regarding cultural identity will shed light on the difficulties of these Vietnamese spouses and also benefit them and their family members to overcome such difficulties. In addition, the findings can be used by MOI to help new immigrants to better adjust themselves to living in Taiwan.

Methodology

In this qualitative part of my research, the methodology of this study is based on the theoretical sensitivity, having a close relationship with grounded theory and referring to the personal quality of the researcher (Glaser 1978). There are a number of characteristics such as having insight, the ability to give meaning to data, the capability of understanding, and ability to separate the appropriate from that which isn't. Theoretical sensitivity is composed of many sources such as literature, professional experience, and personal experience. The literature belongs to a part of training to make the researcher easily have the bountiful background of knowledge to be more sensitive to what is going on with the phenomenon that the researcher is studying. Professional experience will make the researcher more easily understand events and actions of the study with similar background. Personal experience enhances the insight into the situation that the researcher is going to study or research. Therefore, with these three sources added to the focus of this research, it will be very helpful for the researcher to investigate the issue of social identity and cultural identity from the four subcategories of cultural belonging, self-identity, cultural devotion, and cultural integration.

The qualitative ways consist of interviews and observations through various analyses from the study of the literature including readings on theory, research, and documents of various kinds, professional experience such as talks with marriage agents, workers at some new immigrant centers, and some public officials associated with foreign spouses, and lastly personal experience of working abroad, studying aboard, and becoming an immigrant overseas.

The nexus of this research is about the contents of the life-narratives of Vietnamese women who emigrated to Taiwan via marriage to Taiwanese men; they also moved their residences from Vietnam to Taiwan. Besides, there is the commonality of using these life stories or narratives to delineate and to provide meaning to the experiences and

choices in the lives of these people at the center of this social science research.

Recording their narratives of the lives of Vietnamese spouses form the temporal order of events and gives the opportunity to make sense out of these events (Sandelowski 1994).

Discussion

Three cases of Vietnamese women were described in terms of four life phases including: (1) life in Vietnam before the migration, (2) the channel through which they met their prospective husband and eventually decided to tie the knot, (3) life in Taiwan after marriage, and (4) future prospects in Taiwan. Each case shapes not only the routine but also a unique process of immigration through marriage while also illuminating the more profound meanings behind the motivation to immigrate. After analyzing each case, two themes emerged, social identity and cultural identity, which attach weight to this phenomenon of transnational marriage.

Through cross-case analysis, this chapter provides the points of convergence and divergence among the seven cases regarding the first theme, social identity and its second, cultural identity. Under these two themes, a number of dimensions are shaped and discussed within the following three sections. In the first section, the other theme, cultural identity, includes the following categories: (a) Filial piety as the eldest daughter and daughter-in-law, (b) Holding incense and Male heir in a Taiwanese family, (c) Dual and dynamic personal identity, a process of acculturation, and (d) Culture fusion: Food and karaoke. In the second section, the first theme called social identity includes the following dimensions: (a) Personal Abilities and Traits, and (b) Remittances and Organizational Affiliations. In the third section, the discussion of the maintenance or management of transnational marriage will be summarized.

The ultimate purpose of the research of this dissertation was to look into Vietnamese spouses' experiences of living in Taiwan to understand how these experiences have shaped the nexus of mobilization through social identity and cultural identity.

Cultural identity: Having been raised and educated in the society of Vietnam, these Vietnamese female spouses have brought their unique abilities or traits to Taiwan through the marrying of Taiwanese men. These skills and idiosyncrasies include education achievements, cooking talents, language abilities, values, religions and dress codes. For example, while living in a small community with a majority of Vietnamese-Chinese in Ho Chi Minh City, LU2 was proud of her ethnic origin as a Vietnamese-Chinese, speaking Cantonese, Mandarin, and Vietnamese, which distinguished her in terms of her socio-economic status.

Likewise, even though WU4 does not care about whether other people will take her for a foreign migrant or not, she still prides herself on the knowledge and creativity she possesses in terms of Vietnamese foods; in fact, she criticized the authenticity of Vietnamese foods cooked by other Vietnamese spouses, stating that they did not hold true to their ethnic heritage. To Vietnamese spouses, food and language are two obvious cultural boundary markers which Vietnamese spouses like to share with others either from Vietnam or Taiwan (Lim 2006).

Filial piety as the eldest daughter and daughter-in-law: A very obvious tendency from the seven participants in this study is that Vietnamese spouses are the eldest daughters in the family. In fact, five of the seven cases were eldest daughters. For example, LU2 said:

“I thought that I served as a pioneer in my family to move to Taiwan; however, with so much unfair treatment and discriminatory norms I suffered from, none of my sisters or brothers would follow my step.”

Holding incense and Male heir in a Taiwanese family: WU4 and LU2 also pointed out that even though they are Catholics, they are still willing to cooperate with the custom practiced inside the family. In WU4 and LU2's words:

“It is lucky for us to have a Catholic church in our community, so we regularly go to church to join the mass on Sunday. We think that following the family culture like holding incense is indispensable for some Taiwanese families. Since we already have prepared some space for our own religion, holding incense won't trouble us at all.”

Dual and dynamic personal identity—A process of acculturation: PE1 loves to grow some plants with her husband in their front yard; this is a good example of how she is enjoying her relationship with her husband:

“...Giving some of our home-grown vegetables to their or relatives or friends will always bring me and my husband a lot of joy, lets me have a sense of belonging toward the soil of Taiwan, and enhances the terms of endearment with my husband.”

Culture fusion: Food and karaoke: WU4 also likes to sing with her husband:

“...Singing karaoke at home is very relaxing; however, I seldom sing Chinese songs because of my difficulty in reading Chinese characters; my husband loves to sing Japanese songs rather than Chinese songs for he has been strongly influenced by his parents who were educated in Japanese-colonial times.”

Social identity: Walker (2005) stated that social identity theory is a personal concept formed by a personal identity like personal abilities and traits as well as social identity like organizational, religious, and political affiliations. Many happenings or turning-points collected from these seven cases of the lived experiences of these Vietnamese spouses can be interpreted and discussed showing the link to social identity theory.

Social capital plays a role as a social link inside a social system of exchange including the accumulation of cultural knowledge that enhances power and status. In addition, taking advantage of cultural capital can bring about benefits, like being awarded with status or being accepted, which will result in some degree of social capital afterwards (Bourdieu 1977, 2008). Thus, after emigrating to Taiwan, many foreign spouses start taking advantage of their cultural capital (i.e., educational achievement, intellect, cooking or tailoring expertise, style of speech, dress, and physical appearance). These cultural reproductions are the result of many occasions both created by themselves and institutions and are often converted into social capital that makes them feel more confident and live with a better quality of life in Taiwan. Hence, cultural capital can be embedded into the context of social identity.

Personal Abilities and Traits: In LU2's lived experiences, there is a clear contrast between the perception of the individual self, a minority of Vietnamese-Chinese, and the group self, the majority Vietnamese. In order to increase her self-image as a Vietnamese-Chinese, she expressed some discriminatory notions toward Vietnamese, thereby, improving her social status (Tajfel & Turner 1979). While living in a small community with a majority of Vietnamese-Chinese in HCM City, LU2 was proud of her ethnic origin as a Vietnamese-Chinese, speaking Cantonese, Mandarin, and Vietnamese, which indicates she had a high socio-economic status.

“... We had two maids to help my mom and to take care of the kids when I lived in Vietnam; besides, we lived in a better region where only Vietnamese-Chinese could afford the housing.”

Remittances and Organizational Affiliations: PE1 explained why more southerners married foreigners, compared with northerners:

“We northerners are more conservative than southerners; besides, we think it so important for us to contribute to our mother nation after studying or working overseas. On the other hand, southerners are living in the south, which has been open to the world for a long time, so it is very common to marry foreigners.”

LU2 and WU4 also felt resentful about the difference between those from the North and those from the South:

“Only those who were born in the north can be qualified as public officials or bureaucrats unless they marry a southerner, and then their next generation will be entitled to this right. As southerners, we feel deprived of our basic civil rights.”

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Uncovering attitudes toward bilingualism/multilingualism at an international university in Japan

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Abstract

It goes without saying that at present the archetypal global citizen is bilingual, or more precisely, multilingual. To function effectively in international business settings and cross-cultural relations of any sort, possessing foreign language skills is crucial. A question that proceeds from this assumption is: “Who is a ‘global citizen’ and who is not?” May all young people think of themselves as global citizens, or should this designation be reserved for those who specifically pursue ‘international’ interests or careers? Those who support the former notion and believe Japanese people (or its youth in particular) ought to become more global-minded, are likewise expected to be promoters of bilingualism/multilingualism. A quantitative study was conducted at an international university in Japan that investigates this topic from the perspective of students, both domestic and foreign. A two-page survey was designed for this purpose and completed by 122 participants. The questionnaire items probe respondents on their attitudes and beliefs about issues related to bilingualism/multilingualism from frames of reference both personal and societal. Comparisons were made between responses offered by Japanese and foreign students, taking into consideration factors such as age and self-rated second language (L2) ability. Open comment boxes, which the majority of students filled in, were analyzed with grounded theory methods and the results were added to the quantitative findings. Overall, participants tend to view bilingualism/multilingualism in a positive light, and value it more as ‘additional language’ ability increases, and although opinions vary, for the most part, believe it ought to be more prevalent within Japanese society.

Introduction

There exists in Japan a bipolarity in terms of how the English language plays a role in society. On the one hand, it is a subject taught and studied with extreme diligence for the primary goal of passing entrance examinations for high schools and universities. On the other hand, store signs, billboards, magazines and TV commercials appropriate English as well. Seargeant notes that through these media and also the continually growing lexicon of loanwords, a trend-driven, ornamental function of English in Japanese society is manifested (2005, 2009).

The dichotomy of “school English” and “social English” discussed by Kimber (2009) is based on the ideas put forward by Seargeant and others who acknowledge the complexities of Japanese culture, which in part explain this phenomenon. What we often find is that the tiniest of errors marked “wrong” on school tests, are not even blinked at if made by huge corporations. For instance, the nation-wide electronics chain, *Yamada Denki*, for years proclaimed a grammatically incorrect English slogan, “For your just” in spite of the fact that school teachers would have to correct this error if their students made it.

English in Japan, therefore, includes both relaxed and stressful elements, depending on who you might be. For many students, it is considered to be a key to the door of future success. For businesses, aware of the images of sophistication and modernity associated with English, it is strategically used in advertising. In the linguistic context of Japan, and in many other cultures that are similar to it as well, “linguistic accuracy is irrelevant to the consumer of these products. The mere use of a foreign language in speech and writing signals stylishness, glamour, and novelty” (Shin 2013, p. 41).

Within this milieu the majority of young English learners are struggling. Although the typical student spends hours a week studying the language, he/she cannot speak it with any degree of fluency. The English language education system does not seem to be working well (Aspinall 2013, Yoshida 2001, Reedy 2001, Takahashi 2000, McVeigh

2004). However, there also exist individuals who break the mould by using English to, for example, interact with people from other cultures and backgrounds. These have learned the greater, intrinsic value of communicating with a new language and are moving toward the middle of the polarized backdrop mentioned above. All signs indicate English will continue to be taught in schools, and also that it will maintain its status as a lingua franca – the language the world uses to conduct business in. Students in this category have come to appreciate that, with all things being considered, the main purpose of any language is that it be *used*. In other words, knowing how to *theoretically* use a language is not good enough; meaningful, authentic, purposeful communication, both spoken and written is necessary.

At an international university in western Japan, in which the present study was conducted, both Japanese and foreign students not only “learn” English; they learn “with” it. For those who are not yet at the level of fluency in English, studying the content of courses within the medium of English leads to gains in both subject matter knowledge and linguistic mastery. They are developing skills in English and other languages both academically and socially, but also with regard to future career goals, whether in business or some other field. If the nationalism underlying Japan’s agenda for English language education is as real as McVeigh (2004) assumes it to be, then Japanese students attending English-medium institutions are more likely to break from the constraints McVeigh documents and develop a fresh, humanistic approach to learning English. Such individuals, both Japanese and foreign (only 8 out of 122 participants speak English as their first language) are likely to hold beliefs and attitudes toward bi-/multilingualism that differ from the status quo.

Methodology

This study explores the question, “what attitudes or beliefs do students at an international university in Japan hold toward bi-/multilingualism?” It is hypothesized that the majority of respondents will demonstrate a positive attitude toward bilingualism and believe that moving in the direction of a more bi-/multilingual society would be considered beneficial for Japan. In light of the fact that data gathered from Japanese participants will be compared with that of foreign students, it is also hypothesized that bi-/multilingualism will be perceived by Japanese to be more of an elusive goal instead of an ever-present reality; the latter tendency is hypothesized to more likely characterize the thoughts of the international group.

In consultation with a cooperating professor at the university, an opportunity sample was selected for the administration of a 2-page survey. 122 individuals participated in the study, of which there were 25 Japanese and 97 foreign students. In total, the respondents speak 17 different first languages and study or speak 30 additional languages at varying degrees of fluency. The survey first of all, gathers personal information about age, gender and self-rated language abilities. The main part of the questionnaire contains 24 items, to which responses were made on a five-point likert scale. Data from these 24 items were analyzed with SPSS software, with mean values presented for the survey item responses. These were then subjected to correlation tests to investigate potential relationships between factors.

Comment boxes allow participants to offer their thoughts on two bi-/multilingualism themes that appeared in the items. The first asks them to state what criteria they believe are required for individuals to attach to themselves the label: “bi-/multilingual.” The second open question asks them to share thoughts on how important they feel bi-/multilingualism is in Japanese society and what practical steps they might suggest in order to help Japan move in a positive direction in this regard. The comment box data were analyzed qualitatively in accordance with the grounded theory interpretive framework (Strauss and Corbin 1998).

Discussion

After presenting the results from both quantitative and qualitative analyses, a brief discussion of these will then be offered. A more detailed breakdown of the findings and results are provided by Kimber (2014).

An analysis of the questionnaire items reveals students are positively oriented toward bi-/multilingualism, believe “English” is one of the languages a bilingual person speaks, and see bi-/multilingualism as beneficial for Japan. The highest ranked 5-point likert-scale items on the questionnaire from all 122 students are as follows: “I want to be a bi-

/multilingual person” (4.4339), “A bi-/multilingual person speaks English” (4.0667) and “A bilingual society would be beneficial for Japan” (4.0248). The first and third items may be used as evidence in support of the hypotheses. These three highest rated items are contrasted with the lowest three: “Japanese who graduate from Japanese universities are bi-/multilingual” (2.3140), “A bi-/multilingual person speaks Japanese” (2.3814), and “A bi-/multilingual person speaks Chinese” (2.4091). It may be noted that the final two items, in being ranked so lowly, accentuate the position of the highly ranked item: “A bi-/multilingual person speaks English.” Firmly planted within the minds of the majority of participants, therefore, is the belief that English is a necessary factor within the bilingualism equation. Since so few students feel that graduates of Japanese universities are bilingual, we would suggest this may in a small way offer support to the hypothesis as well, since a more bilingual society would result in graduates becoming bi-/multilingual.

The qualitative side of the study begins with comments on what constitutes a bilingual person. Almost non-existent was any claim that one must reach the level of ‘native speaker’ to be called ‘bilingual.’ Only a few Japanese respondents suggested this. Of prominence were descriptions revolving around productive skills. A bilingual person is considered someone who ‘speaks,’ ‘communicates with,’ or ‘uses’ a second language. A smaller number of respondents mentioned receptive skills, saying, for example, that “understanding” another language is necessary. Another theme that was evident, although within a minority of responses, was ‘cultural applications.’ Overall, a bilingual person is considered to be someone who is a fluent speaker of another language, knowing how to understand and use it to function in authentic situations.

The vast majority of participants agreed in their comments that bi-/multilingualism is important for Japan. The primary reasons for saying this appear to be related to globalization and the strongly felt need for English in business/trade and to promote international relations and cultural exchange. With many noting a perception that Japan lags behind other nations in producing bi-/multilingual citizens, suggestions for change were offered, which mainly pertained to improving English education in the public school system. Other opinions touched on the general theme of bringing in more international students or workers for the purpose of increasing English communication between them and Japanese nationals. The feeling that prevailed was that the English language situation in Japan at present requires attention.

As we consider what these results mean, an unmistakable tendency is apparent. The more one studies foreign languages, the more value one attaches to the entire endeavor. In fact, one of the correlation tests revealed that students who self-rate their second or additional language abilities highly are more likely to hold the belief that Japanese society would benefit greatly from the promotion of bi-/multilingualism. In one sense, this is like sharing good news. The more one reaps benefits associated with achieving relative fluency in another language, the more one naturally will feel obliged to let others know about it. It is also possible to surmise that developing an international or global mindset, which arguably is greatly enhanced via communication skills in English, will help Japanese citizens break free of certain aspects of its cultural norms and values that reign in free thinking, individuality and creativity. These themes too, were present within the qualitative data.

Finally, the term “bilingual” itself can be either empowering or disempowering depending on how one defines it. A common view among Japanese, that Yamamoto discusses (2001), is that a bilingual equals someone who has native-like fluency in English. This criterion, which sets the standard unreasonably high, is scarcely found among the Japanese sub-group in this pool of participants, and is not evident at all within the international student cohort. This leads us to consider the possibility that the more one acquires skills in a foreign language, the more one views bilingualism as a *process* instead of a *goal*. It is therefore proposed that one of many possible means by which to empower a younger generation of Japanese learners of English is to instill within them from early on, the motto: “I am bilingual now.” Added to this would be the goal of becoming a better bilingual every day. The bipolarity of school and social English are expected to remain a fixture in Japanese society as long as bi-/multilingualism continues to be perceived as a rare condition that occurs within only a tiny minority of its population.

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A revaluation of the economization of society based on a framework of epistemological and reflexive approach

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Abstract

Sustainability, dependent on habitats, habits and inhabitants, involves the analytical understanding of the building blocks of social capital. It involves an ethical revaluation of the economization of society and how intergenerational knowledge and values can be sustained (Radcliff 2000). This paper outlines a preliminary attempt on how a framework of epistemological and reflexive approach can be developed and to examine the following question: What are some of the epistemological approaches that can sustain multilingual and multicultural education, knowledge, values and worldviews? As dominant societies and cultures exert power shifts and dogmatic approaches to knowledge and values, a counter approach is proposed to provide for an emergence of progressive models for ideas and knowledge that value social innovation and can contribute to the wellbeing of the world. This is through the impact of educational change through innovative practices. An ethical knowledge of sustainability is needed to develop ethical life skills of how to make a living and of how to live. The paper will share some of the exciting work by innovators who integrate sustainability, social values, and service design framework for sustainability of the wellbeing of the community. Using dialogical principles, they argue for small, local, open and connected communities (Ezio Manzini, Jurgen Bey, Marti Guixe, *Knowledge, Technology, Policy* 2009). Similarly Nobushide Sawamura (2002) discusses *wakon yosai*, the use of creative local knowledge, Japanese philosophy and experience in international projects. Hayao Miyazaki, the creative artist, is critical of capitalism and globalization and encourages an exploration of creativity and ecological consciousness that contribute towards a vision of the world through romanticism and humanism.

Introduction

The starting point of this paper is to reexamine the concept of sustainability- habitats, habits, inhabitants, as this involves the analytical understanding of the building blocks of social capital. It involves the revaluation of the economization of society and counter proposes how intergenerational knowledge and values can be used to reverse dominant trends to build and sustain social capital (Redclift 2000).

This paper outlines a preliminary attempt on how a framework of epistemological and reflexive approach can be developed to contribute to a more humane society. It examines the following questions: What is the inter relationships between knowledge and cultural values, knowledge and cultural identity, knowledge and aesthetics?

What are some of the epistemological approaches that can sustain multilingual, multicultural educational approaches to sustain knowledge, values and worldviews?

As dominant societies and cultures exert power shifts and dogmatic approaches to knowledge and values, how can knowledge flows, intergenerational knowledge, intercultural knowledge flows and values be sustained in such dominant environments.

The Legacy of Epistemology: The legacy of epistemological studies is vast and so to provide a point for discussion the following discussion of issues is given below. One main issue in education has been that some countries have tended to undervalue the legacy of epistemology, its own experience, knowledge and value systems. But increasingly more educators are now exploring the comparative advantages of contributions from the legacy of epistemology. A counter approach therefore is proposed by educators and writers, for example, Briggs (2013), to provide for an examination of knowledge systems to enable the emergence of progressive models for ideas and approaches, for knowledge that value social innovation that can contribute to the wellbeing of the world.

One of the approaches discussed by Smeyers (2013) is in making sense of the legacy of epistemology in education and educational research. He refers to Siegel's term of 'cultural epistemologies' as views of knowledge, as

ways of knowing, indigenous ways of knowing, not merely objectifying knowledge, but to be seen as world views, as a set of beliefs about why and how the world functions the way it is.

Hybrid knowledge- the Cinderella of development: The place of indigenous knowledge is taken up by Briggs (2013) who coins the term indigenous knowledge as hybrid knowledge as the Cinderella of development. This is so as the location of the specific nature of indigenous knowledge is the codified, dominant Western, Eurocentric formal scientific knowledge which largely has become the dominant basis of knowledge. He proposes adapting and integrating understanding from both traditions of local knowledge and scientific knowledge where the rigor of codified science is combined with the practices of indigenous knowledge at the local level.

There are challenging proposals to counter the effects of the industrial era that have led to product based economies. The commoditization of knowledge is seen to serve the advancement of capitalism and neoliberals, which has given emphasis to the importance of economic growth and free market forces, directed by the needs of capitalism. This raises the question of power relations from dominant countries and the extent to which the use of indigenous knowledge is more in the interest of the market, as marketization reinforces capitalism. Hence indigenous knowledge is seen to remain as the Cinderella of development.

Knowledge systems – knowledge as process: In education, as educators, we seek to bring about a balance of knowledge systems. In curriculum development, we have re-examined knowledge systems that focus and gives emphasis to information that is passed on passively, which is largely content based. Currently we use process approaches to critical thinking that give emphasis to *observing, inquiring, questioning, challenging, analyzing, and applying*, and to be integrated with creative and innovative thinking. These knowledge systems and approaches need to examine misconceptions in using traditional, indigenized knowledge systems as merely simplistic folklore and instead provide a critical focus on integrating the epistemology of indigenous knowledge systems, ways of knowing.

The strength of culturally embedded indigenous knowledge systems provide the potential and possibilities for new ways of thinking, new ways of using relational knowledge, and forging relationships. Indigenous knowledge leads to the build up of local knowledge repertoires, knowledge resources that enriches by providing locally derived insights.

Methodology

Comparative studies of knowledge systems: In order to attempt a reference to comparative studies of knowledge systems the following section provides a brief review of some of the knowledge systems of the host nation of this conference, Japanese knowledge systems and knowledge processes. I shall attempt to use some of the limited literature that I was able to access in this area in English to provide a comparative basis to the discussion on the place of indigenous knowledge in multicultural societies.

Findings

Knowledge Development: Local spirit, global knowledge, wakon yosai: Here I shall attempt a brief discussion in the context of Japan, where there has been extensive contribution by Japanese knowledge systems to the place of knowledge development. Nobuhide Sawamura, (2002), takes up the argument of the place of local spirit, global knowledge as the Japanese approach to knowledge development in international cooperation. He observes that the country has tended to undervalue its own experience and knowledge of development, its store of cultural values. This observation is perhaps true of many other countries that need to make more concerted attempts to integrate both local and global knowledge to knowledge systems internationally. He provides some insights into the Japanese tradition of understanding knowledge as rooted in indigenous cultures and values. This may be viewed as contributing to the identities of the nation. It includes both the hardware of education, the scientific tradition of mathematics and the sciences as well as software knowledge termed, *wakon yosai*.

This dichotomy in knowledge systems is apparent in many contexts and in the educational systems of countries and needs to be re-examined. It is now argued that the software of social capital and cultural capital offer

complimentary inputs from both international knowledge and local knowledge and cultural values. It is not just taking from sources of international knowledge but the processes of creating resources of knowledge that contribute further to cultural identity. Indigenous knowledge and cultural resources ought to be developed to contribute in turn to international knowledge.

To add further to the discussion, Hideo Nakazawa (2006) refers to the concept of *satoyama* - an epistemology of comprehending the local eco system. This is yet again an area of keen discussion by many groups who set up organizations and NGOs to educate and raise awareness on ecological systems. They attempt to make connections between a global environmental approach with local sustainability; local nature conservation with the principle of sustainability, which sustains the co- existence of human communities and nature, as the concern for local ecological approaches is to avoid harm to humanity. Youth activists in Singapore, for instance, have started green projects to map ecological systems as concerns for environmentalism, biodiversity that affect the wellbeing of communities are being researched and evaluated.

The syncretic nature of knowledge systems: The syncretic nature of the approach combines the aesthetic nature and features of identity. One Japanese example of this in the Japanese context is termed the Cool Japan policy, both of soft power, and nation branding. Yunuen Mandujano (2013) reviews the politics of branding in promoting national culture, contributing to economic goals, soft power and reinforcement of national pride. The positive influence of soft power as a national contribution through culture products from the content industry, is seen in, for example, Japanese creative industries as *manga*, *anime*, the METI 2013 Japan Brand Fund, to revitalise creative industries, to contribute internationally.

Dialogic Principles for a Reflexive Approach (Bakhtin 1992): This section reviews educational change through a reflexive approach through innovative practices. The impact of this approach is to develop sustainability of ethical knowledge, develop ethical life skills of how to make a living and of how to live. Some of this is realized in the pursuit of innovators who use a service design framework to integrate social values for the sustainability of the well-being of community.

Using Bakhtinian dialogical principles, where responses and discussion to any issue is multiple -dynamic, relational and engaged, (Bakhtin 1992) Ezio Manzini, Jurgen Bey, (*Knowledge, Technology, Policy* 2009) argue for small, local, open, connected creative communities. Such approaches as design knowledge can be used for social approaches to empower grass roots development. Social innovative processes of change may be brought about through the recombination, from social capital to historical heritage, from traditional craftsmanship to accessible advanced technology. These innovators lead citizen participation led by design initiatives. It seeks social transformation and argues for designing with and designing for communities. This approach through hybrid processes, for example, has local groups in Italian communities to coordinate sustainable agri-food chains for high quality food.

Jurgen Bey, a Dutch, industrial designer offers conceptual ideology, that enables a new perspective and theoretical framework through collaborative processes to produce high quality products (Design Museum 2008). This enables artists with multicultural perspectives, for example, from India, to work collaboratively to a collective future, which is to invest more into shared futures, for example, to design and craft products that add value to public spaces in urban environments.

Case study of Singapore, commoditization vs indigenization : In this section on a case study of Singapore, I revisit the relationship between knowledge and cultural values, identity, aesthetics and worldviews. Singapore, an island state, has been described as a metropolis, a cosmopolitan city, evolving culture and continuously testing boundaries. Amidst debates on dominant societies and cultures that exert power shifts and approaches to knowledge, values, and identity, debates continue on the impact of global culture, globalization, on consumerism; of the homogenization from Western trends, of cococolization and the MacDonalidization of consumer habits across the world. There are ongoing debates on socio -cultural issues of preserving tradition, culture, cultural mores and the pursuit of new values and life styles, LGBT movements which test the boundaries.

The official discourse continues on the national ideology of shared values, upholding family values, racial and religious harmony, the cultural heritage of a mosaic of ethnic cultural practices, arts, media, and fine arts. To support these cultural activities the government has channelled funds for arts, culture, media and design in order to make arts and cultural activities attractive to international investors and international talents. It began as support for the

production of cultural activities, cultural artefacts to contribute to the economy, for economic capital. It has since moved to creative services to produce new content, new products, creative content; creative services to support artistic and creative industries. It has envisaged a global city of arts, parallel to the Gardens in a City movement. Cultural policies that were extended to encourage performing arts, film production, museums, art galleries, led to the opening of the Esplanade, Asian Civilisations Museum, National Museum to showcase arts and now recently the Singapore Art Museum to collect and build repositories of national art, to consolidate a legacy of cultural capital.

Discussion

Despite this expansion there is criticism in that it is less for local talent, less for the community, less for personal enrichment and more for the commoditization of cultural products for international investors and cultural funding for international talents. This criticism is being responded to through more balanced funding, of accessibility for local talent, to develop creative workers working with foreign talent in research and industry, with media hubs set up at Mediapolis, Infinity, Fusionpolis, and to develop spin offs for local industries: film producers, designers, media industry, digital industry, and animation industry.

Attempts for cross cultural fertilization in order to internationalize Singapore arts scene has led arts industries education programs, courses and degrees being offered at schools of arts in design, music, dance, aesthetics, as well as to support arts management, theatre production, design, media and broadcast cultural industries. Sponsorships from business provide for locally made content to be showcased at international arts events and festivals. It is hoped that greater community participation in developing arts, heritage, in producing creative arts will give new emphasis to the social value of arts and culture.

Singapore leaders recognise that dependence on a production economy is limited and that planners across the domains will need to consider other forms of knowledge, both knowledge economy and ‘cultural epistemologies’ (Smeyers (2013), to knowledge that values both local and global knowledge. More innovators recognise a more syncretic nature of knowledge systems, the combination of social capital to cultural heritage with advanced technology that will help to develop processes towards social transformation (Ezio Manzini). Singaporean Wee (2007) critiques the capitalist approaches, the social engineering directed by paternalistic – pragmatic approaches that has created a homogenized Singaporean national culture and to a more recent approach towards re-ethnicizing and re-Asianizing.

Conclusion

Regenerating community processes for sustainability: Creative artist, Hayao Miyazaki, who is critical of capitalism and globalization, has given the world a rendition of creativity and ecological consciousness that contribute towards a vision of the world through romanticism and humanism. Using trending digital techniques through creative processes, this artist has combined aesthetics and identity to provide an antidote to commoditization.

In a revaluation of the domains of knowledge and its contribution to development, it is argued that, for example, ecological economics environment as capital approach is narrow if it is only managed and controlled for capital growth, and material growth. Sustainability of values is dependent on shared values, attitudes, and the prevention of the erosion of cultural values, of cultural memory. Reflective approaches based on a recognition of bilingual, bicultural diversity, of human languages and cultures, multiple worldviews need to be cultivated and constructed. Natural capital is a legacy for future generations.

In educational institutions we have started to promote knowledge within a framework of shared values. The present and future generations of students need to experience learning by doing, through collaborative actions in community projects conducted through holistic and reflective practices. Ethnic diversity in the form of cultural boxes where identity and cultures are boxed in will lead to further stereotyping. The shift is enabled through applying Bakhtinian (1992) dialogic principles, which has moved the discussion towards recognition of hetroglossia, of diverse points of view, of polyphonic voices and styles of discourse.

In teacher education institutions, for example, at the Institute of Education, Singapore and at Bahrain Teachers College at the University of Bahrain, the framework includes structural, cognitive and social elements. Current

curriculum approaches are shifting toward emphasis to heuristics, problem solving skills, and to approaches that value inquiry, application to aesthetics, arts and design. More radical, critical approaches are needed to re-examine established ways that has promoted stereotyped thinking through over reliance on mechanized ways of responding to problems.

This discussion is rounded up by my experiences in colleges of teacher education for 3 decades and in the Middle East for 5 years, 2008-2013. Instead of being passive recipients of knowledge and learning, teacher educators realize that it is pertinent to re-evaluate competitive approaches that encourage individualism and move towards more interactive approaches of co-partnering teachers, parents and children to become co-producers of knowledge. These approaches integrate knowledge as content to values education. It leads to a re-examination of the deterministic and uncentric nature of knowledge flows. Instead in its place educators adopt alternative approaches that include the site and context of intergenerational knowledge, of intercultural knowledge flows and values that are central to sustainability in dominant environments.

One vivid experience stands out amongst a myriad other experiences. Trust, the value of trust is an essential ingredient to hold together such community approaches. This intrinsic belief was needed especially so in times when there was discord and divergence amongst the communities.

There is a need to generate and diffuse new ways of living for all ages, disseminating reflective practices to bind intergenerational relationships amongst communities. Through cultural interchanges like the present conference in Ritsmumeikan, Beppu City, on *Sustainability, Knowledge and Practices*, it is hoped that greater understanding of interconnectedness will lead to new forms of community interchange, of inter cultural heritage, in rural, urban, global cities, from the cultural heritage of cities to the centers of cultural legacy of Kyoto, to music and learning, the legacy of spirituality, of cycles of life, death and rebirth in Varanasi, to sustain humanity.

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The moral status of euthanasia in Bangladesh

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Abstract

The intention of euthanasia is to dispose of the life of a patient affected with unbearable pain and suffering caused by an incurable disease/injury. This article focuses on its pros and cons and the controversy related to the moral permissibility of euthanasia as a means of death. In addition, the article provides an assessment of the scenario of euthanasia in Bangladesh, after firstly clarifying the idea from a Western perspective. Secondly, the common normative approach is used to see whether there is any compatibility between the Western approach and the normative one. Most of the inhabitants of Bangladesh are Muslims (80%); there are also Hindus (12%), ethnic communities (5%), and others (3%). Each of these has got its own religious and cultural values. The government of Bangladesh does not favor any specific form of religious or cultural value reformulating its policy or ethical framework. However, people are prone to come to their conclusions on the basis of existing socio-cultural-religious norms. While adapting a moral course of action, it is essential to resolve the moral conflicts that arise between the concerned parties. The article does two theses: First it presents philosophical arguments with an aim to reach to the conclusion as to whether it is permissible to adopt the ideal of killing a patient. Second, it presents a report on a field survey which was conducted over the country's different hospitals and medical colleges in urban and non-urban areas. Finally, it is concluded that (1) most decisions regarding one's ending his/her life or the withdrawal of life-support systems are not according to the procedure of ethics committee, (2) believers of either Islam or Hindu or other religions are not prepared to take a decision on euthanasia because of a lack of religious or cultural permissibility. However, in extreme cases we need to find an alternative solution for not ending a patient's life.

Introduction

Bangladesh is a Muslim majority moderate Islamic country, and its most people believe in the norms and ideal of Islam. In this article, the problem of euthanasia will be discussed in the light of the cultural reality and religious context of Bangladesh. As we know, our cultural and religious views seriously influence our outlook concerning euthanasia. The present research, therefore, raises some questions whether euthanasia is compatible with the norms and beliefs of people in Bangladesh. In order to make more sense of the study, the researcher undertakes a survey to get the general view of euthanasia. However, euthanasia is not known to the mass people of Bangladesh as a specific term. This study also demonstrates that a future endeavor to introduce euthanasia in Bangladesh would not meet with success. Nor it is possible to introduce euthanasia in Bangladesh in its real sense.

Therefore, this article focuses on two aspects: first it provides a general scenario and problems of launching euthanasia in Bangladesh. In addition to this, it presents a short survey based on the respondents' attitude to euthanasia. The overall impression of this survey reflects the view that the attitude of mass people of Bangladesh to euthanasia is not detached from their religious and cultural affiliations. So, it is difficult to launch a policy of euthanasia in Bangladesh in its secular form. This article provides the suggestion to seek reconciliation between the secular view of euthanasia and the Muslim scholars' view of passive euthanasia.

Methodology

This study was conducted between January and March 2012. During this period, I met 480 intermediate, undergraduate and graduate students who responded to the questionnaire. All of the respondents live in Dhaka and in surroundings areas. This research develops a questionnaire in order to get feedback about euthanasia. By asking different questions on euthanasia, it has got the impression that students and other people's attitudes towards euthanasia are not clear. The questionnaires also deal with the problem of *informed consent*. However, the respondents participate voluntarily in this research with confidentiality and objectivity.

Discussion

Understanding euthanasia: While I am on a morning walk across the University, I see some garment labors passing besides me. As I overhear them, they are talking about one of their relatives who is poor and critically paralyzed. One of them shares the story of a painful disease of his relative. She exclaims with sorrow “why Allah does not take off his life to end his sufferings.” Indeed, her praying to Allah reflected one crucial point that death is preferable to a painful life. From a religious point of view, she has confidence in Allah who would be merciful to save the soul of the patient. Sometimes, poor old people pray to Allah to take their soul. From both examples, we can see people aspiring for a peaceful end of life rather than suffering. From these examples a critic would prefer to clarify the situation in favor of the secular stand at least in two ways:

Firstly, “euthanasia” and “taking of life” are not different in their inner sense. Both terms indicate the dismissal of life from a different standpoint. But their ultimate goal is the same. **Secondly**, For the development of modern medical science, caring responsibility and justifiable attitude to person’s desire, it has become a question : why euthanasia? Praying for the withdrawal of life is a religious belief which implies that God is merciful and has the anticipation of what amount of pain and suffering they would bear. But, these two points approve the termination of life in a remarkable way. So, I will clarify the term “euthanasia” in its philosophical significance in the next sections of this article.

What is Euthanasia? Pros and cons

What is Euthanasia? According to a dictionary (Hornby et al., 1963), euthanasia means “easy and painless death for persons (suffering from an incurable and painful disease).” The definition of *The Advanced Learner’s Dictionary of Current English* implies that persons suffering from an incurable and painful disease have a moral right to ask for an easier way of pain-free termination of life. The definition reflects one aspect of the term. But, there are various forms of ‘Euthanasia’. I would like to discuss at least three options for the clarification of ‘termination of life’:

Option-1: The agent may ask the physician to withdraw or withhold his treatment,

Option-2: The patient can refuse food and fluids deliberately in order to hasten “good death” without taking any drugs.

Option-3 : A terminally ill patient can ask somebody to apply lethal medicine to terminate his/her life.

Such options concerning the termination of life can raise questions whether it is morally acceptable to end someone’s life by any of the means mentioned above. **Option-1** implies not to initiate any new treatment, but to withdraw existing treatment in order to facilitate the progression of diseases. Should the withdrawal of life-supporting treatment be ethically allowed? In experience, the withdrawal of treatment is not acceptable without criticism. A competent verdict of Ontario Court of Appeal (decision of court regarding euthanasia came out in 1990) could be mentioned here for a better understanding of this problem. The Court declares that in the case of blood transfusions, when the patient is incapable to decide, blood transfusions aid cannot be withdrawn. The court gives verdict that in specific cases like incurable illness, terminal sickness or a persistent vegetative situation, a patient or his/her family member can reject medical treatment. The Court of Quebec (Quebec Superior Court 1992) gives the ruling that only adult patients suffering from permanently incurable disease have the right to request the disconnection of respiratory or other life-supporting equipment.

A Criminal Court in Quebec gave the decision in response to an issue regarding the criminal liability of the physician. On a request from a severely ill patient Nancy B’s, the physician removed the life-supporting respiratory equipment. After prolonged disputes, the Court decided that the doctor’s action was neither unreasonable nor unjustifiably reckless. The court reasoned out that the patient was critically ill; she had no scope to survive, awaiting her death. This is the conclusion that the Court reached at the patient’s request, which simply let the disease to take its natural course of action. And, this medical procedure would not be treated as an action of helping the patient to commit an act of suicide. I explore the verdicts of the concerning court in favor of **option-1**.

In favor of **option-3**, we find some crucial points from the Greek physician Hippocrates (460BC ~ 377 BC). We are impressed by: “Life is short, but art is long.” What does it mean? I think we can find out the meaning of this statement in his proposed “physician oath”, as he states:

“I will give no deadly medicine to anyone if asked, nor suggest any such counsel; and in like manner With Purity and With Holiness I will pass my life and practice my Art. I will not cut persons laboring under

the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further from the seduction of females or males, of freemen and slaves.”¹

So, it is a physician’s responsibility to help sustain the life of his/her patient and not to provide any medical assistance in order to facilitate the termination of the patient’s life. The oath does not allow suspending the life support tools in clear terms. So, this oath is the first defense of anti-euthanasia and can be cited as an opposition to *option-1*.

If it is endorsed that terminally ill people are allowed to take a lethal dose of medicine to end their life, we can raise a question: Can a terminally ill patient be allowed to take a lethal dose to terminate his/her life?

Sometimes it has been claimed that only to stay alive is not desired in any circumstances, and it is then better to suspend life. Usually a terminally ill person leads a very unhappy life that is divested of the minimum requirements of existence. Then it seems reasonable to let him/her die in order to avoid the agony of a painful life. If it is so, then another massive killing may be entertained as an imperative. With reference to a case, we can justify the claim. In Somalia, 4 million people are carrying a deplorable life due to lack of foods and medicines. All over the country is hunger stricken. If international emergency aids do not reach to the people in time the situation would worsen gradually. People affected by famine/hunger suffer from malnutrition which is caused by the lack of proper diet. Starvation is a form of famine causing the gradual death of a large number of people. People undergoing acute starvation for long often suffer from poor physical health. As we think, the gradual withering of some one’s body is an outcome of his/her long starvation. This scenario of hunger is very common in Bangladesh which is not different from that of the unbearable sufferings from illness. Do we kill the people who suffer from acute hunger? Certainly religions will say ‘no’.

No traditional religion or belief system permits killing. Religions like Hinduism and Islam encourage the preservation of life. In Hindu religion, life is inextricably linked to sacred entities like God, soul and cosmos. So, the Hindu Holy Scripture ‘*the Gita*’ upholds the view that life is sacred and should be revered; and, therefore it should not be demolished. The concept of a sacred life does imply non-injury or *ahimsa* to all living beings. One of the Ten Commandments strictly states: “Thou shall not kill”.

Pythagoras, the ancient Greek mathematician and theologian, upholds the view that life is eternal and human being is the repository of the sacred, so s/he has no right to destroy it. Most of the Eastern and Western philosophical and religious traditions are sensitive to the question of life. Thus, it becomes an imperative for all not to demolish life under any situation. Views like these resist killing either voluntary or involuntary.

Euthanasia: Scenario of Bangladesh

Is there any ethical position by Bangladesh government regarding the issue of euthanasia? In response to this question, we can proceed in two ways. At first, it is very true to state that Bangladesh government does not yet have any policy or ethical stance regarding euthanasia. Even medical colleges, hospitals or health organizations do not have any ethical committee to deal with the problem of euthanasia. Secondly, a hypothetical research can be conducted on the basis of religious beliefs of Islam, the religion of the majority people in Bangladesh. Islam promotes the view that all suffering is the consequence of God’s wrath and blessings. Islam contends that the suffering and pain are determined by Allah as a test for mortals in a world of trial, tribulation, and bitter experience. Humans should embrace the dictates of the supreme creator without disturbing the flow of life even in the name of mercy-killing.

Islamic Code of Medical Ethics (here-in-after ICME) has a strong influence over the Muslim world in framing its values and norms, in solving crucial problems concerning life and society. The guidelines of ICME are liberal in comparison to Islamic orthodox stance. As regards to euthanasia, orthodox believers of Islam would denounce euthanasia as a sort of suicide or killing. On the other hand, some liberal scholars (Brockopp 2003) assume that a passive form of euthanasia may be permissible and syncs with Islamic belief system. In Bangladesh, as I have said before, there is no specific form of practicing euthanasia. However, it is noticeable that in Bangladesh the public consensus is usually formed according to Islamic ideology. At first, I will sketch out the orthodox view of Islam and then the liberal viewpoint.

¹ “The Hippocratic Oath” begins in the name of Gods and Goddesses. The quotation is collected from the original version of “The Hippocratic Oath”, see <http://nktiuro.tripod.com/hippocra.htm>

The orthodox position regarding euthanasia searches an answer to the question: how does euthanasia contradict the Islamic belief system? Euthanasia approves killing either by giving a lethal poison, or the withdrawal of necessary food, fluid and medicine in order to cease the painful prolongation of life. This, however, implies letting someone die as an inevitable consequence. But, the sense of death in Islam contradicts euthanasia. Islam upholds the view that Allah is the “owner of all life”. For example, they refer from *Qur’an* that “Allah knows the best”. He knows beforehand when the life of a person would be ceased. Allah created human beings by inserting *nafs* (soul) or *ruh* (spirit) in human body which is the prime force of human life. As creator, Allah determines the actual duration of everything on earth. In the holy *Qur’an*, there are a number of verses supporting this core conception of Islam. But, it is almost play with God’s order to pursue an alternative means to death. The reverence for life and its sanctity are welcomed in Islam. No human being has the capacity to create any spark of life. It is well expressed in the verses aptly of Sura Al-Imran: “that had they been with us, they would not have died and not been slain, in order that Allah may make it a cause of regret in their hearts. Allah gives life, causes death and Allah is seeing your works.” (Surah Al-Imran, Verse, 169). Similar ideas are expressed in many places of the holy Qur’an.

“And kill not yourselves. Undoubtedly, Allah is Merciful to you.” (Surah Al- Ana’m, verse 151).

“... you kill not your children because of poverty. ... and slay not unjustly the life which Allah has made sacred.” (Surah Nissa, verse 29)

“... And it is He Who gave life to you, then He will cause to die, again He will give life to you. Undoubtedly the human being is most ungrateful.” (Surah Al Hajj, verse 66).

All these verses of Qur’an reflect that life is sacred and made by Allah and it should not be killed. All methods of killing such as taking a lethal poison, jumping from a mountain or to sea, using any kind of tools, are prohibited. If anybody does it, he/she will be punished at the final judgment day. This means killing a life whatever the issue or means is strictly prohibited in Islam. Recently European Council for Fatwa and Research also forbid any kind of deliberate or intentional killing or to hasten the death of any person.

Such a view is also popular among the Islamic scholars of Bangladesh. As a consequence, they claim that techniques of Euthanasia should not be permitted as means to death. In the next section of this article, I will bring into view some information by employing the survey data among the Islamic scholars and show widespread perception of prohibition of euthanasia in Bangladesh. Not only that some Islamic scholar like Prof Dr. Omar Hassan Kasule sr.(2001) agrees with the view of Islam. He thinks that the concept of “*hifdth al nafs*” is the basic concept of life in Qur’an, which implies that any forms of euthanasia whether it is active or passive, is unacceptable. Euthanasia, in all cases, “... involves violation of the divine prerogative of giving and taking away life.... It can indirectly lead to the violation of the purpose of preserving progeny by cheapening human life thus encouraging suicide, and homicide, and genocide.” (Kasule sr. 2011). Prof. Kasule finally comes to the conclusion that Islam seriously upholds the view of sanctity of human life. Therefore, it opposes any form of killing such as assisted suicide, passive or active euthanasia. Sheikh Muhammad bin Saalih al-Uthaymeen (2014) also thinks that Islam does not permit any sort of killing or suicide. However, there are lots of reasons to oppose the stance of Kasule

From the secular perspective, it is quite pertinent to ask whether one is to be motivated to end his/her pain by allowing euthanasia or to carry the burden of a painful life which apparently seems to come from Allah. In response to this question, some Islamic scholars opine that passive euthanasia is possible under the rules and norms of Sharia, a view also emphasized by Brockopp (2003), Mufti Ebrahim Desai (2014) and Sheikh Al-Qaradawi (2014) who uphold that only passive euthanasia can be acceptable. Accordingly, Islamic Conference of Medical Ethics (ICME) has the following to say:

“if it is scientifically certain that life cannot be restored, then it is futile to diligently keep the patient in a vegetative state by heroic means.”

I support the second point of view. In supporting this view, I argue that the life of human beings has two options: birth as beginning and death as destination. A believer of Islam should prioritize eternal life after death irrespective of whether it would be in hell or heaven. To attain heaven one’s death should a good *ending of life*. Only a *good death* can ensure one’s achievement of heaven. According to Islamic theology, death has a teleological end, but death itself

has no value. To attain heaven, the day of resurrection and the day of final judgment have value and significance. Therefore, it is normal to seek *good death*. According to Islam, the good death is means an ideal death devoid of pain and sufferings. In case of a severely ill person or vegetative patient who does not have the possibility to overcome the fatal illness, does not go against the commandments of Allah to withdraw treatment or removing life-supporting equipments to ensure *good death*. However, a patient may refuse foods, drinks as well as withdraw special treatment in order to achieve *good death*.

A happy and painless death is compatible with the infinite pleasure of life in heaven. Considering ruling as a punishable offence, a critic may be tempted to raise a question: How could we entertain the killing in terms of passive euthanasia in the name of Islam? So, the concept of *good death* has been misunderstood by the Islamic scholar. From the Islamic standpoint, one may ask: “How can passive euthanasia be considered a means to *good death*? Whatever the answer to this question, it is a fact that we should not unanimously prohibit euthanasia. In this regard, Islamic scholar Brockopp states:

“For the muftis, it is not possible to say that euthanasia is always forbidden, as long as the act of euthanasia may be described in such a way that it does not defy the central tenets of Islamic theology.” Brockopp, (2003, p.178.)

In support of this view, Brockopp derived an idea from Muhammad Sayyid Tantawi. Considering active euthanasia, Tantawi is against it as a violation of Islamic values. But, he agrees that in the case of brain death, a doctor may permit passive euthanasia. As he states:

“[if] the heart of the patient continues to beat because he is hooked up to a machine, and his brain is dead, there is no fault in the family requesting the removal of the machine... they are accepting God’s decree [since] death is the separation of life.” (Brockopp, 2003, pp.178-179).

According to Brockopp, two things are important: (1) within the Islamic framework, it is not quite restricted to allow death in case of a patient’s severe and unbearable death, and (2) Islam is not much orthodox as far as it is relevant to human well-being. These two points indicate how Islamic stance can be employed in support of passive euthanasia from a Western perspective. Brockopp’s stance implies that euthanasia is right when it is employed to avoid serious pain and sufferings. The same urge is also found in the Islamic interpretation of Farzaneh Zahedi (2007). Her main argument suggests that if any patient’s treatment becomes more burdensome in terms of pain and money, it is not necessary to prolong his/her life anymore.

However, both orthodox and liberal approaches within Islam believe that we should not permit the demolition of life except under critical circumstances. Though, Islamic perspective on the cessation of life is very strict. Various verses of holy Qur’an about life and human dignity give us the impression that a person deserves a respectful death.

Relevant issues with euthanasia: From the previous discussion, it is apparent that there is no clear interpretation regarding euthanasia acceptable to the Muslim population of Bangladesh. So, an empirical survey was conducted with the relevant stakeholders, such as doctors, nurses, patients, and Islamic scholars to get their views about euthanasia.

Muftis on Euthanasia: In Bangladesh, there is no official recognition of *Shariah* or Fatwa based system at any level of government. But, this is a fact that most people either go by a common understanding of Islam or follow the suggestions of the *Muftis*. In this regard, I interviewed some with the following questions: (i) Do you know about euthanasia? (ii) Is letting someone die or withdrawal of life supporting system or killing someone on his/her request allowed in Islam? (iii) What are the views on death in Islam?

Table 1 shows that most of the *muftis* do not agree with the concept of euthanasia; 80% of respondents do not know the term euthanasia or any form of death on request arranged by human beings in case of someone’s severe illness or uncomfortable situation. But, 30% of respondents agree with the idea of withdrawal of life supporting system on request of the family members. At the same time they also confirm that Islam does not allow death by intervention of others.

Table 1: Muftis Response to euthanasia

Concerning issues	Muftis			
	yes	no	Indifferent	Total
Do you know about euthanasia?	0	12	03	15
Is letting someone die or withdrawal of life supporting system or killing someone on the basis of his/her family's request allow in Islam?	05	9	01	15
Does Islam allow suicide?	00	12	03	15

Graduate Students Responses: A part of the survey was conducted with the intermediate and undergraduate students of different disciplines in different institutions. Table-2 shows their age, gender and disciplines. The number of respondents was approximately five hundred. They are students of different disciplines at in different levels. But, most of the students are from the undergraduate level, and others are from the intermediate level. They were interviewed with many questions regarding euthanasia. The results of the survey are shown in table 3.

Table 2: Students responses distribution (in terms of age, gender and discipline)

Gender Age	Female:					Male:				
	12-15	15-18	18-21	21-24	24-27	12-15	15-18	18-21	21-24	24-27
Humanities (H)	10	16	15	15	15	10	16	15	15	15
Science (S)	10	12	10	10	10	10	12	10	10	10
Business (B)	10	12	15	15	15	10	12	15	15	15
Medical Science (MS)				20	20				20	20
Engineering (Eg)				10	10				10	10
Total	30	40	40	70	70	30	40	40	70	70

Table 3: about euthanasia

Do you know euthanasia?	Female			Male		
		Yes	No		Yes	NO
H		25%	75%	H	35%	65%
S		35%	65%	S	40%	60%
B		30%	70%	B	30%	70%
Ms		45%	55%	Ms	45%	55%
Eng		35%	65%	Eng	40%	60%

The majority of the respondents were less informed about euthanasia. But, some medical students positively said that they were familiar with the idea of euthanasia. Table 4 gives us the impression that their poor knowledge about euthanasia does not make any difference. Being students of medical science, they should have special knowledge on euthanasia.

Students of different discipline were asked the question: why may people disagree with euthanasia? Most students argued that for cultural and religious causes we should not allow euthanasia. At the same time, they took a stand in favor of natural death. To some extent, they suggest that euthanasia seems very selfish and cruel. But, this research also finds that (see table 4) some students believe that we should not sustain life under severe illness. In case of unbearable sufferings, and frustration, there should have opened alternative means of death which is good and peaceful. Such a survey is illustrated in the following table 5.

Table 4: Why people may disagree with euthanasia?

	Female		Male	
Due to religion and culture (RC)	H	RC = 60%	H	RC = 65%
		NB = 50%		NB = 60%
		SC = 75%		SC = 65%
		ES = 80%		ES = 70%
People should be naturally biased (NB)	S	RC = 65%	S	RC = 65%
		NB = 60%		NB = 60%
		SC = 55%		SC = 55%
		ES = 80%		ES = 80%
Euthanasia is selfish and cruel (SC)	B	RC = 65%	B	ES = 70%
		NB = 60%		RC = 65%
		SC = 55		NB = 60%
		NB = 60%		SC = 55%
Easy and smooth way to deal with extremely ill patient (ES)	Ms	ES = 80%	Ms	ES = 80%
		RC = 65%		RC = 65%
		NB = 60%		NB = 60%
		SC = 55%		SC = 55%
	Eg	ES = 70%	Eg	ES = 70%
		RC = 65%		RC = 65%
		NB = 60%		NB = 60%
		SC = 55%		SC = 55%
		ES = 80%		ES = 80%

Table 5 : Why do you believe people may agree with euthanasia?

	Female		Male	
It's unfair to sustain life with pain and sufferings (US)	H	US = 60%	H	US = 60%
		C = 50%		C = 50%
		O = 75%		O = 75%
People should have alternative option or choice (in case of need: such as critical pain, unbearable sufferings or painstaking frustration) to death (C)	S	US = 65%	S	US = 65%
		C = 60%		C = 60%
		O = 55%		O = 55%
There should have more opportunity to know about euthanasia (O).	B	US = 65%	B	US = 65%
		C = 60%		C = 60%
		O = 55%		O = 55%
	Ms	US = 65%	Ms	US = 65%
		C = 60%		C = 60%
		O = 55%		O = 55%
	Eg	US = 65%	Eg	US = 65%
		C = 60%		C = 60%
		O = 55%		O = 55%

Table 5 shows that most of the students agree to an alternative means of death in case of critical illness, unbearable pain. However, I think the survey results of table-3 and table-4 are completely contradictory. So, how could ethicists deal with the problem? I think there is a dilemma between ‘reality’ and ‘hope’. The idea and mentality of the people are constituted by their religious belief. In Bangladesh, most of the people are motivated by the Islamic norms and ideals. (Although they have a general faith in the principles of Islam but in practice some may be corrupted; injustices of all sorts are everywhere).

So, it is not clear how their practices and life style are in sync with their religious belief. Therefore, they attempt or reject something according to the interpretations of the Islamic scholars. On the other hand, people of this country are used to take advantage of science. They are hopeful about the future progress of bioscience in the country, and they have firm faith in the development of bioscience which can mitigate current enormous problems of health. So, most of the students’ hope in this relation is very reasonable as well as scientific. The basic norms are formed according to their expectation and experiences of the daily life. But, we cannot forget that most of the expectations and experiences are not consistent with the Islamic belief.

In mitigating such dilemma we can search for a new form of values. In developing such values, we should consider Bangladesh as a pluralist country comprising of different religious, social, and ethnic communities. In different spheres of society in Bangladesh, there are scopes for exchange of values and norms among different groups and communities. Sometimes our societal values and cultural traditions reflect our moral standards. These social values are considered as identity. This is also a reality of history of this territory that there are religious disharmonies and intolerance. In political context, we do not resolve the problems on the basis of consensus. Rather, political parties emphasize on mutual contestation. This is why it requires to transform our traditional values in order to prevail consensus over all controversy.

The question under discussion is relevant for the issue of agent’s autonomy. On the basis of trust, there should be a relationship between the doctor and the patient. In the process of informed consent doctors should provide all sorts of information related to the problem of the patient. Accordingly the doctor should wait for the consent of the patient. However, the strength of information can motivate the decision of the patient. O’Neil (2003), in this regard, states that on the basis of proper and competent information, a patient will be able to make a firm choice and the doctor can then go for necessary course of actions accordingly. But, what would happen to those patients who are not able to give consent? Table 6 can give us a clue. In table 6, in response to the main questions, in average 65% students of different disciplines agree with the condition C (people should have option or choice in case of need (such as critical pain, unbearable sufferings or painstaking frustration) about their death. It implies that passive euthanasia may be allowed as a form of euthanasia.

Table 6: Do you believe that people should have the right to choose how and when to die?

	Female		Male	
It's unfair to sustain life with pain and sufferings (US)	H	US = 60%	H	US = 60%
		C = 50%		C = 50%
		O = 75%		O = 75%
People should have option or choice (in case of need; such as critical pain, unbearable sufferings or painstaking frustration) about their death (C)	S	US = 65%	S	US = 65%
		C = 60%		C = 60%
		O = 55%		O = 55%
There should have opportunity to know about euthanasia (O).	B	US = 65%	B	US = 65%
		C = 70%		C = 65%
		O = 55%		O = 55%
	Ms	US = 65%	Ms	US = 65%
		C = 65%		C = 70%
		O = 55%		O = 55%
	Eg	US = 65%	Eng	US = 65%
		C = 60%		C = 50%
		O = 55%		O = 55%

Conclusion

Our duty is to save the life of a human being. End of life demands caring management which could be a potential alternative to euthanasia. Dying patients may either choose hospice care or palliative care. Hospice care is a care team consisting of professionals, social workers, nurses and doctors. The goal of the care team is to make the life of the patient as comfortable as possible. Such a care system emphasizes how to develop a management of natural death, increase conformability of patient, to intensify the quality of life etc. In this caring system, the patient and his/her family have control over the circumstances of death. This team provide the patient all the life-living requirements, such as food, medicine, necessary nursing, counseling and emotional support.

There is another alternative of euthanasia, palliative care, which is consistent with the healthcare of the extremely ill patient. The aim of this care system is the relief of disease symptoms; it also ensures comprehensive care for the patient. Both palliative care and hospice care have some striking similarities regarding the members of their respective teams: doctors, nurses, social workers, neurosurgeon and psychiatric experts. But, palliative care emphasizes not only the relief of the symptom, but also the curing of the injuries and bodily illness. The supporters believe that in most cases, the team fail to address the physical pain and sufferings of the terminally ill patient; rather it becomes involved with the psychological and emotional sufferings of the patient.

Whatever the definitions offer of the term euthanasia, eventually it intends to terminate the life of a patient due to unbearable pain and sufferings, which is incurable as well. Throughout my article, I have explored many pros and cons of this problem, but I emphasized only one point that we have to find an alternative which would not end a patient's life. For this specific reason, I suggest to consider palliative care system as an alternative to euthanasia. This care system holds that we should not apply euthanasia until we ensure credible effort and sustained care for the dying.

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The influence of mass media on medical decision-making: the case of extracorporeal membrane oxygenation

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Abstract

Several studies have demonstrated how medical information may be portrayed incorrectly in media. For example, depiction of an over-optimistic survival rate for patients receiving cardiopulmonary resuscitation, presenting the positive outcomes of a new drug rather than the negative ones in newspapers, and so on. This is to highlight that the incorrect information presented on media can mislead the readers into believing that medical decision-making of patients/family members should be based on the presented information. Nevertheless, few studies have ever examined the influence of incorrect medical information on decisions made by patients and their families. Our presentation will focus on how the media influence patients' and/or their family members' medical decision-making in critical care medicine, based on two articles we have already published to examine this issue on the subject of extracorporeal membrane oxygenation. Extracorporeal membrane oxygenation was introduced to clinical practice aeveral decades ago and is now the most famous and important life-support intervention in Taiwan. This presentation concludes that incorrect medical information presented on media may significantly influence medical decision-making by patients and their family members.

Introduction

Extracorporeal membrane oxygenation (ECMO), a very important life-supporting treatment, is a heart-lung machine for supporting the life of a severely ill patient experiencing cardiac or respiratory failure for a short period of time. Hill and colleagues in 1972 first reported the successful survival of a 24-year-old severely traumatized patient who had been supported by ECMO during the acute phase of acute respiratory distress syndrome (Hill 1972). To date, ECMO is used to support lives of patients with respiratory failure or cardiac failure refractory to conventional intensive treatments (Crow 2009, Delius 1992, Kolla 1997).

ECMO has been used in clinical medicine since the end of the 1990s in Taiwan, and has been fully covered by Taiwan National Health Insurance since December 1, 2002. The use of ECMO to support a mayor's wife who was a famous movie star (Taipei Times 2014), and a TV celebrity (Epoch Times 2014) at the end of 2006 and the beginning of 2007, respectively, attracted significant attention to the use of ECMO for restoring the severely ill, and imminently dying patients.

According to the Extracorporeal Life Support Registry Report International Summary for January 2014, the annual number of patients supported by ECMO increased from 1,644 in 1990 to 4,357 in 2013. Of the 58,842 patients supported by ECMO, 33,412 (56.78%) were neonatal patients, who have the highest rates of immediate survival after ECMO use, and the highest rates of survival to hospital discharge, compared with adult and pediatric patients. Of the 5,146 adult patients who received ECMO because of respiratory failure, 2,905 (56.45%) survived to hospital discharge. Of the 4,042 patients who received ECMO because of cardiac failure, 1,636 (40.48%) survived to hospital discharge. The average rate of adult ECMO patients who eventually survived to hospital discharge was 46.96% (ECLS Registry Report 2014).

Taiwan has become one of the major countries for ECMO use. In 2010, 1,126 Taiwanese patients received ECMO support (Taiwan Deapartment of Health), accounting for nearly one third of the worldwide ECMO cases. In six studies reporting the survival of ECMO users with cardiac failure conducted by Taiwanese researchers, the survival rates at

hospital discharge ranged from 27.78% to 64% (Ko 2002, Hsu 2010, Chou 2010, Chen 2011, Hsu 2011, Chung 2012) with an approximate average survival rate of 44.03%. A study by Chen et al. in 2011 reported a 31.58% survival rate of ECMO users with respiratory failure.

The mass media, such as newspapers and the Internet, can have a substantial influence on the public's attitudes and behaviors. The objectives of this study were to: (1) examine the association between the two significant social events and the trend change of ECMO use in Taiwan; (2) explore the portrayal of ECMO use in the mass media in Taiwan.

Methodology

For the first objective, we obtained data for trend analysis from National Health Insurance Research Dataset. The ECMO cases from 2000 to 2009 were collected, and the crude incidence rate of ECMO use for each year were calculated. Joinpoint regression analysis was used to examine whether the two significant social events were associated with the trend change of ECMO use. For the second objective, data were collected from the Internet webpages using keyword search, and reports from four major newspapers between 2006 to 2010. Chi-squared test was used to examine the association between the survival rate of ECMO use demonstrated on the Internet webpages and those reported in the literature, and between the survival rate of ECMO use demonstrated in the four newspapers and those reported in the literature.

Based on National Health Insurance Research Dataset, we obtained the total of ECMO uses in each year from 2000 to 2009. The total of ECMO uses in Taiwan almost tripled in 2009 as compared to the total of ECMO use in 2000. In comparison, the total of worldwide ECMO uses excluding those from Taiwan increased by about 30% from 2000 to 2009. Furthermore, the trend change of ECMO use in Taiwan was identified with statistical significance after 2007 using Joinpoint Regression analysis. Accordingly, we concluded that significant social events may influence patients'/family members' decisions to request life-supporting treatments.

Based on the Internet webpages and newspaper articles from 2006 to 2010, we found that: 1) the Internet web pages were more likely to reproduce the survival of ECMO patients than newspaper articles; and 2) the survival rates for ECMO use demonstrated on the Internet and newspapers were both over-optimistic as compared to those published in the literature.

Discussion

Medical decisions to request aggressive life-supporting treatments is frequently discussed in the field of medical ethics. Physicians assist with a patient's/family member's medical decision-making by providing medical information and suggestions based on scientific and humanistic principles, and with respect for patient autonomy. Patients usually make medical decisions depending on the medical information and suggestions given by the health care professionals, personal values, personal preferences, and past medical experiences (Brett 2000). Therefore, the significant social events highlighted by the media and the over-optimistic survival rate of ECMO users reported by the newspaper articles and Internet web pages may potentially influence patients' and family members' personal values and personal preferences, thus encouraging them to request ECMO being performed on themselves or their relatives while death is imminent.

None of the laws associated with clinical practice in Taiwan forces physicians to provide aggressive life-supporting treatment which is considered inappropriate to patients even if patients/family members request them. Therefore, physicians theoretically can decline the request of inappropriate life-supporting treatments based on their professional judgment. However, if the family members are influenced by the significant social events highlighted by the media or the over-optimistic survival rate of the inappropriate life-supporting treatments users reported in newspaper articles and Internet web pages, and thus strongly request the inappropriate life-supporting treatments to be performed on the patients, physicians, usually in fear of litigation or the burdensome process of litigation (Roy 2011), are more likely to perform that life-supporting treatments without carefully deliberating its clinical indications.

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Experiences of a Japanese couple following fertilization with a donated egg

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Abstract

This study presents the results of an interview with a couple, analyzed qualitatively and inductively, to understand the experience and struggles they experienced during pregnancy and following the delivery of a baby following infertility treatment with a donated egg. The married couple, who were the same age, was interviewed when the baby was six months old. The husband cared about the feelings of his wife and continued the stance of “leaving all decision-making on the baby to her” and “talking nothing about the baby”. He also continued having “the anxiety whether she would recognize the baby without genetic relation as her own baby” and spent days “with great caution so that she would feel like delivering a baby”. Moreover, he continued “struggling and brooding over the righteousness to receive egg donation”. Meanwhile, the wife, already 40 years old, had started designing her life without a child. She said that she received egg donation as “the decision of her husband’s parents to give up on having a blood-related grandchild”. When pregnancy was confirmed, she was confused and disappointed at “whether she could take good care of the baby without genetic relation.” Furthermore, since the pregnancy was costly, she felt the pressure that “miscarriage would be unforgivable” and consulted her parents that knew about the secret of egg donation. Starting to feel fetal movement, she felt “a joy and love along with the helplessness of having no genetic relation.” However, as the fetus grew, she felt a miraculous connection and started to feel like “raising the baby with love as her own child”. However, she continued struggling because “she was uncertain about the ethics of delivering a baby by receiving egg donation”. Both of them had decided not to declare “the place of origin” to their child, but were aware of the necessity of announcement under certain circumstances.

Introduction

Remarkable developments have been made in ART (Assisted Reproductive Technology), and the implementation of ART in Japan is more than that in any other country in the world (Japan Society of Obstetrics and Gynecology 2013). The social progress of women in Japan has led to an increase in age for the first marriage and childbirth; consequently, an increasing number of couples in their 40s are receiving fertility treatment, and the number of couples in their 50s who wish to have a child is also increasing (Japan Medical Association 2013). Women who are older and hope to become pregnant have a higher birthrate if they receive an egg donation from a young woman. This has led to an increasing number of women traveling abroad for ‘reproductive tourism’.

The Japanese Society of Obstetrics and Gynecology has announced that the use of an egg from a third party is forbidden (2013); however, in Japan, legislation regarding ART has not been established yet. In 2008, Japanese Institution for Standardizing Assisted Reproductive Technology (JISART), which includes the major ART clinics in Japan, announced the implementation of egg donation for couples, except those who could not conceive because of advanced age. However, most infertile couples hoping for an egg donation are unable to conceive because of advanced age. Furthermore, many Japanese women in the US receiving an egg donation are >45 years of age, 90% of whom are infertile because of aging (Okagaki et al. 2007).

In recent years, there has been an increase in the number of couples receiving egg donations in Asian countries, such as Thailand, because the medical costs are approximately one-quarter of those incurred in the United States (Babycom 2013, Kanazawa university 2013, Shirai 2013). The exact number of such donations, however, is unknown because many couples secretly travel abroad for such treatments (NHK Online). Unlike surrogacy, egg donation does not present the problem of determining the actual mother. The Japanese Ministry of Justice takes the position that couples and children with no blood relationship have no legal parent-child relationship; therefore, observing the child’s right to know their origin may lead to the rejection of the legal parent-child relationship. It has been indicated that under Japanese law, it is a problem that the rights of children born via such medical treatment cannot be fully ensured

(Ishihara 2012).

Although most Japanese couples who conceive through egg donation give birth in Japan, some couples may hide from medical practitioners and not receive the pregnancy management required for women of advanced maternal age with high obstetric risk, and thus suffer a medical problem. This also complicates the settlement of problems involving the born child's right to know their origin and their welfare.

A Japanese web site where infertile couples can exchange information on egg donation (Babycom) highlights some problems, including the high expenses involved (treatment, accommodation, and travel), trouble due to language and cultural differences, and the lack of a post-pregnancy follow-up system in Japan. In a 2011 survey, 47.5% of doctors responded that they flatly refused couples who hoped to give birth via egg donation. Thus, although there is no established legislation and follow-up after pregnancy is inadequate, there are an increasing number of couples receiving egg donations whose support needs have not been clarified. Therefore, with the goal of ascertaining the experience during pregnancy of couples who received an egg donation, we interviewed one couple and report our findings.

Methodology

The present study was a qualitative study using an inductive approach using a semi-structured interview. The study participants were a married couple, both at 42 years of age. They had a 6-month-old healthy child and they voluntarily agreed to participate in the present study. The participants provided informed consent after they were assured that their anonymity and personal information would be protected when publishing the results of the study. The researcher conducted the interviews one-on-one with the husband and wife individually, and asked questions regarding their experience from the decision to receive an egg donation to the completion of the pregnancy. With the participants' consent, the interview was recorded using an integrated circuit recorder, transcribed and used for data analysis.

Findings and Results

The couple was unable to conceive despite fertility treatment for premature ovarian insufficiency. The wife felt that the treatment was limited and had considered a life without children as she approached 40 years of age. On the other hand, the husband and the husband's parents had not given up on a child and were considering other treatment methods. On hearing about surrogate births through Japanese media, the husband proposed the idea of egg donation to his wife. The husband's parents bore the treatment and travel expenses, and the husband and wife willingly agreed to receive an egg donation.

We found that the husband's experience after the decision for egg donation and throughout his wife's pregnancy included five categories, which are shown below as in narrative form.

After deciding to receive an egg donation ***all the decision-making related to the child was left up to the wife***. The husband said, *"I thought it best to let my wife decide by herself"* and *"perhaps it was cowardice, but I let my wife make all the decisions about the egg donation."* The husband gave his wife's feelings top priority and let her make all the decisions, such as deciding on egg donation and choosing a donor. Once the pregnancy was established, the husband felt more confused than happy and behaved indifferently, showing no interest in the unborn child that would have his own genes.

As a result of ***not starting any conversations regarding the child***, *"when my wife asked: aren't you interested in the child at all?, I did nothing and said nothing about the child"* and *"as my wife will be the one giving birth and raising the child, I tried not to upset my wife."*

Furthermore, there was a strong sense of ***concern that my wife would not recognize the child as her own as there was no genetic relationship***, in which the husband said, *"I was very concerned that my wife would say that she wouldn't raise the child"* and *"I even thought that if my wife said that she wouldn't raise the child, I would be left to live alone with the child."* In addition, the husband was worried about whether his wife would recognize the genetically unrelated child as her own and whether she would be the mother.

Moreover, the husband was careful to make sure that he was ***touching his wife's pregnant belly to help her feel***

like giving birth to the child that she was genetically unrelated to. The husband voiced his concern saying, “I wondered deep inside whether my wife would really feel maternal love, and I had no one who had experience of this to consult with. I thought this all along alone” and “I touched my wife’s pregnant belly so that she would not stop wanting to give birth.”

As the birth approached, the sense of **ethical confusion about whether or not it was right to receive an egg donation** continued. The husband said, “I continued to worry about whether we had made the right decision regarding egg donation. I suppose I will keep on worrying” and “as the birth approached, my feelings got more complicated, and I didn’t want the baby to be born with me feeling like that. If it did, I couldn’t say that my wife wouldn’t raise the child.” Anticipation for the birth made the husband even more anxious, with him saying, “if I was told that it was a good thing to have had the child, I would have no regrets even if I died soon after. But I have no idea how to raise a child.”

With regard to telling the child the truth, the husband had decided **not to tell the child of his/her origins**. He said: “I will not tell the child the truth and take the secret to my grave. Once our parents die and we die subsequently, there will be no one left who knows the truth”; he acknowledged the fact that, depending on the situation, he may be required to notify the child.

In contrast, there were six categories found in the experiences of the wife. On considering a life without children as she approached 40 years of age, the wife was recommended egg donation as a final treatment by her husband. The wife chose to receive an egg donation on the basis of the **decision because her husband and husband’s parents had not given up on having a child**.

She said that it was not a treatment that she had personally hoped for and that “my husband’s parents talked incessantly about grandchildren, and I could not take the pressure. So, I decided to do it as a last treatment.”

After deciding to receive an egg donation, she chose a donor that, she felt, was “young and seemed sweet”. Although she did not know the donor’s blood type or if they looked like her, the blood type was consistent with that resulting from their biological coupling. The wife said that “she felt a connection with the donor.”

Once the pregnancy was established, the wife felt more confusion than happiness and felt **pessimistic about her ability to love the genetically unrelated child after it was born**. She was confused about the unexpected pregnancy and was pessimistic about whether or not she would be able to love the child, imagining a poor parent–child relationship.

Furthermore, because of the high cost of the treatment, the wife was under pressure not to miscarry, and she worried about the disappointment of her husband and his parents if she did suffer a miscarriage. When she began to feel the fetal movements, she felt **happiness and love, yet at the same time unhappy that there was no genetic connection**. She said, “although I felt love and happiness from being able to feel the fetus move, I also felt sad that I had no blood ties with the child.” She experienced complicated emotions about a pregnancy in which a genetically unrelated child was growing inside of her.

As the fetus developed and her belly increased in size, the wife felt a miraculous connection with the child, and her feeling changed to **wanting to raise the child lovingly as their own**. She showed an attachment to the baby in saying, “when I found out that I was pregnant I didn’t know what to do, but I got pregnant with a child that I am connected to and I want to take care of it.” As the birth neared, she “absolutely did not want the delivery to be more difficult than that in young women” and continued to make efforts so that she would have an easy delivery by walking daily and not missing any muscular training.

However, she had continued feelings of **ethical confusion about whether it was right to give birth to a genetically unrelated child**. Not being able to consult anyone, she continued to worry and wonder: “is it okay to give birth this way? I just want someone to tell me that it’s not wrong.” She did not even confide in her husband about her feelings. Her decision to tell the child the truth resulted in her decision **not to tell the child of his/her origins**. She said, “even if I tell the child the truth, it will only upset him/her, which is not good. I will hold onto the secret to my grave.” However, she acknowledged the fact that, depending on the situation, she may be required to tell the child.

Discussion

Many people hesitate to receive an egg donation because of the high costs involved (Babycom 2013). For the couple in the present study, receiving financial support from the husband’s parents was a major reason that they made the

decision to receive the treatment.

The husband's experience during his wife's pregnancy through egg donation was one of confusion after the pregnancy was established, even though the pregnancy was planned, and continued to have strong anxiety and confusion about whether the wife would raise the genetically unrelated child or whether she would acknowledge the child as her own. The husband was concerned about his wife, who was pregnant with a genetically unrelated child. He decided not to exhibit any behavior that showed a strong interest in the child because only he was genetically related to it; instead, he acted by giving priority to his wife. When the wife said that she would not raise any children, the husband had resigned to living together with just his wife. As the delivery date approached, the husband's anxiety about what to do if his wife did not help raise the child intensified; he did not look forward to the childbirth and even wished that the baby would not be born.

The husband's experience differed greatly from the process of rejoicing in the development of the fetus and looking forward to its birth with the wife, as husbands do in normal pregnancies. It is said that there is an increasing number of Japanese women receiving egg donations despite the procedure being forbidden in Japan. Therefore, because only few couples are able to receive the treatment, the husband was tormented by the ethical dilemma of whether it was right to receive an egg donation. Furthermore, he was unable to consult anyone about this and continued to feel troubled and did not even confide in his wife.

Pregnancy is a time to prepare for parenthood (Rubin 1997), and the development of the awareness of becoming a parent affects the relationship between the couple and their affection toward the unborn child. In the present study, the husband did not talk to the wife about the child and did not show any affection to the unborn child during the pregnancy. It was suggested that this may have delayed the development of his awareness of becoming a parent.

On the other hand, the wife decided to receive an egg donation as a final attempt at treatment for the husband and his parents, who had not given up on having children. Because the wife actually wanted a child, she looked forward to the treatment and chose the donor herself. However, the wife was confused once her pregnancy was established and felt anxiety about whether she would be able to love a genetically unrelated child. Moreover, the treatment cost several million yen; as a result, the wife was troubled from the additional pressure to not miscarry.

For a woman, pregnancy is a period of preparation for becoming a mother. Thus, exploring maternal models and imagining situations involving one's self with the child while pregnancy progresses will help the mother's love for their child increase (Rubin 1997). In contrast, pregnancy through egg donation caused a complex mental state for the wife, who was pessimistic about the future and imagined a poor parent-child relationship after childbirth. However, as her belly increased in size and she began to feel fetal movements, the wife's affection for the unborn child gradually grew, and eventually her feelings changed to becoming a mother and "*wanting to raise the child with love.*" This affection process differs from that of women who conceive through ART and feel that both the pregnancy and unborn child are precious (Hayashi & Sayama 2009).

In the present study, the pregnancy was planned; however, both the husband and wife felt confusion and anxiety about the wife and giving birth to a genetically unrelated child. The couple was concerned about whether life with the born child would proceed without any problems. They also continued to have doubts about the ethics of conceiving through egg donation, which is forbidden in Japan, and whether it was right to have a child with no blood relationship. The couple did not confide in each other about their feelings, and both experienced an unhappy pregnancy because they had no third party to consult, resulting in continued feelings of trouble and anguish. Both the husband and wife had unmet care needs in which they needed someone with whom they could talk.

Considering that the number of couples conceiving through egg donation is increasing, a consultation system is required that is able to address the complex emotions felt from the perspective of the husband and wife. Such a system should promote awareness among couples of becoming parents during pregnancy, which would enable them to be involved in delivery and child care.

Conclusion

When couples who choose treatment through egg donation actually conceive, they feel more confusion than happiness. In addition, from the perspectives of both the husband and the wife, the treatment can result in a complex mental state

regarding giving birth to a genetically unrelated child. Although they looked forward to the growth of the fetus and birth of the child, this couple continued to be anxious about whether life with the child would progress without any issues and had doubts about the ethics of whether or not they made the right decision in choosing egg donation. A consultation system should be established to promote the development of the awareness of the couple of becoming parents during pregnancy, which would enable them to be involved delivery and child care.

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Organ donation and family relations in Bangladesh

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Abstract

This paper presents a cross-cultural and comparative review of the situation of organ donation and transplantation policies between Bangladesh and the UK. The focus of this paper is on how the human organ donation and transplantation policy of Bangladesh is different from the secular Western perspective such as in the UK. Structurally, organ donation and transplantation policies in Bangladesh are family oriented in comparison with the secular Western notion of self-reliance. The biomedical practice in Bangladesh is in a way that organ donation and transplantation are only acknowledged for family members. However, family members can donate their organs to any stranger in most Western societies. This family oriented donation of organs is very typical and unique in the traditional and Muslim majority society of Bangladesh. I also address the normative question of why organ donation and transplantation policy of Bangladesh is family oriented. Based on the Islamic religious laws and accounts, cultural and ethical perspectives, I argue that saving a family member's life is the prime duty and responsibility of the religious Muslim majority of the society in Bangladesh. Each account offers a comprehensive framework in relation to the family oriented approach of organ donation and transplantation policy in Bangladesh. I also argue that organ donation and transplantation policies in Bangladesh are family oriented because the families are more vulnerable and the issue may be critical in the sense that family relationships may be lost, and organ trafficking may increase. This bioethics study presents a new research aspect and is based on widespread practices in the society. This cross-cultural study may help policy makers, researchers, transplant practitioners as well as patients in Bangladesh.

Introduction

Saving a human life by organ donation is a major concern for many societies, and is also a vital issue in health care policy and biomedical practices. Especially, it is the crucial notion for such societies where organ donation and transplantation policies are family oriented. The family is regarded as a social reality and absolute value. The family is the collective protector insofar it is capable of securing familial collective interest. Similarly, the families in Bangladesh are collective and natural. Organ donation and transplantation policies in Bangladesh are family oriented. The families in this society are acknowledged for their defensive and protective roles.

According to the traditional collective view of the family, this role places the family as the most secured social institution in Bangladesh. Staging at the core of social as well as natural activities, family life is employed as a hub for social, economic, welfare or even political activities. This formation of the family is importantly valued because it mostly enhances and secures the collective interest of children, men, women and elderly in the families. This family oriented organ donation and transplantation practice in Bangladesh is very distinct from individual directed secular Western perspectives such as in the UK. In contrast, organ donation and transplantation policies in most Western societies such as the UK are self-directed. This self-reliance in the West is seen as individual freedom (Hobbes 1968, Locke 1988, Mill 1991).

The self-reliance notion of the West is viewed as equality of men, women, children and elderly within families. In this liberal account, the interest and good of the individual are directed by self-choices and personal directions, and is regarded as individual freedom in most secular Western societies. This individual freedom in the West, as described by Po-wah (2002, p.13) is natural and fundamental, because individual free choices are the foremost and best priority in all interactions, including organ donation and transplantation practices. These are obviously major concerns about public policy issues of organ donation and transplantation practices between Bangladesh and the UK.

In contrast with the secular Western perspectives of self-reliance, organ donation and transplantation policies in Bangladesh are family oriented. This family orientation has been grounded by Islamic tradition, cultural values, and ethical fairness. These accounts lead public policies on organ donation and transplantation in Bangladesh that favor family oriented collective practices. The family oriented organ donation and transplantation approach is also prominent in traditional and religious Muslim society in Pakistan (Moazam 2006)). The functions and responsibilities of the collective family in Pakistani society are also similar to the families of Bangladesh, at least on the situation of organ donation and transplantation practices.

The aims of this paper are two-fold. The first is to focus on how organ donation and transplantation policies in Bangladesh are very different from the secular Western perspective such as the UK; the second is to explore why organ donation and transplantation policies in Bangladesh are family oriented. To the best of my knowledge, in this field particularly in the policy and bioethics context, few studies have been carried out. This study tries to fill this gap.

Discussion

Policy framework of organ donation and transplantation in Bangladesh and the UK: major differences

In Bangladesh, organ donation and transplantation policies and biomedical practices are family oriented. This family approach leads to public policies that favor family donation and transplantation. As to the current policies in Bangladesh, donation and transplantation is only permissible to the legal successors or close relatives (Bangladesh 1999). This provision thus shows that organ donation and transplantation is only permitted among legal successors and close relatives in the families of Bangladesh.

Legal successors mean “husband, wife, adult son and daughter, father, mother, brothers, and sisters, and other adult relatives” (Bangladesh 1999). Close relatives refer to a “son, daughter, father, mother, brother, sister and his blood related uncle, aunt, and husband-wife” (Bangladesh 1999). Given the priority in the centrality of the families, these policies support family oriented donation and transplantation in Bangladesh. Outside the family structure in a traditional society of Bangladesh, it’s a social reality that no one is legally allowed to donate organs. This view of social reality protects each individual of the families from pain and unhappiness.

On the other hand, individuals can donate their organs to family members or even strangers in most secular Western societies such as the UK. Family relations in most Western societies like the UK are broken and strained (Engelhardt 2013). Family obligation is also narrowed in most Western societies such as the UK. Two types of donation and transplantation are legally allowed in the UK: Directed and non-directed donation and transplantation. (UK, 2004 for England, Wales and Northern Ireland, UK 2006 for Scotland). The directed donation includes both genetically related kin (e.g. blood relatives like families) and emotionally related recipient (e.g. spouses, partners or close friends). Other types of directed donation, namely, paired and pooled are also allowed in the UK. When probable donors and recipients are mismatched, matches are allowed. At the same time, two or more donors and recipients are involved in this donation and transplantation practices. The second type of donation and transplantation is named non-directed altruistic donation. Altruistic donation is a non-directed donation where a donor is not clearly informed who the latent recipient will be. This ‘altruistic’ type of anonymous donation is also allowed in the UK, under the Human Tissue Authority’s (HTA) approval.

Individuals in Bangladesh are indebted to donate their organs to family members. This is a new field of bioethics for Bangladesh where policies are framed in favor of family oriented donation and transplantation approach rather than individual directed approach in the UK.

Why a family-oriented approach: Based on religious explanations, this section explains why organ donation and transplantation policies in Bangladesh are family oriented. Bangladesh is a Muslim majority country. People have a strong spiritual faith to *Allah* and *His Prophet Hazrat Mohammad (d.632)*. Saving a life without causing harm is the highest value in Islam. This practice is observed as the criteria and principles in favor of transplant in Islam.

The *Quran* exemplifies: “*If anyone saved a life, it would be as if he saved the life of the whole people*” (Quran, 5.32 quoted from Atighetchi, 2007: 161). *Quran* further amplifies that “organ belongs to Allah” (Quran 2.195 quoted

from Atighetchi, 2007, 162) and “as these divine assets were created for the benefit of men” (Quran 2:39 quoted from Atighetchi, 2007, 162) the family can definitely use their organs for saving of their collective familial life. Concretely, kindness to Muslim families or close relatives is best understood as the true feelings of love, sacrifice, duty, responsibility and care. The family is the core unit of a Muslim society.

The ultimate purpose of the family is to protect each member from any ill circumstances. As Moazam (2006, p. 77) points out, it is the moral injunctions and obligations to protect kin and the Muslim community. As a Muslim majority society, organ donation and transplantation practices in Bangladesh might be viewed as an act of love, sacrifice, duty, and care. Similarly, as Atighetchi (2007) and Moazam (2006) observe, saving a family member’s life is understood as sacrifice by many Muslim countries. Organ donation and transplantation policies and practices in Bangladesh are family oriented because two important matters are involved. First, saving a family members’ life in this Muslim majority society seems to be saving of own life. Second, the family is the core and fundamental social reality where members easily depend and trust in each of the members. Obviously, family members feel happy when they donate their organs to other members. As study shows, family oriented organ donation and transplantation practices in Bangladesh are mostly similar to the religious Muslim society of Pakistan (see Moazam, 2006, p. 218).

Based on cultural accounts, the second part of this section describes why organ donation and transplantation policies in Bangladesh are family oriented. Culture, as described by Gorospe (1988: 87), is the way of collective life. According to him, it is the customs, beliefs, traits, and social norms that constitute the particular tradition. He further mentions that culture strongly touches every aspect of human life, including healthcare services. Culturally, Bangladesh is a diverse and collective society. This culture is collective in the sense that family life is traditional and at the center of all activities.

Relationships among individuals are coherent and structured within the family. Collective duty and obligations are considered as the moral norms. It is a familial system where collective interests are always taking the first place. This reflection leads the family to a sound harmonized social structure. This structure induces individuals to play collective roles. Or even collective permission is asked from members when illness comes. For example, when a member needs a transplant, each of the eligible family members (either legal successors or close relatives) is obliged to donate. By default, this collective fashion bounds each of the individuals when joint medical decision comes for familial interest. Indeed, organ donation and transplantation policies in Bangladesh are truly similar to traditional and collective society of Pakistan where organ donation and transplantation practices are mostly family oriented (Moazam, 2006). Family oriented collective policies and practices in Bangladesh are different in the secular Western individualistic tradition such as the UK.

This section closes with an analysis that explores the ethical explanations in favor of the family oriented organ donation and transplantation policies in Bangladesh. The family has its own moral standpoint (Engelhardt 2013). This encourages Muslims to help others. In addition, Muslims are obliged to help others (Atighetchi 2007). All traditional societies are an extended form of families in the sense that all are under the family’s roof. If we can save the life of family members, it means that we can easily save our whole societies’ life. This account is termed in this paper as the ethics of fairness. This fairness supports the family that has a moral obligation to save the life of its members. The family, as a moral enterprise, is morally responsible to donate organs those who are in need of transplant. This web of moral relationships binds each of the family members cohesively. For example, if an adult dies without organs, the family may be responsible for this misdeed.

Vulnerabilities of the families: This section further explains why family is critical and vulnerable in the situation of organ donation and transplantation policies and practices in Bangladesh. There is no doubt that individuals in a Bangladeshi society are mostly vulnerable in the sense that no one you can find is the possible donor outside the families. As a consequence, organ donation and transplantation policy provisions of Bangladesh do not allow donating organs to strangers. If donation and transplantation shift to strangers, family relationships may be vulnerable. So, two possible problems may arise: The family relationships may be lost, or organ trafficking may increase.

If organ donation and transplantation policies in Bangladesh allow donation and transplantation to strangers, families may be vulnerable and critical. Implicitly or explicitly, individuals in this collective society do not have free choices to donate their organs to strangers. If public policies are shifted to strangers, this practice may lead to

conflicting situations among the people and their religious faiths, cultural traits and ethical norms. To add, there is a strong resistance or lack of awareness about organ donation and transplantation practices in Bangladesh.

Organ trafficking creates a bad situation in Bangladesh. Poor people are mostly affected and trafficked in this situation. Roughly, the poor are more vulnerable and they tend to sell organs to meet their unmet demands. If organ donation and transplantation policies in Bangladesh are shifted to strangers, trafficking of organs may increase, because the poor may sell their organs in the name of 'altruistic' donation. To some extent, current organ donation and transplantation policies in Bangladesh are responsible for an increase in organ trafficking. Some experts and scholars express their opinion that these policies prohibit commercial dealings of human organs (Bangladesh, 1999) but these policy provisions do not fully diminish such criminal offences. There is no policy provisions to establish national or local authorities legally responsible for such commercial dealings and organ trafficking. As a result, this policy vacuum increases organ trafficking, placing the families at the heart of these policy provisions.

Conclusion

To conclude, organ donation and transplantation policies in Bangladesh are family oriented. This family oriented organ donation and transplantation policies and practices in Bangladesh have been shaped by religious, cultural and ethical accounts. The family has also been an imperative guiding force behind the organ donation and transplantation policies and biomedical practices in Bangladesh. These policies and biomedical practices are obviously different from the secular Western perspectives such as in the UK. These differences and justifications are significant for health care policy and bioethics. This paper has some important policy suggestions for Bangladesh:

1. Government should defend its policy provisions, placing the family as the highest value. Eventually, government should consider making further policies to protect the families going through organ donation and transplantation practices. Society is the extended form of families and we can easily save our society by donating organs to the family members first.
2. To increase awareness among the people about the organ donation and transplantation, Bangladesh government should play a more active role in the campaign program. In this regard, different non-government organizations (NGOs) should be engaged in this campaign program.

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Can Bioethics in Thailand Make a Secure Society?

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Abstract

Bioethics is a way of thinking that embraces the human factor as the core value. It is a system of reflection based on guides that promote the ability of human beings to reach their full potential. Both culture and religion influence decision making on contentious issues in the realm of medical ethics and bioethics, including responses to emerging infections, integration of Western and Eastern medicines, medical tourism, stem cell research, organ transplantation, informed consent, malnutrition, abortion, public health, genetic testing and reproductive medicine. Thailand is perhaps the only country in the world where His Majesty the King is constitutionally stipulated to be a Buddhist and the upholder of the faith. For centuries Buddhism has established itself in Thailand and had enriched the lives of the Thais in all their aspects. Indeed, without Buddhism, Thailand would not be what it is today.

Introduction

Buddhism's holistic understanding of human nature encourages a mental approach to the pathology of disease, something to which Western medicine is now increasingly attuned. It may also be suggested that the Buddhist philosophy of origination in dependence is both a fruitful diagnostic model and a philosophy, which encourages a preventive approach to the risks of life, including promoting spiritual and physical health. However, anxiety has been voiced recently about how 'natural' certain forms of traditional Buddhist medicine, included in Traditional Thai herbal medicine, actually are. They include coconut, banana, garlic, ginger, pepper, jackfruit, mango, mint, pineapple, pumpkin, sugar cane, tamarind, Thai Basil, Thai eggplant etc.

Most people who live in rural areas are familiar with the use of traditional Thai herb medicines, and in popular belief they have a longer life expectancy than those who live in urban areas. This medicine is often called "Alternative medicine." We will also consider other factors such as lifestyle stress, and statistics, to assess how this actually enhances the human security of people.

Discussion

Buddhist perspectives on Abortion: Human security includes respect for human rights and peace. One of the most difficult bioethical issues is abortion. Buddhism does consider abortion to be the taking of a human life. At the same time, Buddhists generally are averse to intervene in a woman's personal decision to terminate a pregnancy. Buddhism may discourage abortion, but it also discourages rigid moral absolutes. This may seem a conflict. In our culture, many think that if something is morally wrong, it ought to be banned. However, the Buddhist view is that a rigid following of rules is not what makes us moral. A further, "magnificent authoritative rule" often creates a new set of moral wrongs.

Buddhism does not approach morality by handing out absolute rules to be followed in all circumstances. Instead, it provides guidance to help us see how what we do affects ourselves and others. The karma we create with our thoughts, words and actions keeps us subject to cause and effect. Thus, we assume responsibility for our actions and the results of our actions. Even the precepts are not commandments, but principles, and it is up to us to decide how to apply those principles for our lives.

The struggle to find balance between development and conservation occurs in many arenas, including culture and religious. Various actors for pre-development schemes and conservation projects use cultural and religious beliefs, practices and attitudes toward nature to promote their positions. Religious beliefs themselves are not essentially either ecologically or developmentally oriented, but they can be interpreted in ways to support either conservation or

development. The Thai government, for example, has used Buddhism to promote rapid national economic development, on the other hand, a handful of Buddhist monks and non-government activists incorporate both indigenous spirit beliefs and Buddhist practices to foster and environmental ethic on a local level. Both approaches claim to be based on a fundamentally “Thai” understanding of the world as well as basic Buddhist teachings.

Cultural dilemma for Thai’s society: Thailand is sometimes seen as a testing ground for new policy discussion, Four years ago the fourth ILGA (International Lesbian and Gay Association) conference was held in Bangkok. Thailand may become the first country in Asia to legalize same-sex partnerships. There is still discussion of responsibility however, for example those whose personal life was confined primarily to a gay male sexual libertarian community, are thought of being at higher risk to engage in casual and extramarital sex. Can a man do this without harming his other social relationships and people in them. By contrast, a nongay man or lesbian woman, whose private life involved sexually romantic woman, could not similarly avoid causing harm to others and his/her relationships with others, while engaging in casual or extra marital sex. This is just one example of the risky way that society considers insecurity about public health. The paper will also consider many dimensions of how Bioethics in Thailand may make a more Secure Society.

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A comparative examination of the concept of compassion between Western and Buddhist medical ethics

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Abstract

Compassion is commonly mentioned in both Western and Eastern medical ethics. However, there are some differences in the understanding of compassion in these two approaches. Briefly, compassion can be defined as prioritizing others' interests and welfare before your own ones. In modern medicine, principles of compassion can serve to find solutions for highly debatable issues such as euthanasia or testing on animals. In traditional medicine in Mongolia, all actions of a medical professional such as treatment and diagnosis are conducted based on clearly defined Buddhist ethics. According to the famous script "Four Tantras of Traditional Medicine," ethics is based on the compassionate conscience of "love for all beings". This paper analyzes compassion in medical ethics as stated in "Four Tantras of Traditional Medicine" with a comparative perspective to Western medical science.

Introduction

The purpose of this analysis is to compare percepts of compassion for physicians and other health care professionals between Western and traditional medicine. Compassion is one of the fundamental principles that define ethics in both Western and Eastern medical science. However, the interpretation and understanding of compassion is not the same. Indeed, the Eastern view of compassion is mainly defined by Buddhism. These differences in understanding of compassion result in different approaches in solving some highly debatable dilemmas in the medical world such as euthanasia, testing on animals and abortion.

Methodology

Document analysis, logical argumentation, analytic-synthetic distinction, hermeneutics, grouping and content analysis were utilized for this purpose. Indian, Tibetan, Mongolian, Chinese, Greek and Arabian medical texts, its explications, modern biomedical ethical theories and facts were used.

Discussion

Medical ethics is a system of moral principles that apply to values and judgments to the practice of medicine. Medical ethics is influenced and defined by philosophical, cultural, and religious elements. In this context, Western medical ethics are influenced by the oath of Hippocrates and Christianity and lie on the following basic principles:

- 1) respect for autonomy – the patient has the right to refuse or choose their treatment
- 2) beneficence- a physician should act in the best interest of the patient
- 3) non-maleficence- "do not harm"
- 4) justice- fairness and equality.

Compassion, which is about the desire to help sufferers, is seen in each of the above mentioned principles of Western medical ethics. Compared to Western medical ethics, Eastern medical ethics originates from diverse ethics schools from different ancient cultures. "Ashtanga", "Charaka", "Sushruta" are the primary texts of Indian *ayurvedic* medicine and their ethical theories are based on the philosophies of Brahma, Shiva and Vishnu of Hindu religion,

ethical theories of ancient Chinese medical texts, “Neijing” from the philosophies of Confucius and Dao. Also the ethical theories in Arabian medical book “Avicenna” are based on ethical principles of the Koran of Muslim religion. “Dumta” forms the primary philosophical basics of Mongolian medicine. According to the Dumta, philosophy of “I” or “creator” that is mentioned in Christianity and Shamanism is faulty.

Love and compassion are taught in each of these teachings. However, this paper focuses on Buddhist medical ethics, which appears to pay more attention to compassion than any other medical ethics. Buddhism differs from other religious practices as a religion without god. Buddha means enlightened human being and Buddhism can be understood as a path to enlightenment. Some scholars view Buddhism as an ancient science academy, which survived in modern times as a religion. In Buddhist point of view there is no God that is powerful and almighty that created the world rather than simple cause and effect relationship, which explains everything. Buddhist medical ethics consist of three main principles:

- 1) Suppressing greed or lust (physician should provide treatment without prioritizing profit or other benefits for himself)
- 2) Generating “*bodhi* consciousness” (*bodhi* refers to enlightenment and feeling of universal compassion to all sentient beings)
- 3) Embracing “emptiness” (understanding cause and effect relationship)

Bodhi consciousness is generally interpreted as enlightenment which represents a broader definition of compassion and includes the narrowly defined compassion by Western standards within it. Compassion in Western understanding is limited to the generally human patient, while in Buddhist perspective it is universal and should be felt towards all beings whether these beings are physical or not. From Buddhist point of view, a physician should strive toward becoming a *bodhisattva* or an enlightened being who apprehends cause and effects. He should develop *bodhi* consciousness before he proceeds with treatment. It is taught that if the same treatment has been used, the treatment from physician who possesses *bodhi* consciousness would have better results compared to the one who does not.

Western medical ethics view compassion as an emotional part of physician as a human, which is not required or developed. A physician in Western sense should proceed with his actions according to rules and regulations which are rationally and logically formulated. Feeling compassion towards the patient is a secondary element to treatment, which can be a result of following the rules. In contrast, Buddhist texts require compassion as prerequisite of successful treatment and have detailed guidelines on how to develop compassion. Two main methods are mentioned: the first one is to put yourself in place of others to understand what one is going through, and the second one is to think of others as your own mother; in that way physician would be able to love the patient. Both methods have the same goal to make the person love and feel compassion toward others.

Furthermore, love and compassion in Western practice are generally limited to patient or other human being, while in Eastern side love is universal for any living beings whether it is physical or not. Tibetan and Mongolian traditional medicine teach to love every living being whether it is human, animal or insect as your own mother and it is based on compassion, integration, causes, the law of causality of Mahayana philosophy in “Four Tantra”, “Four Amrita”. Therefore, there are two traditional ways such as “seven masteries of causality” and “put yourself in other’s position” to train physicians and medical professionals to have compassion for others.

Comparison of Western and Buddhist approaches to some debatable issues:

Western medical ethics are based on rational and pragmatic thinking. Compassion is essential but it is rather seen as nothing more than emotions present in human. In contrast, the Buddhist view of medical practice sees compassion as a fundamental basis to physician’s job. In Western perspective, there is no such thing such as reincarnation and life is lived only once. In Buddhism life is cherished, but at the same time the end of it seen as a step to the next life. These and other differences shape the different approaches by Western and Buddhist medical ethics to solve some common dilemmas faced in medical practice.

One highly debatable issue in modern world is euthanasia. Table 1 reveals some differences between Western and Eastern views on euthanasia. The euthanasia debate, which started in Western world just in the last century, has been answered already in detail in Buddhist texts.

Table 1. Euthanasia in Western and Buddhist Medical Ethics

	Western approach	Buddhist approach	
Preparation	Preparation started by somebody himself or by family members	Preparation is made through the entire lifetime beginning from the start of the conscious life	
Time of administration	Inability to continue life due to injury, terminal illness	With indication of near death signs and symptoms	
Methods	Drugs, injection, withholding treatment, removal of life support	Meditation, mind power, drugs, chanting the mantra tantra	
Medicine used	Morphine, sodium thiopental	Tungalag-5, Rinchen Ratnasampel, Rinchen Tsajor, Rinchen Dangjor	
Who administers?	Physician	Physician, lama, someone who has an expertise in administering euthanasia	
When first applied?	In 1973, criminal court ruling agreed on certain conditions when euthanasia can be administered, following the "Postma Case". Dr. Postma injected a patient, her mother on her request with lethal dose of morphine.	Administered by ancient meditators physicians such as <i>Naropa, Delopa, Niguma, Patampa</i>	
Non-drug methods	Mercy machine, thanatron or killing machine	<i>Chod</i> tradition, <i>phowa</i> meditation	
Ultimate goal	To end suffering from pain or illness	To reach next life	
Passive euthanasia is administered	When terminally ill patient requests to end treatment or life support	when it is possible to cure	For persons who: - pose threat to public - harm environment -disrespectful to service of physician -offend physician -breaks the Buddhist religion
		when it is impossible to cure	-9 kinds of terminal illnesses -with signs and symptoms of near death
Active euthanasia is administered	Administered in countries where it is legalized	Patient with obvious signs of near death When the body is dying and the breath is disturbed When external breath stops but spirit is still inseparable	

Table 2. Testing on animals in Western and Buddhist Medical Ethics

	Western approach	Buddhist approach
View of an animal	Animals are considered same as plants or flowers, humans are superior than animals	Every living being including animals are considered as our mother; considered same as ourselves, that's why animal testing is unbearable
Testing on animals	Animal testing is unavoidable and needed for development of new drugs and treatment methods for human wellbeing.	There are other ways than animal testing.
Theory	Charles Darwin's theory of evolution	Karma or theory of cause and effect, theory of interconnection of everything
After the testing	Once used for testing, these animals are disposed as previous testing affects the results of later tests.	Testing is allowed, if there is true need for testing. After testing, the animal should be looked after and fed until its death, and guided to the next life after death.
Animal killing	Some animals die during the testing while surviving ones get killed after testing ends	The killing is acceptable only if it serves for goodness of many. <i>Powha</i> meditation is used for this purpose
Effects on researcher who conducts the testing	No negative effect on researcher's health	The researcher will go through all suffering and pain of an animal he subjected to testing

Buddhist practice treats humans and animals as the same. Reincarnation means that one can be born as a human, an animal or even as insect as well. Therefore animals are treated the same as humans, and animal testing is forbidden as it is seen as testing on own mother (Table 2.). Karma or cause and effect relationship plays a significant role in ethics of Buddhist medicine. Physicians who make animals suffer through the testing can have same pain and sufferings later in life or in the next life.

The rational and pragmatic approach of Western medicine results in different understanding of abortion than in Buddhist ethics. The countdown of life is later and the fetus up to 12 weeks is not considered as a human being. The principle of karma and reincarnation in Buddhism lead to believe that parents who aborted their child could have death from abortion in their next life (Table 3).

Table 3. Abortion in Western and Buddhist Medical Ethics

	<i>Western approach</i>	<i>Buddhist approach</i>
<i>Abortion allowed</i>	If legalized in that country, less than 12 weeks of pregnancy	If there is danger for mother's life
<i>Prevention</i>	Pregnancy prevention methods	Avoid improper intercourse, maintain sexual ethics
<i>Abortion hazards</i>	Illegal abortion is punished	Considered same as murder, and pay it all through karma
<i>Start of life</i>	With first heartbeat of the fetus	At the moment of egg fertilization
<i>Parent consciousness</i>	The consciousness of being parent not developed toward the <i>zigot</i>	Abortion seen as child killing
<i>When abortion is performed</i>	Abortion performed even if the normal birth is possible When it is inevitable	When it is inevitable and no other means are left
<i>Abortion effects on parents</i>	Divorce, secondary infertility, death	Divorce, secondary infertility, death, shortening of life, terminal uterus disease, death through dismemberment from abortion in next life
<i>Abortion effects of physician</i>	Legal punishment if performed wrongfully	Shortening of life, loosening treatment skills
<i>Reason for abortion</i>	Unwanted pregnancy, fetal deformity, genetic illness, population control policy	Save mother's life

Conclusion

In Buddhist medical ethics compassion is emphasized and stated as a key principle, compared to Western medical ethics. Compassion in Buddhist perspective is seen as a prerequisite to successful treatment, and that's why a physician should possess compassion and methodically develop it as a required skill through some special techniques. Western medical ethics sees compassion as an emotional part of a human who works as a physician. Following professional rules and guidelines are more essential than being compassionate.

Compassion in Western medical ethics is narrowly defined and limited. In Buddhist view, compassion is seen within the broader principle of *bodhi* consciousness, which translates into universal and unlimited love and compassion toward all sentient beings. In this sense, in Western perspective it is common to love the patient, but to allow the death of animals during pharmaceutical tests. The broader outlook on compassion is tied to principle of emptiness in Buddhism, which sees no "I am" versus "others". Recognition of reincarnation, before, and after lives explains it all. It is possible for one to be born as a patient one day, as a physician in next life and as an animal used for laboratory tests in other life. Alternatively, reincarnation allows every being have equal chance of being one's beloved mother in their previous lives.

There is a detailed classification on levels of compassion and classification of physicians according to their obtained level of compassion in Buddhist medical theories. Feeling compassion toward patients is essential and

fundamental to successful diagnosis and treatment of diseases. In Buddhist medical practice, compassion of physician is believed to possess the power to enhance the strength of drug, to purify the poison (i.e., mercury) and generate psychotropic skills of physicians.

In Western perspective, the beginning of medical education starts with loving own parents. It is not useful when physicians swear “*I will give all my love for others*” and nurses swear, “*I will possess genuine compassion*” if they do not love their own mother properly.

According to Mongolian and Tibetan traditional ethics, nothing is created by power of God; the existence of everything is explained by interrelatedness and cause and effect relationship. Moreover, it is not worth to have a sworn statement that “*We prefer the goodness of others than our own interest*” in ethical principle of clinical professionals when they do not realize the law of causality.

In order to find ways to execute medical ethics standards in Mongolia and resolve ethical dilemmas it is possible to benefit from Mongolian traditional medical ethical training, which incorporates traditional cultural values. Mongolian traditional medicine has a richer ethical culture which can be used to solve some dilemmas faced in medical practice.

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Online homes and support for the wired *Pinoy* in Japan

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Abstract

This paper delves into the interface of Filipino migrants in Japan and their utilization of the Internet, in particular the cyberspace to create online communities. Using a qualitative method in analyzing texts, this paper learns that cyber-communities have become novel ways to provide platforms for the construction of a 'home', a virtual home that is. It also finds that online communities provide a setting in order to cultivate social support from amongst fellow Filipino migrants in Japan. Moreover, the Internet provides venues through which social networks are fostered and nurtured among displaced Filipino migrants. The sense of belongingness is inculcated and cherished through their interactions and associations with and among fellow users of these online sites. This, in turn, has encouraged the creation of an 'imagined' community, a concept coined by Benedict Anderson that describes how the sense of community is constructed. Furthermore, this paper uncovers a strong and robust affinity among members of the online communities, despite not having met or seen each other personally. It is hoped that the analysis of these two cyber-communities would confirm the role that online groups and/or communities play in promoting the welfare and well-being of Filipino migrants around the world.

Introduction

The dawn of globalization has brought in the assimilation of markets from different countries around the world. This could be attributed to the vast diffusion of technology and the rapid exodus of people across continents.

This phenomenon is not lost with Filipinos as millions of them relocate and move from one destination to another. According to the Philippine Overseas Employment Administration Statistics (POEA) (2012), there are about 2,083,223 number of Filipino workers contracts processed. And in Japan, there are 243,136 Filipino migrants (POEA 2012). This huge number of Filipinos in Japan is an attestation that the country offers a great deal of economic gains despite strict and rigid immigration policies. Indubitably, there are some drawbacks from living and working overseas. Migrants have to contend with the "pain of family separation, partial citizenship, the experience of contradictory class mobility and the feeling of social exclusion or non-belonging in the migrant community" (Parrenas 2001:12). These are corollaries that they have to face as Filipino migrants.

In order to survive, migrants find ways to (re) construct their identities in the host societies. They resorted to letter writing, phone calls or text messaging, as well as sending of videotaped messages. They also engage in using mass media like watching Filipino programs or listening to Filipino music. Some, meanwhile, involve themselves in setting up religious and cultural associations that provide them opportunities for collective activities such as sports fest, celebration of important religious events, and cultural festivals in order to showcase dances and songs. With the initiation of new media and technology, Filipino migrants have turned to be more collaborative and interactive. The Internet has now become a daily haven to get information and social support from individuals, within the host country or otherwise. The Internet now has become the ultimate medium for "dispersed groups wishing to sustain an identity in an 'alien' land while working in solidarity with those facing challenges at 'home'" (Parham, 2004, p. 199).

This study, then, delves into how the wired *Pinoy* or Filipino appropriates the Internet. Through online communities, this study looks into how support is cultivated and nurtured amongst Filipino migrants in Japan as based on their postings.

Methodology

This research used a qualitative method for analyzing online postings. In particular, it utilized textual analysis to extract and deduce patterns and trends from migrants' discourses, interactions or associations with other fellow migrant users. Data source were from two online communities: Timog Online and Malago Network.

Timog Online (which means "south") is one of these virtual homes. Created in 2004, it was developed for Filipinos in Japan in search for friendship and camaraderie. It started as a place "where Filipinos can meet, share their experiences and help each other specifically for Filipinos who do not speak Japanese can get help to learn the language" (Timog Online 2009). To date, it has 14, 147 members, 92, 127 threads and 1, 181, 294 posts (Timog Online 2009). Another website is Malago forum (denotes a productive forum), conversely, was created for Filipinos in Japan who want to make friends with fellow Filipinos. It has 5,464 members (Malago Network 2009). These two websites have the most number of memberships online.

Discussion

I would like to believe that two emergent narratives could be surmised from the diverse, sundry online postings in Timog and Malago forums. The first one dealt with home-making online. The second facet confers on support-making activity online. These nascent features of Filipino cyber-communities bring to the crux how Internet has become a portal of human communication amongst them. Let me now discuss the focal points of each emergent narrative.

On Home-making Online: The exodus amongst peoples in the Philippines to seek greener pastures outside the country has become a histrionic and dramatic episode among Filipinos. Mixed feelings of despondency and exhilaration thrive among family members and those who are going away. The feeling of gloom is very much revealed in the way kin, especially kids, weep over their father or mother's departure. The feeling of happiness is also felt, as family members know that going abroad for work will for sure increase their chances of getting a better economic life at home. As one mother shared during one of my random talks at the Manila Ninoy Aquino International Airport, "*It is a good thing that our Manuel is going already. I hope he helps us go through life by sending money*".

Apparently, this hegira among Filipinos has been an economic source of national narrative and development. The national government even campaigns and promotes overseas jobs to its constituents.

In Japan, Filipinos grow in numbers every year (Sassen 2009). This could be weighed down on the fiscal bliss that they gain which in effect provide an economic enjoyment to their families back home. Being in Japan, however, is difficult. Migrants are confronted with pressures from inside and outside the host society. Pressures inside would mean cultural differences, language incompetence and relational problems with peers and colleagues, which could lead to loneliness, isolation, and alienation. Pressures outside concern loved ones back home. These demands and difficulties have prompted Filipinos to recreate their identities in the host society through consumption of Filipino media programs and participation or attendance in religious and cultural events and associations. These actions afforded platforms for collective activities. The dawn of new technologies and media offered great potentials for migrants to be interactive across distances. They have now used these mediums as new avenues to commune and build kinship amongst themselves in Japan.

As they journey toward their incorporation to the host society, they have also conquered new territories, new spaces to build a new "home", and establish communities. These acts of occupying cyberspaces are ways to articulate and perform their identity, build camaraderie and belongingness, and ultimately create a home away from home.

And through their engagement in cyberspaces, Filipino migrants have used their facility of imagination to connect with the homeland, and in this process of imagination, they became part of a larger location where they get to be part of a community (Espiritu, 2008). This encouraged the creation of an 'imagined' community, a concept coined by Benedict Anderson that describes how the sense of community is constructed. This construction of a virtual home has located migrants in a Filipino community in Japan, unites with family members and friends, and (re) established their national identity. Furthermore, this study uncovers a strong and robust affinity among members of the online communities, despite not having met or seen each other personally. In their cyber interactions, memory of place, of home, is then cultivated and ruminated. Hence, despite the idea of "*placelessness*" among Filipino migrants, the

Internet buttresses a place; despite the idea of “homelessness”, these online communities provide a home, a virtual home that is.

Performing religiosity is also a noteworthy aspect of being home, and one of the considerable social markers of Filipino identity. As Filipinos become more oriented with their situation as migrants, they explore on the use of the Internet as a venue to carry out their religious faith. Members of online communities viewed the Internet, as Campbell (2005) underscored in her study: “as a spiritual medium facilitating religious experience, a sacramental space suitable for religious use, a tool for promoting religion or religious practice and a technology for affirming religious life” (pp. 9-10).

Filipinos carrying out religiosity online is worthy of note in this research as this only showed that the Internet has become a sanctuary for people who are dislocated from their homelands. Filipinos know that by living out religious faith online, this will remind them of home. This will also strengthen their faith in God. Though these online communities have become anchorage for worship and fellowship, this does not mean, however, that online religiosity has replaced the actual mode of going to church. This means that the Internet has significantly become a complementary site to enhance faith and religiosity.

On Support-Making Online: The fast development in Internet communication has prompted many new opportunities for assistance and exchange. In the multitude of studies on the benefits of Internet use, support-making appeared to be extensive (Livingstone & Brake 2010, Notley 2009). In this area of literature, most of these delved on health support (Crafton 2010, Perry-Maclean 2010). This research extends further its coverage of support-making to correspond to the needs of Filipino migrants in Japan. Primarily because they are migrants in a foreign land, the main issue that confronts them is their immigration status; hence, the Internet has become a good resource for Filipinos in addressing their problems concerning their passage in the host society.

One of these types of migrants is the undocumented or illegal migrant, who benefit so well with the existence of online communities. Undocumented workers—the overstayers known as *bilog*—have used online forums to speak up and seek assistance from other online members. Because of fear of being caught, they are ‘invisible’ in the actual society. The Internet then, through online communities, serves as their “speaking capital” (Mitra 2001, p. 45). And as they forged ties with other members, they found alliances in online forums where they could get information and resources on what to do with their situation as illegal aliens.

As one forum user posted on the usefulness of online communities: “*Good evening to all of you. My friend has surrendered and has returned to the Philippines, God’s grace, nothing has happened to him when he surrendered. Thanks for all those who made a post in this thread.*” Tonyang, another forum participant, posted: “*Your discussion here is so productive. I learned a lot and I have confirmed a lot of things. Thank you so much.*”

The Internet has provided a place for individuals or groups who seemed to be invisible and muted (like the overstayers). It has also become a reservoir, a basin for information and resources for those who want to know about immigration policies in Japan. Essentially, the concern for each other among Filipinos in Japan as characterized online proves the Filipinos’ nationalistic zeal and commitment to extend help to fellowmen who are in need. The Internet becomes the envoy to make all these support, guidance and care materialize.

Conclusion

These online communities have given migrants the ability to reproduce, re-create, and maintain their sense of being Filipinos despite their absence from the homeland. These cyber-communities have paved the way for the Filipino ‘touch and feel’ for belongingness and kinship to exist in foreign land.

One finding of this research is home-making online, which has legitimated the idea that the home, a virtual home that is, is an important element for migrants to survive. In the case of Filipinos who are extraordinarily family-oriented, the Internet has given them the latitude for the visualization of the homeland, for keeping ties with family and friends, for creating a new “home” in cyberspace, and for having a new “family” online.

Another finding is extending the utility of social support online to immigrants. Social support is an important aspect of Internet communication. However, most if not all related studies involved health support, overcoming shyness or for handicapped persons. This study extends to social support network in order to meet the needs of the

Filipino migrants. One major concern for them is their immigration status. The Internet becomes a good resource for information, guidance, and education of these significant issues. These cyber communities have also provided overstayers the security, guidance, and information amid their invisibility in the real world.

The possibility of the government, both the homeland and the host society, in utilizing these online communities to better the lives and conditions of migrants, is a good way to build stronger diplomatic relations between the two countries. It is hoped that the analysis of these two cyber-communities would confirm the role that online groups and/or communities play in promoting the welfare and well-being of Filipino migrants around the world.

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Time to think about the changing faces of family, marriage and parenting

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Abstract

The stability of any human society is rooted in its institutions, which include education, health care, human rights and marriage, to name a few. Due to the rapid advancement of science and technology, these institutions have undergone marked changes in maintaining their social and cultural values. This paper examines the bioethical issues that are emerging in the institution of marriage, family and parenting, as a result of changes in social and cultural values. Marriage from time immemorial has been a public event. The earliest report is found in the Old Testament when Laban made his daughter's wedding a 'public event' by "gathering together all the men of the place and making a feast" (Gen. 29:22). There are three options in defining the partners of marriage: (i) marriage is between a man and a woman (ii) between two persons and (iii) between two creatures. The legal definition of marriage is changing. Which is the right definition? Changing the phases/faces of marriage is a bioethical challenge. Similarly the number of parents a child can have is changing. Traditionally a child can have two parents, a father and a mother. Currently this number is changing. With the onset of one parent families, a child may be basically denied of the benefit and/or luxury of having two parents. However, in some countries, the number of parents a child can legally have is more than two. The main issue is that of secular thinkers who have made a vow to radically change the institution of marriage. Which position is right? This paper discusses the bioethical implications of marriage and family in modern times.

Introduction

Human institutions like education and marriage contribute directly to societal stability. A country is known by its people's attitude to the institution of marriage. The ancient Vedic culture recognized the value of marriage, family and parenting but sacrificed the individual human rights of the wife. Society made it very difficult for a married woman to break away from her family. Modern science and technology (S&T) have brought discernible changes in the core definition of marriage, the structure of family and an increase in the number of parents a child can have.

Methodology

The paper examines the results of techno-science and relates them in the context of societal problems of marriage. Information contained in primary and secondary sources have been employed to discuss and construct the paper.

Findings and Discussion

Traditionally marriage has been a public event. If a man and a woman marry secretly then child birth will make it public. In the Old Testament, Laban made his daughter's wedding a 'public event' by "gathering together all the men of the place and made a feast" (Gen. 29:22). It is also a cultural event which varies from one group to another. In all religious cultures marriage is a legal and a social event. It has a legal dimension in that a 'marriage certificate' must be obtained from a government approved agency. Although there are some variants in marriage, many cultures have restricted marriage as a union between a man and a woman which is a traditional type of marriage.

Traditionally marriage is a religious event. Religions do recognize that for the "human society to stand upon firm foundations" it is necessary that the institution of human marriage be "held in honor." A society's firm foundation is

secured through the life-long stable relationship between the husband and wife. Family integrity is the key for social wellbeing: If marriage breaks then society breaks and ends up as a nation of individuals. In some societies, for some people, marriage may break but weddings continue!

Traditional marriage partners: There are three types of defining a partner in marriage: (i) Marriage is between *a man* and *a woman* (ii) between *two persons* and (iii) between *two creatures*. The legal definition of marriage is changing. In the second category, the word “persons” may cover two same-sex persons. As long as two men or two women (persons) love each other and maintain a committed life-long relationship then it is really a marriage. In the third category “creatures” would include non-humans (animals) and objects. There are instances of a woman marrying Eiffel Tower (Wikipedia, 2007) and a man marrying his own photo! Interestingly a man addicted to porn-movies has applied for license to marry his computer (Web, 2014). Franklin Kameny, an invitee to the White House in 2009, advocates that “morality is a matter of personal opinion”. And hence “If bestiality with consenting animals provides happiness to some people, let them pursue their happiness. This is Americanism in action” (Mehan, 2014). Americans are great path makers from cosmos to adding cosmetics to marriage. As long as this cultural position exists bioethicists will never be out of job. Changing phases/faces of marriage is a bioethical challenge. Which is the right definition? There is a biological test to assess which definition is right. Marriage is child-centric. Whichever life partnership produces a child that union is the right type of marriage. Only a biological union between a male and a female can give the couple a child.

Changing phases/faces of Marriage: The Legal Status and definition of American Marriage is undergoing marked changes! On Sept. 21, 1996 the USA enacted an Act entitled “*Defense of Marriage Act*” - DOMA - [110 STAT. 2420 Public Law 104-199—Sept. 21, 1996 Legislative History-H.R. 3396:]. This law (DOMA) was signed by the then President Bill Clinton. DOMA provided legal definitions of the words ‘marriage’ and ‘spouse’. Accordingly, the word ‘marriage’ means only a legal union between one man and one woman as husband and wife, and the word ‘spouse’ refers only to “a person of the opposite sex who is a husband or a wife”. Currently this Act is not indefensible since, in the view of differently enabled people with different sexual orientations, it provided an official sanction for discrimination of citizens who do not conform to the above norms. Moreover, the Act denied the same-sex-couples all the benefits granted by the federal government such as social security survivor payments, the right to file joint tax returns and many other fringe benefits (Editorial, 2011). Hence a growing number of same-sex lobbyists of American society have been advocating that the word ‘marriage’ needed to be redefined so as to include other types of sexual orientation of gender relationships such as co-habitation, and same-sex-unions.

Implications of the DOMA: Since the law DOMA categorically restricts the use of the word marriage as a legal union between a man and woman, any union between two members of the same sex is ineligible to be categorized as marriage. Since DOMA also explicitly restricts the usage of the word ‘spouse’ which is to be used only in the context of heterosexual union, the word ‘spouse’ cannot be used in any other context such as same-sex unions. Logically a same-sex union also does not result in a family and hence “functional role play words like husband and wife can’t also be used” (CE 2012). Because of these complications such legal unions are called a ‘civil union’. In any deviations from heterosexual marriage, four issues are to be considered: (i) same-sex couples (ii) same-sex marriage (iii) same-sex reproduction and (v) same-sex parenting.

Redefining family radically: Futuristic thinkers can foresee the upcoming quality changes in human parenting. One such person is Dr. Kamal Ahuja, a well-known IVF specialist at the London Women’s Clinic. Dr. Ahuja voiced:

“The definition of a traditional family is progressively fading... Families of the future may combine up to five parents. Regardless of culture, the evidence is that children adapt well and it’s the quality of the nurturing environment which is important” (Marquandt, 2011).

“Current S & T research is opening the family-door for children to have six, eight, even a dozen parents” (Lovett, 2012). Some say sky is the limit!

Single but Moms - But Fatherless: Before the onset of sexual revolution in the Western hemisphere, starting from 1960s, there were families in USA that were of traditional types. By traditional family, it was generally meant that a family constituted by the legal union of a woman and a man. When a child was born then it was a two parent family; the man became the father and the woman became the mother. It is a child's right to have a father and a mother. At the unfortunate instance of a woman losing her husband in war or by any accident or by divorce, then the mother took up on herself the additional role of the father and such a situation was a 'single parent family'. A separation between a father and a mother through tragic process of divorce also resulted in a single parent family when the mother chose to remain single. If a woman or a teenager accidentally and unexpectedly becomes pregnant in a casual sexual relationship and avoids abortion to give birth to a child, then she would constitute a single parent family. A woman may remain single if she chooses to be unmarried. Such an unmarried woman may want to become a 'mother' in which case she can choose a sperm donor or a sperm bank to get her impregnated to become conceived; it is by her own choice that she chooses the motherhood. Such a family is termed as "families of choice".

Currently such a culture in building the family is changing in the western world. Traditionally the formula for a family will be: Children + two parents = family. This equation is changing and the new equation is: Children + absentee fatherhood = a new type of family. This type of new family is termed as the 'intentional family'. It should be noted that a woman can create a 'fatherless' family by inseminating herself posthumously with her late husband's frozen sperm. Similarly, through somatic reproductive cloning techniques, a 'fatherless' and a 'sexless' family can be created.

'Intentional families': According to the British philosophy Professor, Susanne Gibson 'single mothers' are those who "practice intentional single parenthood" (Gibson, 1995). Extending such a notion, Professor Kathleen M. Galvin of Northwestern University defined 'intentional families' as "families formed without biological and legal ties, [which] are maintained by members' self-definition. These 'fictive' or self-ascribed kins become family of choice, performing family functions for one another" (Galvin, 2006).

Emerging New Family Values: Intellectuals with academic excellence provide further impetus in bringing about the tide of cultural and social changes in family values. Such changes were brought about by the publication of well written books to open the eyes of knowledge of common people including church leaders who willingly sanction a social and cultural change even if it is diagonally opposite to biblically sound doctrines related to marriage and sex. If an established church can break its own doctrinal norms then that action opens the flood gates for a paradigm change in society. In her book with a provocative title as "Single by Chance, Mothers by Choice: How Women Are Choosing Parenthood without Marriage and Creating the New American Family", Hertz (2006) narrates an instance where the church gave importance to an unmarried woman's intention to become a mother through artificial insemination. The church pastor endorsed her 'crazy' desire and told her:

"It's completely natural that you want to be a mother; of course you want to be a mother. And of course, it would be more perfect if you had a husband. But you would be a great mom. And this church community loves you, and I know they will support you in this".

Armed with the sanction of the church elders, she had to cross other objections, if any, from her school principal where she worked as a teacher.

Single father by choice: In a man's case it is not as simple as that of a woman to become a father. First, he needs to procure a female donor who can lend him a human egg. Of course he is the sperm donor. The story is not yet over since he needs to find another 'gestational' mother who could carry the fertilized egg with his sperm to full term and deliver a living baby. It is his own choice to bring that living human baby into the world. Hence he becomes a 'Single Father by Choice' (SFBC). A woman who carries the conceptus fertilized by another woman's egg, becomes a gestational surrogate mother. On the other hand a 'traditional' surrogate mother carries a conceptus conceived with her own egg.

Motherless-single-father-by-choice-family: Mr. Ian Mucklejohn (58) of UK purchased a human egg from an egg donor, Ms. Melissa Valdovinos of USA and rented the womb of surrogate Ms. Tina Price also from USA. He spent about 50,000 pounds. He became the father. In the reproductive biological world “Ian Mucklejohn made history when he became the first single man in the UK to have his own children without a female partner”.

“My children are the product of a single-parent family, like many of their friends and lots of people in today's society” (BBC 2006).

Although Ms. Melissa was the biological mother, she did not assume the functional role of a mother and hence in the birth certificate of the three boys the column ‘mother’ was left blank because they come from a motherless-single-father-by-choice-family!

In India Mr. Amit Banerjee (45 years), of Kolkata (Calcutta city), is a married man but childless and a divorcee. According to him; *“A child is always an extension of the self. I wanted to see myself through a baby”*. So he expressed his intentions to establish a family through the well established technology of artificial reproductive technology (ART). An unidentified woman became the egg donor and a married woman was chosen as the surrogate mother. In the year 2005, an eminent IVF doctor, Dr. Sudarshan Ghosh Dastidar who is connected with the Indian Council of Medical Research and the National Academy of Medical Sciences performed the IVF technology to make Mr. Banerjee the first Indian to launch the nation’s SFBC community.

Bioethical Issues: There are two issues: (i) Legal and (ii) Moral. *“The legal status of the baby should be determined by the courts as the woman who gave birth to the baby and the one who donated the ovum were not married to Mr. Banerjee, so both can claim the baby, like Banerjee.”* In order to establish his parenthood Mr. Banerjee has to legally adopt the child. Morally such a practice is different from traditional practice. Traditionally a conservative person would call it an “illicit sex”. An intention to have a technological child covers it all! In brining a child into the world, there were three main players – one man and two women - (Mr. Banerjee, egg donor and surrogate woman) and two other persons in the background (the divorced wife of Banerjee and the husband of the surrogate woman). The primary three players could be considered as ‘parents’ and the secondary two persons could serve as ‘intentional parents’. Moreover it is a case where there was no mother, no marriage and no sex. It is a case of SFBC (BBC, 2005)

Intentional Family: As early as 1997 an interesting but complicated case of dispute of parental ownership of a child was registered with the Court of Appeal of California. In this case a decision was to be made as to who was the ‘legal parent’ or ‘biological parent’ or ‘genetic parent’. Two infertile people by name of Luanne and John Buzzanca made a decision to build their family by using donor sperm from an unknown person and a donor egg. They employed a third party person as a surrogate mother. There was no sex involved in any of the procedures of child birth which involved five persons. The case became interestingly complicated; Luanne and John split in their relationship before the child (Jaycee) was born. Then the question of custody of the new born child came before the Court and the surrogate mother also claimed to secure the custody of the child. Interestingly the Court used the principle of *intentionality* to pass the judgement.

“The court decision was made on the basis that these two people [Luanne and John Buzzanca] were the ones who intended to have this child together” (Marquandt, 2011).

The primary intent to parent a child laid a guiding principle for future cases; in parenting disputes between lesbian couples or in cases where IVF reproductive technology is used to procure a child, the basic question asked is *“who made plans to have the child”*.

A new concept in family building was initiated, namely “Intentional Family’ wherein ‘functional parenthood’ rests “around who actually cares for the child”. A new doctrinal concept is emerging which separates ‘marriage’ from ‘parenting’. Storrow (2002) defined intentional parenthood as that *“planning and preparing for the birth of a child, not marriage, are the essential criteria in determining who is, and is not, an intentional parent.”* Such a scenario opens up a larger arena of ‘families by choice’ in which choice is the key player and other factors such as money, marriage and genetic relationships are sidelined.

The new acronym SMBC stands for the emerging reproductive doctrine: ‘Single Mothers by Choice’ (1981). These mothers of choice choose their baby’s unnamed and absentee father from a nearby sperm bank for cash. It is significant to note that neither Luanne nor John Buzzanca was the biological parent and the child was not procreated by their sexual act. The birth of the child was through a third-party relationship. Nevertheless, their ‘intention’ to have the child is tantamount to sexual reproduction.

Conclusion

The homosexual movement shares in the larger rationalization of the sexual revolution and is invested in its spread. The acceptance of each variant of sexual misbehavior reinforces the others. The desire to rationalize these behaviors becomes an engine for revolutionary change throughout society. “*As a moral act, sodomy should be normative. If it is normative, it should be taught in our schools as a standard. If it is a standard, it should be enforced*” (Reilly, 2014). It is a time tested process for successful implementation: first rationalization then legalization through socialization to implementation and enforcement into high school curriculum. Society is changed forever.

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The comparison of 'role stress' between Indian and multinational company employees in India

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Abstract

Today, Indian companies are unable to compete with multinational companies in India such as Korean and Japanese companies. It was theorized that the style of management had to be revamped in order to compete with multinational companies. The role of human resources was considered of paramount importance and the management started to focus on the employees. One such important aspect is the concept of 'role stress'. The researchers selected two organizations (one from a multinational company and another from an Indian company) for the present study. Both the multinational company and the Indian company manufacture automobile parts. The objective of the study was to compare the level of organizational role stress of the employees between the multinational company and the Indian company. All permanent employees of both companies were included for data collection, and the census method was adopted to recruit the respondents for this study. Data collected from 450 employees in an Indian company along with data from 450 permanent employees of a multinational company were included for the analyses. The researchers identified ten dimensions of 'role stress' as the major variables, and T-tests were employed. The researchers could establish who was having more stress in the minds of the both company employees. Findings of our study will be discussed in this presentation.

Introduction

The modern world, which is said to be a world of achievements, is a world of stress. One finds stress everywhere, whether it be in a family or in an organization – economic, social or political. Right from the time of birth until the last breath, an individual is invariably exposed to various stressful situations. The extent of stress, however, varies from individual to individual. Even though all individuals working in an organization are exposed to the same environment, where the stressors, i.e. factors contributing to stress are the same, the levels of stress experienced by people are different from other each other. It depends on how they appraise the situation as stressful. This means that individuals' differences in variables are viewed as either mediators or moderators in the stress phenomenon (Cox & Ferguson, 1991). Mediating variables are facilitating mechanisms in the stress process (Baron and Kenny, 1986) whereas moderator variables try to reduce or control the stress level in the stress process.

In the past few decades, empirical researches on stress have increased manifold. One of the major areas of research appears to be organizational stress in general and role stress, in particular. The concept of organizational stress was first evolved in the classic work of Kahn et al., (1964). Organizational stress originates from organizational demands, which are experienced by the individual. Because of its negative effects in the workplace, organizational stress has significant implications for organizations. Research studies have shown that although most of the costs of stress are health related, physical and mental, there is considerably loss due to the effect of stress on organizations as stress leads to low productivity, high absenteeism, tiredness, low enthusiasm for work, low creativity, and high dissatisfaction with work (Cooper & Marshall 1978, Matterson & Ivancevich 1987).

Stress is often described as a silent killer because the effects of stress are not readily apparent; they may either go undiagnosed or take a long time before they are manifested leading to permanent damage. Stress can affect anyone and its impact on physical and psychological well-being is well studied by many authors. It is also well documented that stress-related illnesses have severe impact on employers as well as individual employees (Singh, D.2003).

Stress among employees in organizations is becoming an important matter of concern, that is the why organizations are spending a huge amount for reducing the stress level of its human resources by way of providing various types of

training programs. In this context, the researchers have attempted a study to compare the role stress between the employees of MNC and Indian company at Chennai.

The context of the problem

The New Economic policy adopted by the Indian government in 1991 saw Foreign/Multinational/National Companies establishing their base in India. They followed the styles of management that was followed by the parent company (e.g. Korean companies, Japanese companies, European companies, and American companies). These companies posed a great challenge to Indian companies and more specifically to companies which were in the same field. The management styles focused on the importance of productivity and human resources. The Indian companies, on the other hand, were trying hard to keep themselves afloat. The Indian companies of management were unable to compete with these multinational companies.

It was believed that the style of management had to be revamped in order to compete with multinational companies. The Indian companies followed their own style of management which was almost the replica of the colonial style of management. Many Indian companies went through a restructuring phase and brought about important changes. As it is said earlier, changes were seen in all facets especially in the areas of productivity, marketing and human resource development. The role of human resources was considered paramount and the management started to focus on the employee. This research attempts to study the aspect of role stress. Further, an attempt is made to compare an Indian company with a Korean based multinational company on the same aspects.

Methodology

The objectives of the study are to study the selected background details of the employees from an Indian company and multinational company, and to understand and measure the organizational role stress as perceived by the employees. Keeping the above objectives in mind, the following research hypothesis has been formulated after having gone through the available literature: Employees from Indian company have more organizational Role Stress than the employees from Multinational Company

The researcher selected two organizations (one from multinational company and another Indian based) for the present study. Both the multinational company and the Indian company manufacture automobile parts. Tamil Nadu is one of the industrially developed states in India. It has different manufacturing units. The researcher decided to study the role stress in an Indian company and in a multinational company. There are nearly 55 large scale manufacturing companies in the automotive sector in Chennai of which 42 are Indian companies and 13 are multinational companies. Of all these companies, the researcher could get permission from a leading multinational company which manufactures automobile parts for the cars namely Pyeonghwa Automative and an Indian company namely Rane Engine Valves Limited to carry out this study (other companies refused to give permission). Moreover, these two companies have more or less equal number of employees; besides the nature of manufacturing is more or less similar to each other. Hence, these two companies were selected.

There were 483 permanent employees from the multinational company and 472 permanent employees in the Indian company from various categories at the time of data collection. For the purpose of the present study, the researcher decided to select all the permanent employees of both companies for collection of data. Thus, census method was adopted to select the respondents in this study.

Among the total number of permanent employees from this multinational company, only 458 employees extended their cooperation for this study during data collection. However, for lack of all details, data obtained from eight employees were discarded. Thus, the data collected from 450 employees from this multinational company was included in this present study.

Among the permanent employees of the Indian Company, 16 employees were not available during the data collection period and four of them expressed their inability to answer all the questions. Two questionnaires were discarded due to inadequate information. Thus, the data collected from 450 employees in Indian company was also included for the analyses. Thus, the researcher collected data from 900 permanent employees (450 multinational company and 450 from India based organization) for this study.

A simple descriptive research design was used when data were collected by using a survey methodology in order to describe the characteristics (Chew, 2010) of the employees working in the selected organizations. Since, one of the objectives of the study was to understand the background characteristics, organizational role stress of the employees of both Indian and multinational companies, the researcher adopted a descriptive design.

The study is comparative in nature as the researcher has administered questionnaires to two different groups of employees from two different organizations (Chew, 2010) in order to look at the similarities and differences between these two groups of employees in terms of the subject dimensions of interest in this study.

Findings and Results

The first five tables present the distribution of the employees of both multinational and Indian companies on various socio-economic characteristics such as, age group, sex, education, monthly income, years of experience. From Table 4.1, it is evident that 68.4 percent of the respondents are in the age group of 25-49 years working in multinational company and only 33 percent are in Indian concern. The reason for this higher percentage in multinational company is mainly because multinational company prefers younger age group considering their performance and efficiency. On the other hand 34 percent are in the age group of 41-50 years in Indian company compared to around 8 percent in the multinational company. This higher concentration in Indian company is mainly due to the Indian laws which govern the domestic companies and provide more protection to the older age employees when compared to multinational company.

Table 2 clearly reveals that the distribution of respondents based on sex is biased towards men. It is clear from the table that the nature of work in both domestic and multinational company prefer men to women employees.

Table 1: Distribution of Respondents based on their Age Group

Sl. No	Age Group	MNC*		India#		Total	
		N	%	N	%	N	%
1	18 – 25 years	98	21.80	27	6.00	125	13.90
2	26 – 40 years	308	68.40	167	37.10	475	52.80
3	41 – 50 years	38	8.40	154	34.20	192	21.30
4	51 & above years	6	1.30	102	22.70	108	12.00
	Total	450	100.00	450	100.00	900	100.00

Table 2 Distribution of Respondents based on Sex

Sl. No	Sex	MNC		India		Total	
		N	%	N	%	N	%
1	Male	433	96.20	343	76.20	776	86.20
2	Female	17	3.80	107	23.80	124	13.80
	Total	450	100.00	450	100.00	900	100.00

Table 3 Distribution of Respondents based on Education

Sl. No	Educational Status	MNC		India		Total	
		N	%	N	%	N	%
1	Higher Secondary or less	83	18.40	175	38.90	258	28.70
2	Diploma in technical education	187	41.60	113	25.10	300	33.30
3	Under graduation	133	29.60	136	30.20	269	29.90
4	Professional degree/ Post graduate	47	10.40	26	5.80	73	8.10
	Total	450	100.00	450	100.00	900	100.00

On comparing the educational status of the employees in the multinational company with that of the employees in the Indian company, it is seen that the multinational company employ more technically qualified personnel. Non - Technical personnel are found more in the Indian company.

Table 4 Distribution of Respondents based on their Income

Sl. No	Total monthly income in Rs	MNC		Indian		Total	
		N	%	N	%	N	%
1	Rs.10000 or less	114	25.30	89	19.80	203	22.60
2	Rs.10001 - 15000	183	40.70	206	45.80	389	43.20
3	Rs.15001 – 20000	98	21.80	99	22.00	197	21.90
4	Rs. 20001+	55	12.20	56	12.40	111	12.30
	Total	450	100.00	450	100.00	900	100.00

From the above table it is clear that there is no vast difference in the income of both the multinational company and the Indian company. Eventhough the income levels in the multinational company are low when compared to Indian company, employees are attracted by more fringe benefit offered by the multinational company. The above table shows the truth that multinational company gives more income than the domestic based company.

Table 5 Distribution of Respondents based on Years of Experience

Sl. No	Years of Experience	MNC		Indian		Total	
		N	%	N	%	N	%
1	5 years or less	219	48.70	63	14.00	282	31.30
2	6 - 10 years	194	13.10	122	27.10	316	35.10
3	11 -15 years	35	7.80	95	21.10	130	14.40
4	16 - 20 years	2	4.00	34	7.60	36	4.00
5	20 years and above	0	0.00	136	30.20	136	15.10
	Total	450	100.00	450	100.00	900	100.00

On comparing the years of experience of the employees of both the multinational company and the Indian company, it is seen that there are more number of freshmen, i.e. those who have joined the company in the last few years. Further, it is a fact that the multinational company was established only in 1997. Looking at the years of experience of the employees in the Indian company, it is seen that the years of experience of its employees is somewhat uniformly distributed. In the Indian company the more number of respondents are found in the above 20

years of experience category, whereas in the multinational company the largest number of respondents is found in the “below 5 years” category. It is seen that the labour turnover is higher in the multinational company than that of it in the Indian company. It is also seen that many of the employees in the Indian company prefer to stay in the Indian company because of the goodwill and the feeling of security they get in the Indian company.

Discussion

This section deals with the results of the analysis of data to examine the third objective of the study, i.e. to understand and to measure the organizational role stress as perceived by the employees. Organizational Role Stress is the stress experienced by individuals while performing their role in organizations.

Table 6: ‘t’ Test Result for various sub dimensions of Organizational Role Stress for respondents from Multinational Company & Indian company

Sl. No	Dimensions of ORS	MNC (450)		Indian (450)		t' Value	Stat Result
		Mean	SD	Mean	SD		
1	Inter role distance	17.97	14.91	35.46	17.07	16.37	P<0.05 Sig
2	Role stagnation	17.28	7.70	46.01	11.82	43.21	P<0.05 Sig
3	Role expectation conflict	15.43	10.72	42.07	17.32	27.74	P<0.05 Sig
4	Role erosion	18.61	14.26	45.01	16.35	25.81	P<0.05 Sig
5	Role overload	15.56	9.20	48.61	15.01	39.83	P<0.05 Sig
6	Role isolation	18.90	10.92	50.39	20.36	28.91	P<0.05 Sig
7	Personal inadequacy	17.62	12.87	53.07	12.78	41.46	P<0.05 Sig
8	Self role distance	18.17	10.94	50.62	14.73	37.51	P<0.05 Sig
9	Role ambiguity	16.42	9.28	42.20	17.66	27.41	P<0.05 Sig
10	Resource inadequacy	18.12	11.59	41.17	16.48	24.26	P<0.05 Sig
	Total	17.41	11.24	45.46	15.96	31.25	P<0.05Sig

The organizational role stress scale (ORS) is used for measuring organizational role stress of industrial employees. Ten role stress dimensions viz., self role distance, inter-role distance, role stagnation, role isolation, role ambiguity, role expectation conflict, role overload, role erosion, resource inadequacy and personal inadequacy are used. The investigator examines the difference in organizational role stress experienced by various employees of both companies by the analysis of variance test.

Inter – Role Distance (IRD): The mean value of inter-role distance of the multinational company is found to be 17.97 and 35.46 for the Indian management company. When comparing the standard deviation of the multinational company and Indian company; it is 14.91 and 17.7 respectively. It is seen from the panel 1 of table 4.16, that the ‘t’ value is 16.37 and it is statistically significant. Therefore, it is seen that when inter-role distance is compared there is significant difference in the perception of inter-role distances between the multinational company and the Indian company, the former being almost double the value.

Role Stagnation (RS): The panel 2 of table 4.16, summarizes the mean values of role stagnation of the multinational company and that of the Indian company which are 17.28 and 46.01 respectively. When looking at the standard deviation of the multinational company and that of the Indian company it is 7.70 and 11.82 respectively. It is seen from the table also shows that the ‘t’ value for role stagnation is 43.21 and it is statistically significant.

Role Expectation Conflict (REC): The mean value of role expectation conflict of the multinational company is 15.43 and it is 42.07 for the Indian management company .It is seen from the panel 3 of Table 4.16,that there is significance

in the value of the standard deviation of the multinational company (10.72) and that of the Indian company (17.32) respectively. It is seen from the above table that the 't' value is 27.74 and it is statistically significant.

Role Erosion (RE): The mean values of role erosion of the Indian company and multinational company are observed as 45.01 and 18.61 respectively. When compared, the standard deviations of the multinational company and the Indian company are 14.26 and 16.35 respectively. It is evident from the panel 4 of table 4.16, that 't' value for role erosion is 25.81 and it is statistically significant.

Role Overload (RO): The mean value of role overload of the multinational company is found to be 15.56 and that of the Indian management company is 48.61. When comparing the standard deviation of the multinational company and that of the Indian company it is 9.20 and 15.01 respectively. It is seen from the panel 5 of table 4.16, the 't' value for role overload is 39.83 and it is statistically significant.

Role Isolation (RI): From the panel 6 of table 4.16, that the mean value of role isolation of the multinational company is observed to be 18.90 and that is 50.39 for the Indian company. The standard deviation of the Indian company and that of the multinational company is seen as 20.36 and 10.92 respectively. The 't' value is 28.91 and it is statistically significant.

Personal Inadequacy (PI): The mean value of personnel inadequacy of the multinational company is found to be 17.62 and it is 53.07 for the Indian company. Panel 7 of table 4.16, points out the 't' value for resource personnel inadequacy is 41.46 and it is statistically significant. There is a difference between the standard deviation of the multinational company and the Indian company. It is found as 12.87 and 12.78 respectively. Thus, it is clear that when personnel inadequacy is compared, it is seen that there is a difference in the perception of personnel inadequacy.

Self – Role Distance (SRD): The mean value of self – role distance of the Indian company is found to be 50.62 and it is 18.17 for the multinational company. In the comparison of the standard deviation of the multinational company and Indian company it is seen as 14.73 and 10.94 respectively. The 't' value of the panel 8 of table 4.16, for self-role distance is 37.51 and it is statistically significant.

Role Ambiguity (RA): The mean value of role ambiguity of the Indian company is found to be 42.20 and that is 16.42 for the multinational company. The standard deviation of the multinational company and Indian company is observed to be 9.28 and 17.66 respectively. From the panel 9 of table 4.16, the 't' value for role ambiguity is 27.41 and it is statistically significant.

Resource Inadequacy (RI): The mean value of resource inadequacy of the multinational company is found to be 18.12 and 41.17 for the Indian company. When comparing the standard deviation of the Indian company and multinational company is 16.48 and 11.59 respectively. From the panel 10 of table 4.16, it is known that the 't' value for resource inadequacy is 24.26 and it is statistically significant.

To sum up, the analysis of data reveals that all variables are significant and they experience a total organizational role stress (ORS) in both companies. Organizational role stress for respondents from multinational company and Indian company is negatively related. It is quite obvious that if an individual is suffering from work place stress it is more likely to would affect his / her personal life. The study by Wheeler and Lyon (1992) suggests that stress can lead to social and domestic problems. If a personal is stressed his general well – being will automatically decline.

The analysis suggested that Indian employees are significantly high or in stress in comparison to their multinational company employees. What causes this high stress among Indian employees is an area of research, which either will confirm the notion that Indian employees are more stressed because they have to make a balance between work, management and home front or will give us better understanding and a model helping organization in controlling the stress levels in them. The current research tries to explore the levels of ten stressors and identify which among them is important from the point of view of an organization finding challenges in managing and training of the Indian employees workforce.

Employees over the years (most are married) gain substantial experience and are given responsibilities. They are considered able to handle the burden because of their maturity and years of experience in the organization. They are considered naturally efficient in tackling various role they are supposed to handle. The study clearly indicates that

among ten stressors under study, Role stagnation contributes least and role isolation contributes highest towards the organizational role stress.

On the other hand, multinational company employees are considered as young employees with lots of energy that they have. As the result reveals that among ten stressors under study, role expectation conflict contribution is the least and role isolation contributes highest towards the organizational role stress.

To develop guidelines which can help in managing the level of stress among employees, two important factors, in recruitment i.e., educational qualification and previous experience were considered. The identification of stress among the employees can help in planning, for staff training programs to handle stress situations.

When one looks at the Indian employees, most of them have dreams and huge expectations from life. The research finding suggests that for all other stressors viz., IRD, REC, RE, RO, PI, SRD, RA, and RI in Indian employees were highest stressed and they were not clear about different roles in the organization and limit their performance related to the job assigned were least stressed.

Comparing the results of the first hypothesis, Employees from Indian company have more organizational Role Stress than the employees from Multinational Company, they were not given different roles at a particular time.

Findings related to organizational role stress: The employees from the Indian company and the multinational company differ significantly and statistically with regard to sub –dimension of Role Stress, namely, inter role distance, role stagnation, role expectation, conflict, role erosion, role overload, role isolation, personal inadequacy, self-role distance, role ambiguity and resource inadequacy . It is interesting to note that employees from the Indian company have secured higher score in the above mentioned dimensions when compared to employees from multinational company. (Table No.2.1). Therefore, Stress is higher among the employees in the Indian company when compared to the stress Multinational Company.

Ethical concerns

Inter role distance: In the Indian company it is seen that the employees have many responsibilities in the company as well as in the family. Most of the employees have more experience, and have families with children. The employees feel that due to organizational roles they are unable to spend quality time with the family. As a result, they perceive role stress, whereas in the multinational company the employees are in the younger age group and family responsibilities are less and so there is less family work conflict. Hence it is the responsibility of the Indian company to do good to the employees by counseling and other strategies.

Role stagnation: In the Indian company it is seen that the employees feel comfortable in their present position. They are afraid to take up new challenges. This is probably a mind set. The reason again is that when moving the upward ladder there are less opportunities and it takes a considerable period of time. Whereas in the multinational company the stress level is low because when a person is given the new responsibilities he is given sufficient training to handle it, while this is less in the Indian company.

Role expectation conflict: The employees working in the Indian company felt that stress is generated by different individuals such as superiors, subordinates and peers. Therefore, this resulted in higher stress. The situation is similar in the multinational company but not to the extent seen in the Indian company. In this content both the companies should focus on uplifting human dignity.

Role erosion: In the Indian company it is seen that a lot of stress is created due to role erosion. Compared to the multinational company the Indian company is older. The management at regular intervals has been instructing its workforce. This created a lot of discomfort among the employees and stress was seen due to role erosion. However, the restructuring is done at a minimum level.

Role overload: In the Indian company from the above results it is seen that employees experience stress due to role overload. The employees feel that the management made unjust demands with regard to productivity. It is also seen that more the experience they have a fixed mind set they have and are not willing to change, Whereas from the multinational company they have fixed targets and have to be fulfilled. From the beginning they have this culture.

Personal inadequacy: The employees in both the companies are experienced in operating the machines but feel that they have enough knowledge, and skills to perform their role effectively. Senior employees feel that they never update

their trainings, and knowledge regarding the work. Moreover, when they are assigned with new responsibilities with orientation, they experience a feeling of personnel inadequacy. Therefore, they experience more stress in the Indian company. On the other side, in the multinational company most of them are qualified with technical education or are graduated. Comparing to Indian company the role stress is low. This is found more among diploma holders and non-technically qualified employees. The quest for training and updation is found more among employees of the Indian company. The multinational company is conscious of the training needs of the employees and organizes regular training programme.

Role ambiguity: According to the respondents, in both the multinational company and the Indian company it is found that role ambiguity is an important issue. The younger and higher the qualification, it is seen that role ambiguity is low. In the multinational company it is seen that there is a highly qualified workforce and this helped them to understand their role better. Whereas in the Indian company the employees said that there is no information or clarity about their roles and they are doing mundane work.

Resource inadequacy: The multinational company has a perfect system in place, where logistics and other aspects are well maintained. The production unit has lot of necessary facilities which are available within the organization. The employees of the Indian company said that there is a lot to be done with respect to facilities and they said that irregular supply of materials affect their production. This caused a lot of anxiety among them.

Justice: From the study, it is implicit that employees of MNC and Indian companies have more role stress but found more in Indian company, therefore, Justice must be done for both Male and female in terms of salary, distribution of work and equality

Autonomy: More autonomy must be given in making decision independently in the Indian company, doing no harm at work place, doing good for employees and human dignity must be respected at every levels of the industrial employees.

Conclusion

From the study, it is understood that employees of multinational and Indian companies have role stress, therefore, Periodic orientation program on stress management can be organized for the employees of both the Indian and the multinational companies.

The social worker can intervene in aspects viz industrial counseling, family counseling, individual and group counseling and home visits. By doing all of these, role stress will be reduced and productivity will increase in both companies.

Team building will reduce stress and create a concrete relationship between the workers, supervisors and management. In social group work, the programs, recreation activities should be introduced, according to the needs, interests, experience and competence of members of the group.

The role of Management in the Indian company is to improve communication by sharing information with employees to reduce uncertainty about their jobs and futures. They can also make communication friendly and efficient, not mean-spirited or petty, and clearly define employees' roles and responsibilities.

Discuss with your employees, praise good work performance, both verbally and officially, through schemes such as employee of the month. Be sure the workload is suitable to employees' abilities and resources; avoid unrealistic deadlines. Show that individual workers are valued. Consult employees about scheduling and work rules. Offer rewards and incentives. Provide opportunities for career development. Give workers opportunities to participate in decisions that affect their jobs. Develop a friendly social climate. Establish a zero-tolerance policy for harassment. Make management actions consistent with organizational values. Provide opportunities for social interaction among employees.

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A method for the development of an international bioethical management system

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Abstract

Amaryta Sen (*Why Human security?* presentation at “International Symposium on Human Security” in Tokyo, 28 July, 2000) emphasized on human security for survival, daily life, and dignity of human beings, and the significance of health, peace and tolerance for survival and thus human security. However, Sen did not suggest a management system to help achieve human security. There are two ethical aspects to human security: one is on the moral choice of behavior by individuals and the social choice by the general public, and the other is a need for an ethical standard for management of social organizations for cooperation. Sen focuses on the moral aspect and democracy for human-security. Meanwhile, he focuses on the management of social organizations that can contribute to human-security in daily business affairs. Social organizations need social responsibility to be able to contribute to human-security in daily business activities. For the achievement of social responsibility in daily business, not only a rule verification of all members inside the social organization but also a system and structure for the governance of social organization, like cooperative governance, are needed. ISO (International Organization for Standardization) has utilized the cycle of management for achievement of industrial and commercial standards by social organization in daily business affairs. Advanced management systems like ISO focus on the achievement of social responsibility. But, there is no international bioethical management system for the achievement of social responsibility that can contribute to human-security. In this age of rapid globalization, cooperative work is needed for the development of an international bioethical management system. The author shows the application of the management cycle to the development of a bioethical management system. The bioethical management system should be a universal manual for business under international bioethical standards. For the creation of a universal manual through international cooperative work, a framework and basic system need to be developed on a web-site. The framework of management cycle may be composed by “Plan” (ethical standards, ethical codes), “Action” (guidelines), “Monitoring” (standards and norms for evaluation) and “Conclusion” (remediation of daily business in the future). It is possible to develop a system for international cooperative work on a web-site about the management cycle. In this paper, the author concentrates on the actual method for the development of an international bioethical management system through international cooperative work as a tool that may contribute to the realization of human-security. The author has already founded a Free Think Tank system on the web-site for cooperative work.

Introduction

I suggest a cooperative method for the development of an International Ethical Management System for human security. My focus is on cooperative social organizations including private enterprises and public services like universities and hospitals that rely on making profit in the economic market for their development and to be sustainable. The reason is that if human security cannot be conceptualized in the market system, its realization would be very difficult.

To realize public policies based on ethical principles, there is a need for an ethical management system plus a management certification system for market based social organizations so that social organizations can choose ethical behavior. In short, when social organizations utilize an ethical management system, they can get profits. As for public policy, if an ethical management system is connected to the global official certification system through the support of national governments and intergovernmental organization (similar to ISO), consumers can make better choices on their consumption behavior.

The use of an official certification system and the ethical management system help with recognition of brands not only on the demand side but also on the supply side. On the demand side, an official certification provides assurance to consumers about the quality as well as contribution to human security by the certified social organization. On the

supply side, if a social organization can utilize the ethical management system as a protocol for daily business activities, it can save on the costs of administrative protocols. The official certification becomes a guarantee of not only the quality of service but also of social responsibility and the contribution to human-security. Therefore, social organizations can use the official certification to promote themselves to consumers.

In this paper, the author focuses on the concept of a bioethical management systems because there is no global bioethical management and certification system. The mission of the bioethical management system is making contributions to a good life which is fundament of human security. It includes dignity of human beings and the significance of health, peace and tolerance as Sen indicated.

Without the development of a management system, the spread of ethical standards in economic systems that pursue self-profit is difficult. Therefore, both universal bioethical standards and a bioethical management system are needed for human security.

The development of the international management system by ISO: ISO followed through 6 phases of development of its international management system. The development of an advanced management system focuses on Corporate Social Responsibility (CSR) or Social responsibility (SR).

- 1) First phase (1987-2001): quality management of products: example, ISO 9000
- 2) Second phase (1996-2004): Environmental management: example, ISO 140003)
- 3) Third phase (2000-): Information management: example, ISO 17799
- 4) Forth phase (2003-): Risk management: example, ISO 73
- 5) Fifth phase (2003-): Consumer protection management for complaint management and conflict management: example, ISO 100018, ISO10001
- 6) Sixth phase (2004-): Management for Corporate Social Responsibility (CSR) or Social responsibility (SR): example, ISO 25000

There is a medical management system for all medical activities of hospitals in Japan. But, there is no international bioethical management system or international medical management system for CSR or SR.

Main institutions for the development and certification of CSR management system

After BSI was established as a domestic association 100 years ago, British national government became the observer of BSI. This was a starting point for the development and spread of management system by cooperative work. Table 1 shows the main institutions concerning the development and certification of management systems in the world.

In the case of ISO, WTO becomes the observer of ISO. With the help of an observer from specialized intergovernmental organizations like the UN and with the support of national governments, an international management system can be spread to the world. ISO operates the certification system of each management system by the support of national governments in each country.

ISO (International Organization for Standardization) is an NGO for the development of international standards with a certification system. ISO is an internationally authorized agency under the official support of national governments. ISO has a certification institution in each of its member nations for the realization and spread of international standards in public agencies and firms of member nations. For example, in the case of Japan, Japan Standards Association (JPA) is responsible for the registration and screening of ISO of firms and public agencies for ISO.

Table 1: The main institutions for the development and certification of management systems in the world

Category	Main institution	Institution for the development
International institution	Official international institution	OECD, UN, specialized organizations in UN,EU, EC,
	International standard institution	ISO26000 British Standard Institution group (BSI) Social Accountability International (SAI) Institute of Social and Ethical Account Ability (ISEA) Reitaku University in Japan, Ethics Compliance Standard 2000
	International NGO (international social network including global corporations, universities, NPO, investors, etc.)	Interfaith Center on Corporate Responsibility(ICCR) Ethical Investment Research Services(EIRS)
	International private institution International social network of global corporations	Global Responsibility Initiative (GRI, for creation of international guideline) World Business Council for Sustainable Development (WBCSD)
Domestic institution in Japan	Official institution by national government	Japan Council for Quality Health Care (JCQHC) by official support by Ministry of Economy, Trade and Industry in Japan

In the case of ISO, ISO has the following structure:

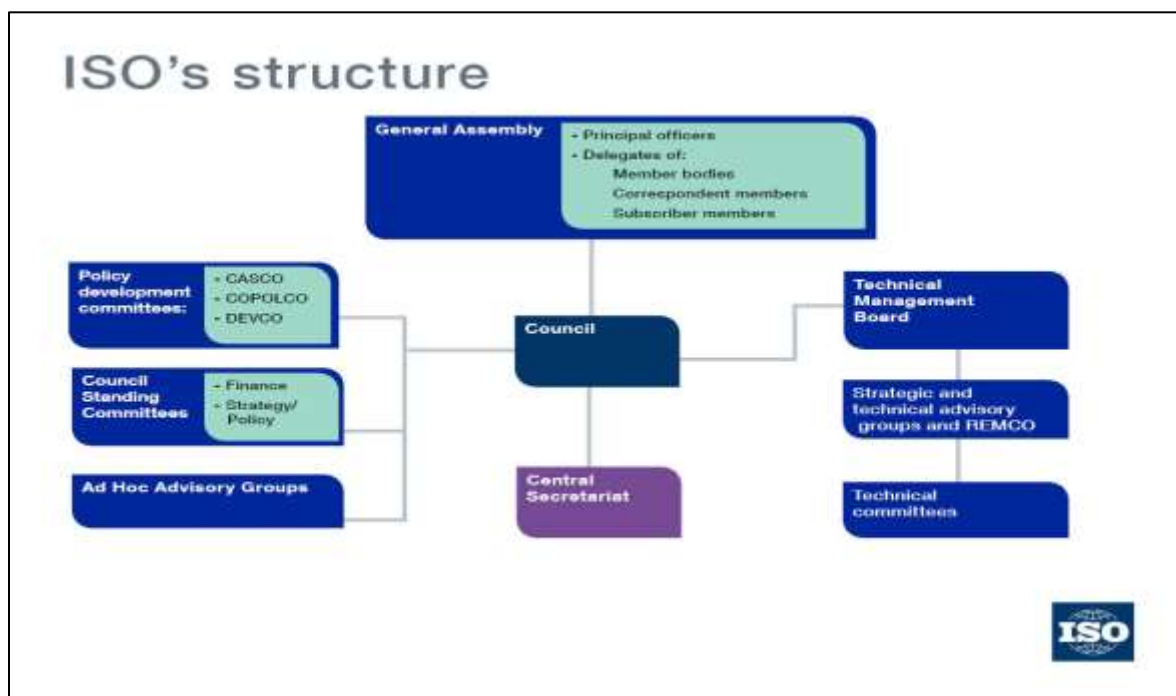


Fig1: ISO's structure (from http://www.iso.org/iso/home/about/about_governance.htm)

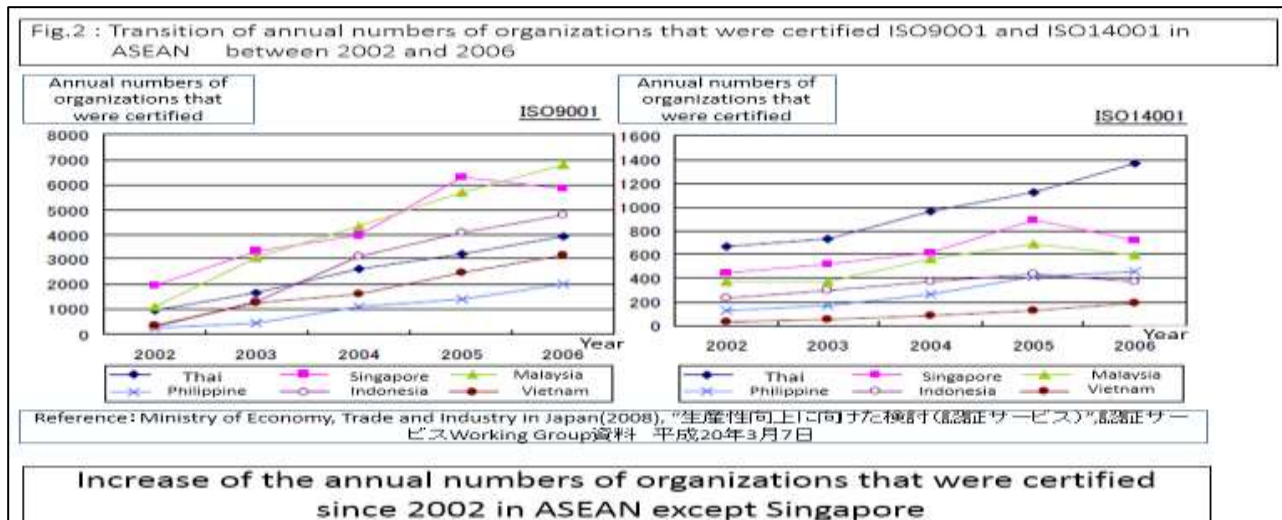


Fig 2: The increase of the annual number of organizations that were certified since 2002 in the ASEAN, except Singapore.

Table 2: The list of total sales price for review and registration of ISO9001/ISO14001 by the Japan power Engineering and Inspection Corporation (JAPEIC) which is a registered company for certification in Japan. (Unit:\$ after currency conversion assuming 1\$= \100)

Number of workers inside a firm that takes inspection	JISQ9001		JISQ14001
	Existence of planning	Without planning	
1-30	2,205	1,680	2,205
31-100	3,990	2,835	3,990
101-250	4,515	3,360	4,515
251-500	5,670	4,555	5,670
501-1000	6,825	5,145	6,825
1 001 -2000	8,505	6,1 95	8,505
2001 -4000	1 0,290	7,980	1 0,290
4001-8000	1 1,970	9,1 35	1,1 97

From:JAPEIC(2008),”財団法人発電設備技術検査協会認証センター審査登録料金規則 2008年4月28日改訂版“

The Ministry of Economics, Trade and Industry (METI) estimated the sale amount of certification of ISO9001 and ISO14001 in Japan (2008). The Ministry of Economy, Trade and Industry (2008) estimated that the total market size, which included the sale amount of certification and also consulting services, amounted to \$ 100 billion in Japan in 2006. Hence, if an international management system incorporates a certification system under official support of national governments or the UN, the market size can become significantly larger.

If an international bioethical management system is developed for human security, the profit from its realization and dissemination to firms and public agencies can be used to financially support the development of countries that need it. For example, the profit from the certification of bioethical management system can be given to healthcare and medical necessities of the needy.

Table3: Annual sales for certification of ISO9001 and ISO14001 in Japan from 201 to 2006.

Year	ISO9001		ISO14001	
	Sale amount (unit: \$ billion)	Numbers of organization	Sale amount (unit: \$ billion)	Numbers of organization
2001	25.9	16,655	8.6	4,609
2002	29.6	23,882	9.4	7,291
2003	32.9	31,457	10.6	10,028
2004	32.2	36,671	12.8	12,869
2005	30.5	41,411	14.6	16,170
2006	29.9	42,621	14.7	17,833

Source: Ministry of Economy, Trade and Industry (2008), “生産性向上に向けた検討（認証サービス）”, 認証サービス Working Group 資料, March 7.2008.

The framework of a bioethical management system

For international cooperative work and spread of bioethical management system to social organizations, it is important to develop a simple framework of bioethical management system.

The management cycle (PDCA cycle) for development of universal management system

The spread of a management system like that of ISO, the development of a simple management cycle can be very useful. The cycle circulates 4 elements: Plan, Do, Check and Action. Figure 3 shows the case of ISO management system. Reitaku University in Japan (2000, p.16) published the following ethical management cycle that is based on the ethical standard (Fig3).

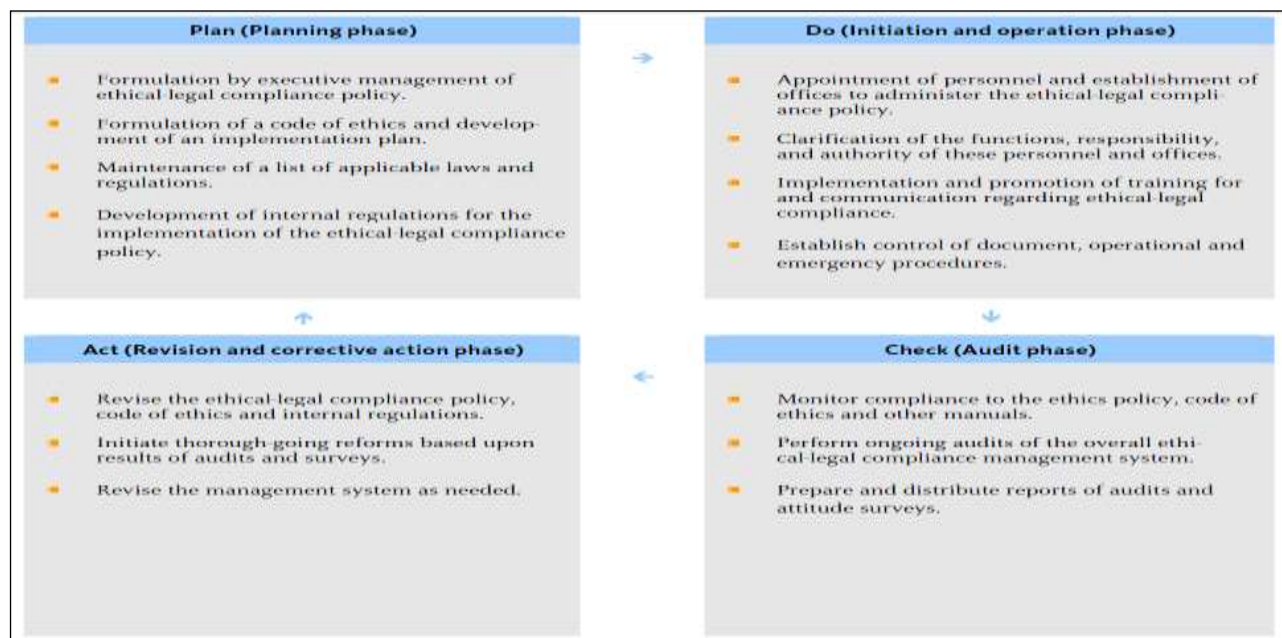
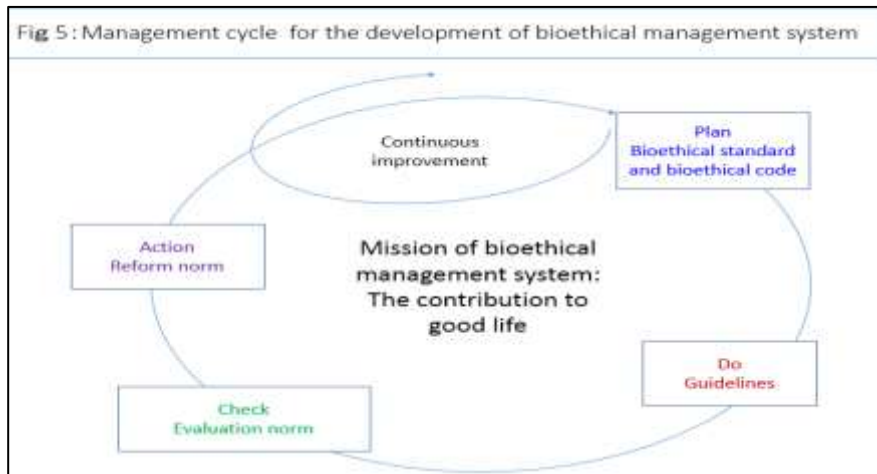


Fig 3: Ethical management cycle based on ethical standards. (Source: Reitaku University in Japan, 2000, “A Guidance Document for Implementation of the Ethics Compliance Standard 2000 (ECS 2000 V1.2) Part one, pp.16)

Reitaku University utilized PDCA cycle by ISO, and designed the contents and phases in each element inside PDCA cycle under ethical standards. Hence, the application of a management cycle (PDCA cycle) is the key for the development of a bioethical management system. Figure 5 shows the management cycle for the development of a

universal bioethical management system. As seen in the figure, the Bioethical Management system (BMS) is constructed by a management cycle that includes PLAN (bioethical standard and norm), DO (guideline), CHECK (evaluation norm) and ACTION (reform norm).



Framework for the development of a bioethical management system

Table 4 shows the framework for the development of a bioethical management system by cooperative work.

Table 4: Framework for the development of bioethical management system
1) PLAN : The bioethical standard and bioethical code Bioethical standard and bioethical code for planning policy and strategy for management of bioethical issues
2) DO : Guideline Concrete principles and examples of actions for practices in daily business
3) CHECK: Evaluation norm Norm for the evaluation of the achievement of the target in medium –term and long-term goal
4) ACTION : Reform norm Norm for survey of tasks that each social organization should reform in the future

Agreement over the rules for business activities and administration inside social organizations is the most important issue in their development. Specially, there should be agreements about rules for the achievement of social responsibility. For example, in the case of hospital, there is an agreement about rules for information disclosure to patients or security of their private information.

Agreement about the rules in social organizations in various countries can help with the development of a universal management system by international cooperative work. While participants utilize a common format for the development of a bioethical management system, they can write the rules of the agreement concerning bioethical issues of social organizations they belong to. The participants need to classify the rule of agreements according to each category of PDCA cycle. For cooperative work, a common format for writing and editing is needed. For example, Wikipedia has developed the most common format for writing and editing by cooperative work. Table 5 shows the common format for writing and editing through cooperative work concerning the development of an ethical management system.

Table 5: Common format for writing and editing through cooperative work

[Ethical Standard]

[Ethical code]

[Guideline]

<Documents that social organization should create for follow up of the ethical code>

1)

2)

[Evaluation norm]

[Reform norm]

Table 6: Assumption for writing and editing a bioethical management system for regenerative treatment

【Ethical Standard 1】

(ES.1) Promotion of medicine centered on patients

【 Ethical Code1-1】

(EC.1-1) Medicine that respects and protects the rights of patients

【Guideline 1-1.G】

1-1.G.1 Realization of the rights of patients and protection of their rights in daily activities

1-1.G.2 Explanation that patient can understand and consent

1.1.G.3 Protection of privacy of patient

< Documents that social organization should create for follow up of the ethical code 1-1>

1) Placards about the rights of patient should be given to the patient and family

2) Documents that staff utilize in each hospital to respect and protect the rights of patients

【Evaluation Norm 1-1】

(EN.1-1.1) Quantitative evaluation of realization of the rights of patients

【Reform Norm 1-1】

(RN.1-1.1) Quantitative survey about publicity on the protection of the rights of patients, family and staffs

*ES.1, EC.1-1.1, G.1-1.1 inside () shows the numbered list of each item for catalog of biological management system.

Table 7: Assumption of bioethical standards for regenerative treatment

[Ethical Standard 1]

(ES.1) Promotion of medicine for patient that is centered on

[Ethical Standard 2]

(ES.2) Supply of high quality medical treatment by regenerative remedy

As an example, it is supposed that researchers and medical experts need to develop a bioethical management system through cooperative work. Table 6 shows an assumption for writing and editing a bioethical management system in regenerative treatment. Table 7 is an example of writing and edition format through cooperative work. In the case of bioethical management system in Figure 1, the ethical standard 1 is “the promotion of patient-centered medicine”. The ethical code 1-1 that is made under the ethical standard 1 is “1.1 Medicine to facilitate respect of the right of the patients”. Here, the author shows sample sentences so that the participants of cooperative works can write and revise the sentences from the sample sentences. In short, the following common format can help as a guide:

1) First step: Decision of domain for the development of bioethical management system

In the case of bioethical management system, there are many domains like regenerative research, regenerative treatment, gene research, gene treatment, palliative care, etc. There are differences among social organizations according to each domain and various bioethical issues. Therefore, working groups according to each domain of bioethical issues are needed for cooperative work.

2) Second step: The creation of ethical standards by cooperative work

After the decision of the domain for the development of bioethical management system, the creation of ethical standards is needed. The ethical standard becomes the most fundamental structure of the management system. Therefore, ethical standards are needed to make it simple and easy to understand.

Third step: creation of ethical code according to ethical standard

There are many ethical codes under an ethical standard. Table 8 shows an assumption of some bioethical codes under ethical standard 1 (promotion of medicine for patient) for regenerative treatment.

Ethical code is like a target that all staff of social organization aim to achieve through daily business.

Table 8: Assumption of bioethical code for regenerative treatment

【 Ethical Standard 1 】
(ES.1) Promotion of medicine for patient that is centered on
【 Ethical Code1-1 】
(EC.1-1) Medicine that respects and protects the right of patients
【 Ethical Code1-2 】
(EC.1-2) Information disclosure
【 Ethical Code1-3 】
(EC.1-3) Practice for security of patients
【 Ethical Code1-4 】
(EC.1-4) Treatment for infection control

Forth step: creation of guideline according to ethical code

For concrete business activities, a guideline for follow-up of each ethical code is needed.

Table 9 shows an assumption of some bioethical guidelines under ethical code 1-1(Medicine that respects and protects the rights of patients) for regenerative treatment.

Table 9: Assumption of bioethical guideline for regenerative treatment

【 Ethical Standard 1 】
(ES.1) Promotion of medicine centered on patients
【 Ethical Code1-1 】
(EC.1-1) Medicine that respects and protects the right of patients
【 Guideline 1-1.G 】
1-1.G.1 Realization of the rights of patients and protection of their rights in each daily activities
1-1.G.2 Explanation that patient can understand and consent
1.1.G.3 Protection of privacy of patients
< Documents that social organization should create for follow up of the ethical code 1-1 >
1) Placards about the rights of patient should be given to the patient and family
2) Documents that staffs utilized in each hospital should respect and protect the rights of patients

Fifth step: creation of evaluation norm according to ethical codes

For evaluation norm, the quantitative evaluation is better. Table 10 shows an assumption of evaluation norm under ethical code 1-1(Medicine that respect and protect the right of patients) for regenerative treatment.

Sixth step: Creation of reform norm according to ethical code

For creation of reform norm, a quantitative survey is better. Table 11 shows an assumption of reform norm under ethical code 1-1(Medicine that respects and protects the right of patients) for regenerative treatment.

The cycle of management system is useful for creation of a manual for business and administration in achieving the mission by social organizations. Figure14 shows that fundamental structure for actual writing and editing in a hierarchy. The highest is the mission of bioethical management system that is, contribution to good life. For achievement of mission, the bioethical management system can contribute to realization of human security through business activities and administrations by social organizations.

Table 10: Assumption of evaluation norm for regenerative treatment

【 Ethical Standard 1 】

(ES.1) Promotion of medicine centered on patients

【 Ethical Code1-1 】

(EC.1-1) Medicine that respects and protects the right of patients

【Guideline 1-1.G】

1-1.G.1 Realization of the rights of patients and protection of their rights in each daily activities

1-1.G.2 Explanation that patient can understand and consent

1.1.G.3 Protection of privacy of patient

< Documents that social organization should create for follow up of the ethical code 1-1 >

1) Placards about the rights of patient should be given to the patient and family

2) Documents that staffs utilized in each hospital should respect and protect the rights of patients

【Evaluation Norm 1-1】

(EN.1-1.1) Quantitative evaluation about realization of the rights of patients and protection of their rights

Table 11: Assumption of reform norm for regenerative treatment

【 Ethical Standard 1 】

(ES.1) Promotion of medicine for patient that is centered on

【 Ethical Code1-1 】

(EC.1-1) Medicine that respects and protects the right of patients

【Guideline 1-1.G】

1-1.G.1 Realization of the rights of patients and protection of their rights in each daily activities

1-1.G.2 Explanation that patient can understand and consent

1.1.G.3 Protection of privacy of patient

< Documents that social organization should create for follow up of the ethical code 1-1 >

1) Placards about the rights of patient should be given to the patient and family

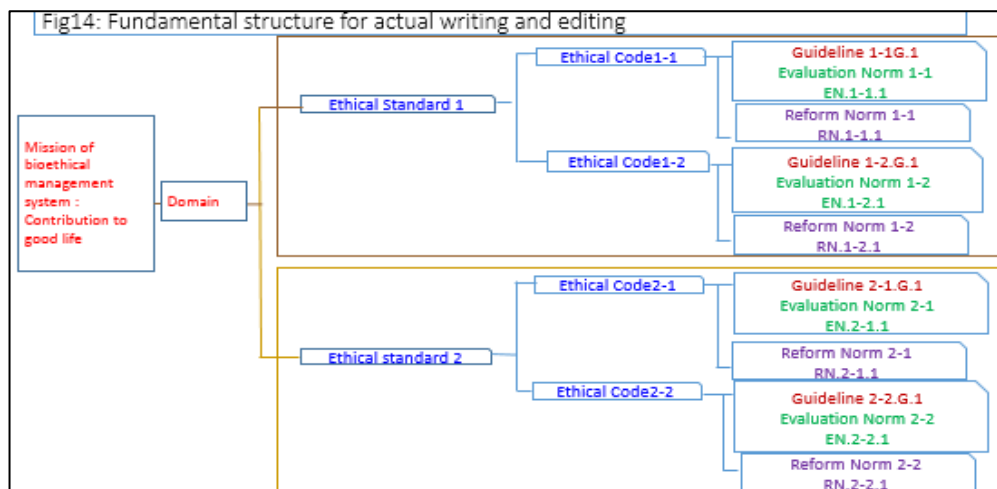
2) Documents that staffs utilized in each hospital should respect and protect the rights of patients

【Evaluation Norm 1-1】

(EN.1-1.1) Quantitative evaluation about realization of the rights of patients and protection of their rights

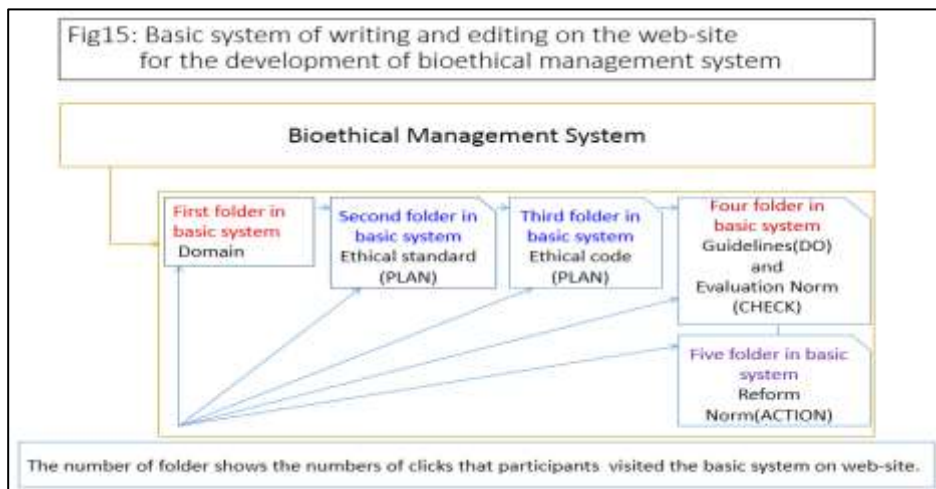
【Reform Norm 1-1】

(RN.1-1.1) Quantitative survey about publicity on the protection of the rights of patients, family and staffs



Diverse experts in the world must participate for the development of a universal management system through international cooperative work. The development of a basic system on the web-site for cooperative work by the experts in the world is needed for cost reduction. I propose a common format based on the framework of the PDCA cycle on the web-site. The common format can be adopted as the basic system on the web-site.

Figure 5 shows the basic system of writing and editing on the web-site.



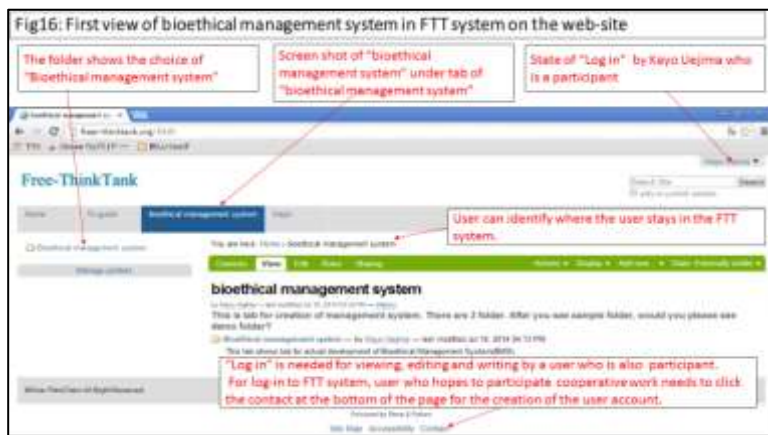
In short, when management system cycle (Domain, PLAN, DO, CHECK and ACTION) is utilized for development of basic system on the web-site, there must be 5 folders for information catalogue that participants need to write and edit. This is constructed in the basic system on the web-site.

A basic system for the development of bioethical management system on the web-site

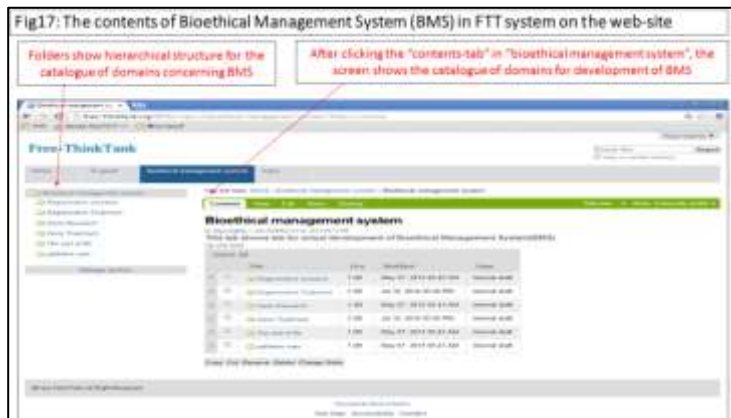
The author has launched the “Free-Think Tank system” (FTT system) that includes a demo of the basic system for the development of a bioethical management system (BMS) on the web-site. URL of FTT system is the followings; <http://free-thinktank.org/> ; after registration of user to FTT, readers can find a demo for development of bioethical management system in FTT system on the web-site.

Participants can write, save, edit and choose condition of publication on the web-site after logging-in FTT system on the web-site. Figure16 shows a screen on the web-site after a participant for development named Kayo Uejima logs in, the reader can find the screen after clicking the Tab of “bioethical management system” in FTT system on the web-site. The folder on the right side shows choice of “Bioethical management system” for cooperative work on the web-site. The folder on the right side in Figure16 shows choice of “Bioethical management system” for cooperative work on the web-site.

For cooperative work, users of FTT system have various choices for information sharing and information control after users create or save information (file, default, video, photo, music etc). There are many functions in FTT system that the author could not introduce for concentration of introduction and explanation for development of BMS by cooperative work on the web-site. The functions that the author explained in this paper show the applied sample of FTT system.



Finally, the author introduces convenient and useful functions in FTT system not only for cooperative work but also for storage on the web-site. FTT system can supply storage functions to users of the FTT system. Figure7 shows the contents of Bioethical Management System (BMS) in FTT system on the web-site. The folder on the right side shows the hierarchical structure for catalogue of domains concerning BMS.



Conclusion

In this paper, the author concentrates on the actual method for the development of an international bioethical management system through international cooperative work as a tool that may contribute to the realization of human security.

When ethical management system is developed by international cooperative work of various experts in the world, the ethical management system can become a universal manual for daily businesses, activities and administrations in the world. For consumers, the guarantee of the quality and credit of goods and services, under ethical principles, is important. For example, for the choice of a hospital that supplies regenerative treatment, consumers can choose a hospital that utilizes a bioethical management system for protection of the rights of the patients.

Generally speaking, some research papers concentrate on suggestion of theory or policy for the development of ethical management system. However, the author has suggested a FTT system for a realistic scenario of the development of an ethical management system. The author concentrates on how to develop a bioethical management system through the cooperation of international networks using the web as a tool.

The Bioethical Management system (BMS) is constructed by a management cycle : a) PLAN (bioethical standard and norm), b) DO(guideline), c) CHECK(evaluation norm)and, d) ACTION(reform norm).

The bioethical management system can be a universal manual for business under international bioethical standards. For the creation of a universal manual, a framework and basic system need to be developed via the web so that international cooperation on the matter of bioethical management can be achieved. Hence, the management and certification system via a website is very helpful.

However, the FTT system cannot provide a management system and certification for bioethical management of organizations. The FTT system is just a basic system on the web-site to supply functions (storage, information management, social network system for cooperative work, high security for protection of private information) to social organizations and individual users on the web-site. After a social organization develops a bioethical management system though international cooperative work, it can freely utilize the FTT system for the development of a bioethical management system.

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Ethics of Health care, Medical Ethics

Shortage of organ donation resulting from difficulties in the diagnosis of brain death by medical practitioners in Malaysia

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Abstract

The issues of brain death and organ donation are closely related. Brain death is the irreversible loss of brain function, and from the medical perspective, a person who is brain dead cannot be recovered. The shortage of organs for transplantation is a worldwide problem. One of the reasons contributing to the shortage of organs is the refusal of medical practitioners to diagnose brain death. This paper will highlight four factors why medical practitioners in Malaysia may refuse to diagnose brain death. These factors include: 1) medical practitioners may not accept brain death as true death, 2) a misconception of the concept of brain death, 3) a lack of knowledge about brain death, 4) a lack of responsibility in carrying out professional duties. These four factors will be discussed on the backdrop of ethics as the ethical implications pertaining to brain death diagnosis in Malaysia.

Introduction

Organ donation is the best method of treatment for patients with end-stage organ failure (Sui et al. 2011). Organs such as heart and lungs can only be obtained from brain dead patients. This is because the organs are still fresh from the oxygen supply received through ventilators as the brain dead patients would still be on the life support machine.

Shortage of organ donors is one of the problems faced by many countries, including Malaysia. Malaysia has a low rate of organ donation where the rate of organ donation from deceased donors is among the lowest in the world. A report from the National Transplant Resource Centre showed that there were only 26 actual donors in 2013. One of the causes of the small number of organ donors is the low rate of referral of brain dead patients. Referrals are made by doctors who treat patients diagnosed with brain death. Mortality due to brain death in intensive care units in some hospitals is high, but when brain death diagnosis is not done, then the patient would not be on record to be brain dead (Interview with Dr. Fadhilah Zowyah Lela Yasmin Binti Mansor, Chief National Transplant Procurement Manager & Donor Coordinator - Malaysia).

When there is no diagnosis of brain death, then there would not be any referral. As a result, the number of potential donors would not be as high as it should be. However, it does not mean that if the referral rate is high then the number of donors is also high. At the end of the day, in Malaysia, whether a brain dead patient becomes a donor or not depends on the permission given by the next-of-kin (even if the patient is an organ pledger). Nonetheless, a high referral rate would show an effort among doctors, especially in the Intensive Care Unit, to diagnose brain death. Some of these patients diagnosed may turn out to be potential donors. The bottom line is if diagnosis of brain death is not done, then the probability of getting a donor is very low.

This paper aims to identify the factors contributing to the shortage of brain death diagnosis. Although Malaysia has accepted the concept of brain death in terms of legislation, religion and practice, it is hypothesized that there are still doctors who do not accept or do not apply the concept of brain death.

Methodology

Questionnaires were distributed to doctors at the University of Malaya Medical Centre (UMMC). A total of 80 respondents were selected consisting of doctors working at four major departments of the hospital namely anaesthesiology, medicine, surgery and emergency medicine. The questionnaire data was collected anonymously to

ensure confidentiality. The pilot test was done, and the final version was distributed to respondents. This questionnaire was designed to identify the reasons as to why a low number of medical practitioners in Malaysia diagnose brain death. Many articles written on this matter attribute this to knowledge and attitude of doctors towards brain death. In this survey, a “good knowledge and attitude” can be defined when the doctor does not require any information on brain death, and can provide information to the families of brain dead patients confidently. This study has been approved by University of Malaya Medical Ethics. The findings were analysed; see the percentage for each answer.

An interview was also conducted with Dr. Fadhilah Zowyah Lela Yasmin Binti Mansor who is Chief National Transplant Procurement Manager and Donor Coordinator of the National Transplant Resource Centre, Malaysia.

Results

The table below shows the summary of the results obtained from the study which shows the percentage of the responses given by the doctors to the questions asked. 80 respondents were selected but one of them not give a complete answer. Therefore, only 79 respondents were analysed.

Questions/ Percentage %	YES	NO
Do you know what is "brain death"?	100%	0%
Are you involved in the diagnosis of brain death?	37%	63%
Have you ever treated brain dead patients?	76%	24%

Questions/ Percentage	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
My knowledge about brain death is sufficient for me to manage brain dead patients.	6.4%	31.6%	26.6%	31.6%	3.8%
I do not need more information on the issue of brain death.	16.4%	63.3%	7.6%	7.6%	5.1%
I feel confident that I am able to explain the issue of brain death to the patient's family.	7.6%	27.8%	27.8%	31.7%	5.1%
Doctors should take part in discussions of brain death with the family of brain dead patient.	6.3%	0%	3.8%	51.9%	38%
Brain dead patients should become organ donors.	5.1%	19%	27.8%	36.7%	11.4%
I would like to become an organ donor if I am diagnosed to be brain dead.	8.9%	3.8%	21.5%	33%	32.9%
Diagnosis of brain death is a way to increase the number of organs for transplant	12.6%	19%	17.7%	34.2%	16.5%

The results show that there are many doctors who need additional information regarding brain death. 63.3% of doctor disagreed when asked if they do not need more information on the issue of brain death. If they do not have enough knowledge, it will affect their explanation to the patient's family. That would contribute towards doctors having low confidence when explaining about brain death.

The respondents were also asked whether Malaysia accepted the concept of brain death as death. In total, 54.4% answered true, 15.2% answered false and 30.4% did not know. While slightly more than half of the respondents answered this question correctly, it is quite alarming that the remaining 45.6% either answered wrongly or did not know. On another matter, the majority of the respondents (89.9%) agreed that doctors should take part in discussions of brain death with the family of brain dead patient.

Discussion

Medical practitioners may not accept brain death as a true death: Studies conducted in several countries such as Israel, Italy and Switzerland showed that there are doctors who do not accept brain death as legal death (Cohen et al. 2008). Approximately 1/5 of doctors from studies conducted in these three countries do not accept brain death as death.

Although the concept of brain death is accepted and adopted in many countries, it is still not recognized in countries such as Egypt, Syria and Pakistan (Mohd Rani 2005, Al-Khader 2002). Therefore, for this study, a hypothesis was made that Malaysian doctors who graduated from Egypt do not accept the concept of brain death because Egypt does not recognise the concept of brain death as death.

Attitude towards the acceptance of brain death will impact on the organ donation process. Most doctors who do not accept brain death are those who are not involved with the process of organ procurement or who are unfamiliar with the donation process. Abidin et al. (2013) in their study done at University of Malaya Medical Centre showed that there are still some doctors who are unwilling to accept the concept of brain death, although the Malaysian Medical Council (MMC) has issued guidelines on the acceptance of brain death in 1996 (Merican 2006). In this study, however, from the demographic data compiled through the questionnaires, none of the respondents had their medical background from countries which do not accept brain death as legal death. As such, the hypothesis could not be tested.

Misconception of the concept of brain death: The study conducted at UMMC in 2013 found that 10.6% of doctors thought only neurologist could certify brain death (Abidin et al. 2013: p6). In this study, a similar misconception still occurs, as 24.4% of the respondents answered that doctors involved in the process of organ procurement can diagnosis brain death, and half of them do not indicate that a neurosurgical specialist as the person who can diagnose brain death. This misunderstanding can reduce the number of brain death diagnosis. In Malaysia, it is a legal requirement that doctors involved in certifying brain death consist of two specialists, with at least three years of postgraduate clinical experience who are trained in brain death assessment and diagnosis. They should preferably be anaesthesiologists, physicians, neurologists and neurosurgeons (Merican 2006: p13).

Lack of knowledge about brain death: Lack of knowledge of brain death is a result of little exposure to the concept of brain death among doctors. One way to give a clear understanding is to introduce a formal subject related to brain death and organ donation in the early clinical year of medical training (Cohen et al. 2008: p215). Lack of knowledge related to brain death will result in discomfort among doctors when explaining brain death to family members of patients. Previous studies have shown that the level of understanding of physicians on brain death is poor (Youngner et al 1989, Harrison & Botkin 1999).

This situation is caused by a lack of education and exposure while in medical school. Before this, there are many reports which only assess medical students and physicians' understanding on the issue of organ donation, but these do not focus on basic issues of brain death (Schaeffner et al. 2004, Afonso et al. 2004). There are several studies regarding the knowledge and attitudes of doctors on the issue of brain death carried out in Korea (Jeon 2012), Pakistan (Sherani 2008), Egypt (Hamdy 2013), Japan (Kato 2004) and Poland (Kubler 2009). The studies found that there are doctors who are not clear about the definition of brain death, and some of them reject the concept of brain death such as those in Egypt, as "not quite dead".

From the result of this study, 76% of respondents have treated brain dead patients but 63.3% of them still require more information on the issue of brain death. The current knowledge that they have is still not sufficient to manage brain dead patients.

Lack of responsibility in carrying out professional duties: Based on the interview with Dr. Fadhilah Zowyah Lela Yasmin, it is found that many doctors did not make a diagnosis of brain death to patients who were brought to the Intensive Care Unit (ICU). The patients would be put on life support machine in order to assist the heart and respiratory process. Most of these patients would eventually die when in fact, from the medical perspective, they are already brain dead. Dr. Lela Yasmin is of the view that it would be more ethical for doctors to make a diagnosis of brain death on patients suspected of being brain dead rather than leaving them on the life support machine.

Furthermore, it is the responsibility of doctors to explain brain death and organ donation to the patient's family. A study conducted by Abidin et al. showed that the shortage of organs in Malaysia is caused by passive attitude among doctors to identify a suitable organ. Almost two-thirds of respondents had never approached the family of brain-dead patients to explain about organ donation. Acceptance and application of the concept of brain death as legal death is a major issue in organ donation because the rise of acceptance of brain death can increase the number of organ donors. When the question about diagnosis of brain death as a way to increase the number of organs for transplant was asked, 12.6 % answered strongly disagree, 19% disagreed and 17.7% answered not sure. This may be one of the reasons for the reluctance of doctors to diagnose brain death since they do not view the diagnosis of brain death as a means to

increase the number of organ donors. In fact, when the diagnosis of brain death is not implemented, potential donors cannot be identified.

Conclusion

Doctors should be given adequate training and information on brain death which can be started from the beginning of their undergraduate studies. Abidin et al said that they should understand the concept of brain death, and have to be aware of this possibility when treating patients, and be able to recognize and diagnose brain death in the presence of a potential organ donor. We need to change the attitudes of doctors to make them more responsible on the issue of brain death. Doctors should have a more positive attitude towards brain death. Finally there must be exposure on brain death to the public through the media and religious bodies. This will help to facilitate doctors job to provide information to the patient's family.

Doctors play an important role in the issue of brain death and organ donation. Their understanding and good behavior in the issue of brain death is very important. They should be responsible for each task given. Continuing medical education and increasing awareness are the key in increasing the number of brain death diagnosis.

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Ethical considerations over production of human skeleton models from autopsied Hansen's disease patients in pre-war Japan

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Abstract

On May 9, 2013, a local newspaper in Kumamoto (located in Kyushu Island, Japan) reported that pathology researchers at Kumamoto Medical School had produced dozens of human skeleton models (hereafter, models) from autopsied patients who had died of Hansen's disease (HD) in the 1920s. A general meeting of the "Hansen's Disease Citizen's Association" was held in Kumamoto City immediately after the release of this news, aiming to eliminate prejudice against individuals with the disease and to address the historical lessons learned about discrimination. The Association made an emergent appeal, demanding investigation over the production of these models and the ethics of medical professionals and researchers at both Kumamoto University School of Medicine (originally Kumamoto Medical School), and the National Sanatorium *Kikuchi Keifuen* where all autopsied patients had been admitted. Both former patients with HD and commentators specialized in the history of HD in Japan argued that medical professionals involved in the production of these models had been discriminatory toward patients with HD in carrying out unethical practices. The authors believe it is important to examine, from the humane perspective, the factors that allowed medical professionals to participate in those activities without any condemnation from either the medical community or the lay population. The paper discusses the long history of discrimination against patients with HD and the ethical fragility of medical professionals as the two main factors that contributed to the production of the models. We also consider circumstances of the era in which this occurred, including the national atmosphere and the ethical immaturity of the medical community at the time. In conclusion, the authors stress the importance of preventing discrimination and ensuring robust ethical guidelines for medical professionals in order to keep history from repeating itself. An endless battle against discrimination is necessary, and serious reflection upon the past and learning from it are essential.

Introduction

On May 9, 2013, a local newspaper in Kumamoto prefecture located in Kyushu Island, Japan reported that pathology researchers at Kumamoto Medical School had produced dozens of human skeleton models (hereafter, models) from autopsied patients who had died of Hansen's disease (HD) in the 1920s. This news spread throughout the country, renewing national attention on issues of discrimination against people suffering from various diseases and former patients with HD (Sawamoto 2013; Izumi 2013, Editorial 2013). A general meeting of the "Hansen's Disease Citizen's Association", aiming to eliminate prejudice against individuals with the disease and addressing the lessons learned from historical discrimination, was held in Kumamoto City immediately after the release of this news.

The Association made an emergent appeal, demanding investigation into the production of these models and the ethics of the medical professionals and researchers at both the Kumamoto University School of Medicine (originally Kumamoto Medical School) and the National Sanatorium *Kikuchi Keifuen*, where all autopsied patients had been admitted. Finally, the Association demanded that the Ministry of Health, Labor, and Welfare investigate whether or not similar activities had occurred at other institutions (Sakamoto 2013).

Both former patients with HD and commentators specializing in historical issues concerning HD argued that medical professionals involved in the production of these models were discriminatory toward patients with HD and carried out unethical medical practices. They also asserted that these practitioners were inhumane, and had violated the human rights of the patients by treating the human body as an object (Sawamoto 2013, Editorial 2013, Kyodo Tsusin 2013; Nittere News 24, 2013). On March 24, 2014, an "Investigation Committee" concerning the production of human

skeleton models of patients with Hansen's disease at Kumamoto University Graduate School of Life Sciences (hereafter, Investigation Committee) published a report on this matter, revealing the details discussed below (Investigation Committee Report 2014).

An associate professor from the Kumamoto Medical School Department of Pathology (hereafter, Department) initiated production of the models from autopsied patients with HD who had been admitted to the Kyushu Sanatorium (currently called the National Sanatorium *Kikuchi Keifuen*) between 1927 and 1929. A list of autopsied bodies was found that exclusively consisted of patients with HD and revealed that the associate professor had conducted autopsies on 43 patients with HD between November 1927 and March 1929. Models were produced from 20 of these patients and were preserved at the Department. None of these models exist today; they are thought to have been destroyed during the World War II bombing of Kumamoto City by the United States. The associate professor mentioned this incident in an article published in 1951 under the title of "*An Afterword (Batsu ni kaete)*" (Suzue 1951).

Autopsies had been conducted with due process for the majority of the 43 cases. However, no written consent was obtained from the patients or their family members to produce the models. The Investigation Committee believed that the associate professor produced these models for anthropological research aimed at proving the existence of a biological predisposition for contracting HD. The findings of this study were formally presented in 1931, under the title "*A study of the biological predisposition of Leprosy patients: the first report,*" at the Japanese Society of Pathology (Suzue and Nagase 1931).

We argue that the nationwide discrimination and prejudice towards patients with HD in Japan at the time played a significant part in the production of these models. Discrimination is defined as unfair treatment of a particular individual or group without a legitimate reason. People have discriminatory feelings or thoughts when they feel uncomfortable about and loathe, disdain, or are afraid of a person or group without a rational reason (Nakajima 2009). HD has a dreadful history of discrimination. Patients with this illness not only suffered from severe and persistent symptoms, but were also forced to leave their home or town. These individuals were compelled to wander, and were socially devastated by separation from spouses, children, parents, and other relatives (Ohtani 1993, Niimura 1998). Since ancient times, individuals with HD were forced to, metaphorically, "experience death" during their lives. They were stigmatized as being impure or criminal, and were thought to be "quasi-humans" being punished by Buddha or God. Patients with HD were thus sentenced to social death in addition to their disease-related suffering and disability (Ohtani 1993, Niimura 1998). In Japan, HD was recognized as "Buddha's vengeance," "leprosy" (the disease of heaven's judgment), the shame of entire families, or "*suji*" (a bad pedigree), since the Edo era.

HD was irrationally considered both a genetic illness and an infectious disease, with current and former patients being long abhorred in local communities. Japan also maintained a national forced isolation policy, via the *Leprosy Protection Law*, that lasted 90 years keeping patients with HD in forced isolation (Dobson 2010; Hataya 2006; Kumamoto *nichinichi* 2004; Investigation Committee 2005). Although this law was repealed in 1996, serious prejudice and discrimination against recovered patients still continue. A Japanese physician, who has been involved in the care of patients with HD for decades, called the illness outstandingly extraordinary because the suffering from this disease leads to loss of one's home and homeland (Tokunaga 1982).

Akamatsu, a Japanese anthropologist, wrote that latent discrimination against those who had a family member with HD is obvious in the context of marriage. People who believe that their children or grandchildren might marry someone with a HD pedigree have been known to tenaciously investigate multiple generations of the prospect's familial ties to determine whether any members had HD. Even a rumor of a relative with HD can be sufficient to call off an engagement.

Narratives about patients with HD in sanatoriums revealed that their family members were not present when they passed away, did not attend their funerals, and did not collect their ashes after cremation. Many of these patients' families refused to allow the patients to visit their homes while they were still alive. When they returned home, some were told by their families: "*Do not come back. Keep away from this house,*" "*You have such a shameful disease,*" and "*You would keep me from looking at people in the eye*" (Tokunaga 1982). One patient with HD repeatedly escaped from a sanatorium in search of freedom, but was rejected by people from his hometown, his relatives, and even his own mother. In one instance, people believed that a grandfather with HD would socially hurt his grandson [Tokunaga 1982]. In November 2003, a hot springs hotel in Kumamoto, Japan, refused lodging to patients who had previously suffered from HD. This situation reminded Japanese society of the deeply-rooted and long-lasting prejudice

and discrimination toward patients with HD (Hataya 2006).

In 2009, a study of the daily lives of patients who previously suffered from HD was conducted by a human rights volunteer group. Respondents reported that patrons at local public bathhouses told them not to come; staff at local bookstores ordered them not to touch the books; and guests at their home would not eat food they served [Sankei newspaper 2009]. A 2013 survey reported that 37% of laypersons would feel uncomfortable bathing with former patients with HD, and 42% would not want a marriage between their family and the children of former HD patients (Kusonoki 2013). As is evident from the above discussion, the production of models from deceased patients with HD occurred in a society that was severely discriminatory towards patients with the disease. It is thus not an overstatement that these unethical and inhumane attitudes toward, and policies against, patients with HD are partly responsible for having allowed these models to be produced.

Ethical fragility among medical professionals: Besides the severe and widespread discrimination against both current and former patients with HD, we argue that ethical fragility among medical professionals, especially physicians, contributed to the environment that allowed the production of these models. Certain characteristics shared by many medical professionals could make them ethically susceptible, leading them to do something considered unacceptable from the modern moral standpoint. For example, Colaianni suggests that the present medical culture remains relatively unchanged from the time when German doctors participated in the genocide carried out by Nazis, transforming life-saving professionals into murderers. She claimed that the culture of medicine made German doctors more morally vulnerable than laypersons at that time.

This characteristic of moral vulnerability now and then among medical doctors has arisen from the rigid hierarchy and socialization in medical culture, a strong career ambition, and a ‘license to sin’ (i.e., physicians are allowed to perform actions in medical school that are taboo in other contexts, in the pursuit of scientific knowledge), all of which result in arrogance and a belief that they are above the law. It has also been suggested that physicians become accustomed to inflicting suffering, as part of their professional duties (Colaianni 2012).

Tsuneishi has recounted the actions of the ‘731 Unit’, in which Japanese medical researchers performed cruel human experiments, human vivisection, and murders. Participants quickly became accustomed to the brutality of their acts and developed a serious lack of social awareness and individual independence, attempting to justify their barbaric actions by claiming that they had been done for the glory of the Emperor and Japan (Tsuneishi 1995).

Those involved in the production of the models may have had similarly problematic beliefs and perceptions of themselves, the medical profession, and other individuals. Both past and present medical cultures occasionally nurture arrogance, the tendency to justify actions in the name of science, the nation, or the Emperor, unconditional confidence in doing what is perceived to be right, and numbness to the brutality inherent in some medical practices. The national goal of exterminating HD at the time may have been used to justify the production of these models for medical research. The study was consistent with national policies at that time, and was regarded as beneficial. Research was viewed as socially significant insofar as it aimed to reveal the mechanisms involved in contracting the disease. At the time, HD was viewed as weakening the nation, and stopping its spread was seen as promoting overall health and reinforcing the physical capacities of Japanese people.

Individuals with feelings of elitism, career ambition, and clear purpose, as well as beliefs in high productivity, progress, health, and social improvement, are likely to think that human beings who are unable to contribute to social progress should be excluded from global society. It can be argued that such eugenic ideas are clearly connected with discrimination against disabled individuals, including patients with HD, and that these ideas attenuate empathy for physically and socially vulnerable persons and weaken psychological resistance to the violation of human rights. As a consequence, respect for the dignity of deceased patients with HD and courteous treatment of dead bodies is easily lost.

The “*Final Report on Issues Related to Hansen’s Disease*” published by the Investigation Committee in 2005, discussed the establishment of a lifelong isolation policy in Japan; this report posited that doctors had propagated the belief that HD was highly contagious, extremely dangerous, and should not exist in a civilized nation, as well as the belief that HD must be eliminated at any cost. The report concluded that these widespread beliefs led Japanese citizens to discriminate against both current and former patients with HD. The report also suggests that some Japanese medical professionals at the time actively discriminated against and isolated patients with the disease. Looking at all the evidence together, we propose that ethical fragility among medical professionals contributed to their willing

involvement in discrimination against these patients and production of the models without consent.

National Setting: Production of the models in question occurred between 1927 and 1929. In addition to the social discrimination against these patients and the ethical fragility of medical professionals, the national setting at the time may have contributed to this shocking event. It is necessary to consider the overall environment during this era to better understand these occurrences. Two related factors that are important to consider are the pre-war nationalist policy aimed at enriching and strengthening Japan, and the immature level of research ethics at the time.

The medical society of Japan developed a system of medical ethics in the late 1880s and early 1890s. The major ethical principles governing medical practice at the time were care and consideration for patient suffering, non-maleficence and beneficence, and mercy. Physicians' virtues were also considered essential (Goto 1999). However, Ozeki pointed out that the missions and obligations of physicians at the time could not be separated from the nationalistic awareness of the era. It was believed that medical progress would promote health and thereby enhance national productivity (Ozeki 1970).

It was also believed that, in order to compete with Western countries, Japanese medicine had to enhance the physical abilities of Japanese citizens. Thus, from the beginning of modern medicine in Japan, many Japanese physicians had engaged in healthcare and medical research motivated by nationalism or enthusiasm to serve their country. Confucianism was believed to have contributed to the foundations of Japanese medicine and the establishment of healthcare and public health systems. We argue that the application of Japanese nationalist ideas to medicine led to the development of eugenic ideology. This nationalist ideology, which was focused on enriching and strengthening Japan, may have led Japanese physicians to discriminate against socially vulnerable people, including those with HD.

Conclusion

Discrimination must be eliminated in order to stop the harm it causes to targeted groups and its impact on their biological and social lives. As discussed in detail in the preceding sections, discrimination has caused torment throughout the lives of current and former patients with HD (Ohtani 1993; Akamatsu 2005; Hataya 2006; Kumamoto *nichinichi* 2004; Investigation Committee 2005; Tokunaga 1982; Inami 2007). We believe that health-related discrimination still persists today, and cannot be completely eliminated. Never has a utopia existed that is completely free of discrimination, and there likely never will. The only chance for full realization of human rights and ethics is through a fight against weakness, arrogance, selfishness, self-centeredness, narrow-sightedness, and the failure to recognize and appreciate the suffering of others. It would likely be an endless battle.

Discriminatory ideas and feelings reside in the dark side of the human spirit, no matter how they are developed or established. It is impossible to avoid all discomfort or unpleasant feelings towards particular individuals or groups, and it is instinctual to fear contagious diseases that deform or destroy the body. Discriminatory thoughts, feelings, and actions are natural to humans, but discrimination against an individual or group is distinctly inhumane. It has been suggested that discriminatory thoughts and feelings are part of the basic human mentality (Akamatsu 2005). It is essential to look into human darkness in the face in order to make progress in countering discrimination.

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The influence of gender on living donor kidney transplantation in Japan: a questionnaire survey of spousal kidney donors

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Abstract

Living donor nephrectomy for renal transplantation has become widespread as surgical techniques and outcomes have improved. However, living donor transplantation presents an ethical dilemma because physicians must risk the life of a healthy person to improve or save the life of the patient. Between January 2012 and March 2013, a questionnaire survey was conducted on living transplantation donors who had donated a kidney to their spouse to determine their perceptions of living donor kidney transplantation. The survey included 41 husbands and 99 wives as donors, i.e., over 70% of kidneys were donated by wives. Thus, there may be a gender bias with regard to the number of donations from wife vs. husband living donors. In Japanese society, men are commonly the breadwinners in the family and women may be more often expected to act as donors. For the question “How much the decision to become a donor was yours?” 85.4% of husband-donors and 79.8% of wife-donors answered that the donation was only their intention. Surprisingly, however, 1 wife-donor answered it was not her intention to donate (under 10% her decision) and her decision was influenced by others. Apparently, wife-donors were under pressure from their husbands, children, parents, parents-in-law, or close relatives. Another finding was that 92.7% of husband-donors compared with 86.9% of wife-donors perceived living donor transplantation as ongoing medical care. Donors were also asked about their opinions regarding transplantation of surgically restored cancerous kidneys. This is currently not allowed in Japan because of the lack of necessary evidence. The issue of cancer recurrence is a concern in restored kidney transplantation, and we estimated the 5-year recurrence rate to be 6%. In total, 78.0% of husband-donors compared with 82.8% of wife-donors recognized restored kidney transplantation as ongoing medical care. These results thus show that husband-donors preferred living donor transplantation, while wife-donors preferred transplantation using a restored kidney. Transplantation using a previously cancerous donor kidney may offer some relief from the pressure on family members, particularly wives, to donate.

Introduction

In Japan, the average waiting time to receive a kidney from brain-dead patients or those in cardiac death is approximately 14 years. Because of the diminutive availability of cadaveric donor organs, kidneys must be procured from living donors. Spouses are an important source of living donor kidney grafts, because despite poor HLA (human leukocyte antigen) matching, the graft survival rate is similar to that of parental donor kidneys (Shah et al. 2009).

While awaiting transplantation, all patients must receive dialysis treatment for survival. By the end of 2013, there were 314,180 individuals in Japan receiving dialysis for deteriorating kidney function (Japanese Society for Dialysis Therapy). In Japan, almost all dialysis treatment-related expenses are paid by the National Health Insurance. At present, the total sum of dialysis expenses in Japan amounts to 2 trillion yen (approximately 20 billion US dollars), and this greatly affects the country's remuneration of other important medical expenditures.

Many small renal tumors are nephrectomized in Japan, resulting in the disposal of an excessive number of discarded kidneys every year. It is thought that the use of discarded cancerous kidneys for transplantation may help compensate for donor shortage. Clinical research is ongoing in Japan to determine the feasibility of restored kidney transplantation as a method of alleviating the long waiting time and easing the suffering of patients who require transplantation.

Methodology

Between January 2012 and March 2013, a questionnaire was sent to 3 hospitals. In total, responses were obtained from 142 donors. The questionnaire is provided in the Appendix. Only descriptive statistical analysis was performed. This study was approved by the ethical review committee in the Medical Department, Nihon University.

Results and Discussion

Gender imbalance: In total, 41 husbands and 99 wives were donors in this survey (there were 2 respondents who did not indicate their gender). Two of every 3 kidneys were donated by wives in this study, indicating a gender bias in living donors. As shown in Table 1, 67.7% of husband-recipients earned the majority of the family budget (70%–100%). With the husband being the main or only breadwinner in the family, it is not difficult to imagine that women are more often expected to act as donors.

Table 1: what is the percentage of recipient's income in the total family income?

donor	husband		wife	
	n	%	n	%
0%	24	58.5	2	2.0
10%–30%	7	17.1	10	10.1
40%–60%	6	14.6	14	14.1
70%–90%	3	7.3	20	20.2
100%	1	2.4	47	47.5
no answer	0	0.0	6	6.1

How much was your intention to become a donor?

In total, 85.4% of husband-donors and 79.8% of wife-donors answered that the offer to donate was made based on their own intentions. In total, 7.3% of husband-donors and 14.1% of wife-donors answered that the offer to donate was primarily made on the basis of their own intentions, with some interference (90%–50%). Surprisingly, 1 wife-donor answered her own intention was less than 10% (Table 2). These figures showed that some donors may not want to donate and may be pressured into donation by others.

Table 2: how much was your intention to become a donor?

donor	husband		wife	
	N	%	n	%
100%	35	85.4	79	79.8
90%–50%	3	7.3	14	14.1
50%–20%	1	2.4	3	3.0
<10%	0	0.0	1	1.0
no answer	2	4.9	2	2.0

In developing countries, women donate live-related and unrelated kidneys more often than men (Bal and Saikia 2007). In this survey, we found that gender bias in renal transplantation is not restricted to developing countries. 18.1% of wife-donors stated that their offer to donate was partially based on their own intention (<90%); this was twice as much as that of husband-donors (9.7%).

As shown in Table 3, living donors felt pressured by their husbands or wives, children, parents, parents-in-law, or close relatives (cases under 90% in Table 2). The wife-donor who answered that her own intentions to donate were less than 10% felt pressured by her husband.

Experience with living donor transplantation: In total, 92.7% of husband-donors and 86.9% of wife-donors recognized living donor transplantation as ongoing medical care, while 2 wife-donors thought the medical care that they received was problematic. Fewer wife-donors than husband-donors regarded living donor renal transplantation as regular medical care.

Table 3: Who did you feel pressure from? (in cases of less than 90% in table 2)

	n	%
between husband and wife	7	31.8
offspring	5	22.7
parent-in-law	2	9.1
Parent	2	9.1
close relatives	1	4.5
no answer	5	22.7

The function of a single kidney is approximately 70%–75% that of both kidneys. After transplantation, the living donor may suffer from high blood pressure or proteinuria, which may progress to heart disease and kidney disease. When we audited consent forms in Japan and the United States, there was no description about these long-term risks. If the true spirit of informed consent is to be met, potential living donors should be told all possible risks associated with becoming a donor.

Opinion of donors regarding Restored Kidney Transplantation: Total nephrectomy is often performed as a treatment for small renal tumors (≤ 4 cm). Many of these nephrectomized kidneys could be successfully transplanted after surgical restoration with satisfactory results (Mannami et al. 2008). However, the issue of cancer recurrence is a concern in surgically restored cancerous kidney transplantation. The 5-year recurrence rate of cancer after restored kidney transplantation remains undetermined. Nicol et al. supposed that it may be observed in less than 1 in 50 cases (0.5%) (Nicol and Fujita 2011). However, the recurrence rate after radical or partial nephrectomy is reported to be $<6\%$ (Poppel 2011). In our survey, we asked recipients a question on the assumption that the 5-year recurrence rate after restored kidney transplantation was 6%.

In response to the question “What do you think about restored kidney transplantation from your experience?” 78.0% of husband-donors and 82.8% of wife-donors recognized restored donor transplantation as medical care. In response to the next question “If restored kidney transplantation had been possible when you underwent the procedure, would you have chosen living donor transplantation or restored kidney transplantation?,” 61.0% of husband-donors and 52.5% of wife-donors wanted to choose living donor transplantation and 9.8% of husband-donors and 13.1% of wife-donors wanted to choose restored kidney transplantation (Table 4). From these results, wife-donors were more tolerant of restored kidney transplantation than husband-donors.

Guidelines on Renal Transplantation (2009) published by the European Association of Urology (2009) state the following: “Due to a low risk of recurrence, kidneys with small renal cell carcinoma (RCC) can be considered for local excision and transplantation after the recipient has given informed consent. The risk of RCC transmission to the contralateral kidney and/or to other organs is even lower.” In the United States, the Middle East, and Asia, many living kidney transplants are performed. On the other hand, living donors are generally less used in Europe (Tellioglu et al. 2008), where the option to use surgically restored cancerous kidneys may be preferred.

Table 4: if restored kidney transplantation had been possible, would you have chosen either living donor transplantation or restored kidney transplantation?

donor	husba		wife	
	n	%	n	%
I choose living donor transplantation	25	61.0	52	52.5
I choose restored kidney transplantation	4	9.8	13	13.1
I cannot decide which one to choose	10	24.4	25	25.3
no answer	2	4.9	9	9.1

Appendix

Questionnaire:

The day when questionnaire was filled out.

Are you the wife-donor or husband-donor of the kidney?

How old was the recipient at the time of renal transplantation? (20–29, 30–39, 40–49, 50–59, 60–69, ≥ 70 years) / How old were you at the time of renal transplantation? (20–29, 30–39, 40–49, 50–59, 60–69, ≥ 70 years)

When was the transplant surgery performed?

How many years had you been married when the surgery was performed?

How long were you on dialysis?

What is your religion?

What is the percentage of recipient's income in the total family income? (0%, 10–30%, 40–60%, 70–90%, 100%)

How much was your intention to become a donor? (100%, 90–50%, 50–20%, <10%)

Whom did you feel pressure from in the case under 90% in the previous question? (between husband and wife, offspring, parent-in-law, parent, close relatives)

After kidney transplantation, what was your physical condition?

After kidney transplantation, what was your psychological condition?

Were you worried about having only a single kidney?

After kidney transplantation, did conjugal relations between you change?

What do you think about living donor transplantation from your experience?

Total nephrectomy is often performed as a treatment for small renal tumors (≤ 4 cm). Many of these nephrectomized kidneys could be successfully transplanted after surgical restoration with satisfactory results. However this is currently not allowed in Japan because of the lack of necessary evidence. The issue of cancer recurrence is a concern in restored kidney transplantation. The 5-year recurrence rate of cancer after restored kidney transplantation remains undetermined and we estimated it to be 6%. How do you think about restored kidney transplantations?

If those days when you underwent transplant, restored kidney transplantation was possible, what kind of choice did you do, living donor transplantation or restored kidney transplantation?

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An examination of incongruities experienced by Japanese nurses in teamwork associated with different ethical values

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Abstract

While teamwork is essential for the delivery of high-quality nursing, it has been reported that nurses face certain difficulties in communication and collaboration with colleagues who have a different sense of values. Since nurses are expected to facilitate ethical conflicts or seeds of conflict that can occur between stakeholders in clinical settings, they often experience incongruities and dilemmas when working with patients, families, physicians, and other healthcare providers, including colleague nurses. Therefore, the objective of this study was to examine the incongruities experienced by nurses in their teamwork, as well as to clarify their common structures. A semi-structured interview survey was conducted with 10 nurses (with clinical experience ranging from 3 to 10 years), and a narrative analysis was performed in regard to the structure of the nurses' stories of incongruities. As a result, 31 episodes were extracted from the stories told by the 10 participants. The reported causes for such incongruities were categorized into three themes: (A) related to differences in the conventional codes of conduct in their nursing teams, (B) related to a difference in the length of clinical experience, and (C) related to nurse–doctor relationships. In addition, the findings of the structural narrative analysis suggested three structural patterns in the reported episodes: (1) the nurse did not take any action (19 episodes); (2) the nurse took some actions, but they had no effect (10 episodes); and (3) the nurse took some actions and they had some effect (two episodes). Regarding the latter two episodes, one nurse noted that her colleagues were a “good model” while another referred to her previous successful experiences when dealing with the current incongruity. These results are informative as to the role of teamwork and group dynamics in clinical ethics, especially in the Japanese healthcare context.

Introduction

Team work is indispensable in order to provide high quality and ethically appropriate medical services. Nurses, in team work, are expected to provide nursing care based on specialized knowledge and skills, as well as to properly participate in resolving ethical issues that occur in the dynamics of groups consisting of patients and other care specialists. However, it is not necessarily an easy task for nurses to deal with ethical issues arising within team work. It has been reported that nurses are unable to voice their opinions about physicians or colleagues because they worry how the other party may react (Varcoe et al. 2004), and that nurses have experienced strain between their individual values and ideals as a specialist in contrast to the expectations of others (Goethals et al 2010).

Moreover, despite feeling that some of the decisions and care by colleagues is inappropriate, many nurses have experienced not being able to point that out nor overlook that fact, and this experience has been reported to increase with the number of years of experience (Tanihira et al 2008). While nurses are expected to play a key role in resolving ethical issues in team work, they may experience problems and dilemmas due to team work, which may impede their ethical behavior based on moral reasoning.

The purpose of the present study is to clarify the type of “incongruities in team work” that nurses experience, how nurses deal with these, and how their team and colleagues react to the way that they deal with such incongruities.

Methodology

The study design is a qualitative descriptive study using an interview survey (semi-structured interviews). As for study participants, between June and September 2013, data was collected from 10 nurses with 3 to 10 years of clinical experience working at university hospitals and general hospitals in Eastern Japan. Participants were recruited using the snowball sampling method. The researcher (MT) conducted semi-structured interviews with 10 nurses, and asked the nurses to talk about two points: 1) experiences of “incongruities in team work” related to the provision of nursing care

to patients; and 2) behavior and actions that the nurse took after experiencing “incongruities in team work,” and how they differed with the behavior and actions that they were expected to take as a nurse.

The data was analyzed using two types of narrative analyses, namely thematic analysis and structural analysis. Thematic analysis focused on “what was told,” whereas structural analysis focused on “how it was told.” As for ethical considerations, the present study was performed with the approval of the Research Ethics Committee of the Graduate School of Health Sciences, Niigata University. Participants were explained in writing the purpose, methods of the study and privacy protection, after which consent was obtained.

Results

A total of 31 narratives were extracted from 10 participants. The narratives of the nurses had one of three structural patterns: 1- The nurse did not act (19 narratives), 2- The nurse acted, but to no avail (10 narratives), and 3- The nurse acted and their actions were effective (2 narratives). The cause of incongruity was classified into three themes: A- a difference in the approach towards nursing team practices, B- a difference in length of clinical experience, and C- nurse-doctor relationship. The details of these are outlined below.

1- Narratives in which the nurse did not act

A- Dilemmas based on a difference in the approach towards nursing team practices: There were nine out of 19 narratives on this theme. In these narratives, nurses spoke of prioritizing the nursing system over the benefit of the patient, and a difference between themselves and their colleagues in opinions and values about patient care. While nurses felt that a discussion was needed with their colleagues, they tried to maintain team integrity by suppressing their own opinion.

B- Dilemmas based on the length of clinical experience: There were nine narratives on this theme. In these narratives nurses with few years of experience found it difficult to speak up at conferences, and they felt that voicing their opinions about their senior nurses was an “impudent act.” It is assumed that nurses follow the norm that priority is given to the opinion of nurses with more years of experience.

C- Dilemmas based on the nurse-physician relationship: There was one narrative on this theme. In this narrative the nurse described the fact that performing the physician’s duties is an unsaid rule. While the nurse spoke of a lack of satisfaction towards the physician, she believed that nurses created and maintained this unsaid rule and therefore accepted it.

2- Narratives in which the nurse acted but to no avail

Of these 10 narratives there were no themes regarding (C).

A- Dilemmas based on a different approach towards nursing team practices: There were seven out of the 10 narratives on this theme. One nurse experienced a dilemma in which the customary way to use analgesics went against the wishes of the patient. She had explained to her nursing team her own view of nursing in that care should be provided that respects the life-history of the patient, however one senior nurse said that she should deal with the patient in accordance with the policy of the nursing team, and did not accept the nurses opinion.

Another nurse had proposed expanding the scope of nursing practices carried out to ease the stress on the patient, but this was not accepted. This was due to the opinion that the burden on nurses would also increase because physicians’ expectations of the nursing team would likely increase.

B: Dilemmas based on the difference in the length of clinical experience: There were three narratives on this theme. One nurse proposed plans to improve care based on data in literature, but her proposal was not accepted. She felt that her little nursing experience disadvantaged her situation.

3- Narratives in which the nurse acted and the actions were effective

Of the 31 narratives there were only two on this theme. On questioning patient physical restraint performed by a nurse to keep the patient safe, one nurse proposed to her team that this be improved and her proposal was accepted. She had

experienced improving physical restraint at a hospital where she had formerly worked. Another nurse spoke of an experience where a patient and the family were shocked on receiving news of cancer and did not allow nurses to come near them. The team policy is that “communication should be done sparingly,” however she proposed that “the needs of the patient and their family should be ascertained by communicating with them normally,” which was accepted.

Discussion

Dealing with “incongruities in team work”: Most narratives, 19 out of 31, indicated that despite experiencing incongruities the nurse did not do anything about them. On the other hand, 12 narratives described nurses who did act, regardless of whether their actions were effective or not. These results suggest that although in many instances participants were unable to respond in any way to incongruities or dilemmas that they perceived, it is also common for them to take some kind of action. Participants who took action shared the motivation in wanting to respond to the needs of the patient. Although it cannot be said that their proposals were usually right, as stated in the ICN Code of Ethics for Nurses : “*in providing care, the nurse promotes an environment in which the human rights, values, customs and spiritual beliefs of the individual, family and community are respected*” (Fry & Johnstone 2008); it is important that nurses respect the needs of the patient.

Individual and the team: Many of the incongruities experienced by participants were with regards to nursing team practices and (often the unspoken) rule. When the participants thought that these need to be improved, they made proposals to the nursing team and their colleagues based on the status and basis of the patient. However, when the proposal differed greatly to the customary team practices, it was not accepted by the nursing team and colleagues. When the participants’ proposals were not accepted, they focused on the good aspects of team practices and conventions, and while making compromises they took a different action that differed to convention and practices as far as it was individually possible. Therefore, participants differentiated between “their behavior as part of a team” and “behavior as an individual.”

Participants also behaved this way in nurse-physician relationships. Team work is part of routine practices for nurses, and conventions are easily formed in the group. Nurses are positioned between patients and their families, between patients and other medical professionals, and between various colleagues, and therefore it has been reported that nurses confront the values of other people (Varcoe et al. 2004) . Nurses should be aware that in the same way that patients benefit from team work, sometimes the patient needs cannot be met.

The effect of clinical experience: Participants with three or four years of clinical experience said that it was difficult to speak up in the team due to a lack of experience and knowledge. In conferences new nurses refrain from voicing their own opinions, and the opinion of senior nurses tended to be given priority. On the other hand, participants were of the opinion that from various opinions the best care for the patient should be selected. Reports on studies examining the relationship between new nurses and the nursing team indicate that new nurses suffered in their interpersonal relationships in the workplace (Kubo et al 2008), and that new nurses were unable to get the “support that they hoped for” from their colleagues and senior nurses (Tsukamoto & Funashima 2008). Therefore we believe that nurses with little clinical experience tended to take into consideration their relationship with senior nurses. Even nurses with more than five years of experience said that they were unable to speak up to senior nurses. This suggests that the length of clinical experience affects how nurses deal with “incongruities in team work.”

Good model and experience of success: In two narratives the nurses’ behavior towards the team was effective. These nurses proposed their own experience at a nursing team conference, and succeeded in changing the norm of the team. They took action based on the benefit to the patient and not the opinion of the nursing team or senior nurses. One nurse observed a colleague succeeding in dealing with an incongruity, which subsequently became the “good model.” According to earlier literature, observing behavior and actions in the good model of colleagues who are trusted members of the team, can lead to improved nursing practices (Shintani & Inagaki 2005), and that new nurses are able to recognize themselves as “good nurses” by having “experiences of success” in their practices (Nakano & Aoyama 2005). A good model and experience of success may help nurses to improve their ability to deal with “incongruities in team work.”

Suggestions for improvement: In the present study it was suggested that (1) nurses may not be able to take action despite feeling an incongruity in team work, and (2) nurses may take action but their actions may not be accepted by the team. A survey conducted in four countries including Japan indicated that when faced with an ethical dilemma nurses tend to give priority to conventions rather than the needs or well-being of the patient (Casterlé et al. 2008), and we found that this may not be an issue unique to Japan. Further studies are needed by systematically examining the way that ethical dilemmas are responded to and dealt with to establish a team work environment where individual nurses can easily demonstrate their ability to conduct nursing practices in an ethical way.

Conclusion

The present study revealed the following points: Despite experiencing incongruities and dilemmas, nurses are often unable to respond to them; Proposals made by nurses to their nursing team or colleagues are rarely accepted when the proposal differs greatly from treatment and care methods conducted thus far; When their proposal is not accepted, nurses consider the good aspects of conventions, rules and nursing system to date, and respond to the needs of the patient as far as individually possible.

The way that incongruities and dilemmas are dealt with is greatly affected by the amount of nursing experience. As a result of dealing with an incongruity or dilemma, a constant effect was that they experienced success and experienced a good model. A systematic examination of the way that ethical dilemmas are dealt with and responded to is imperative to establish a team/group environment where individual nurses can easily demonstrate their ability to conduct nursing practices in an ethical way.

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A situational and relational learning paradigm for community mental health in Taiwan with pragmatic challenges to the contemporary visions of professionalism

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Abstract

This research uses community mental health for developing a learning paradigm that encompasses a situational and relational approach to medical professionalism, and hoping that it would contribute to exchanges among regional professionals as well as protection of human rights. Major mental hospitals in Taiwan have established models for therapeutic communities that incorporate pragmatically adopted patient-centered approaches, while successfully integrating biomedical knowledge with social support networking skills. These models were developed in Taiwan not only to address the issue of humanizing psychiatric treatment, but also to create an opportunity for Taiwan to earn a good international reputation. Based upon Taiwan's established international collaborations with Southeast Asian countries, this project adopted a participatory narrative approach towards a learning paradigm that is situational and relational. Using Jonsen's four-topic approach as a directing concept, we designed learning environments and service learning curricula in collaboration with mental health workers and appropriate patient groups. In conclusion, Taiwan's experiences can serve as evidence for a patient-centered professional model and open new horizons by addressing gaps in contemporary theories about professionalism.

Introduction

This research uses community mental health for developing a learning paradigm that encompasses a situational and relational approach to medical professionalism, and hoping that it would contribute to exchanges among regional professionals as well as protection of human rights. Major mental hospitals in Taiwan have established models for therapeutic communities that incorporate pragmatically adopted patient-centered approaches, while successfully integrating biomedical knowledge with social support networking skills. These models were developed in Taiwan not only to address the issue of humanizing psychiatric treatment, but also to create an opportunity for Taiwan to earn a good international reputation.

As shortcomings of the global trend of deinstitutionalizing treatment for mental illness emerge, new models—in particular, institution-based therapeutic communities—appear as promising alternatives (Perry et al. 2014). The concept of a therapeutic community began with Thomas Main's 1946 idea of the "hospital as a therapeutic institution," where professional authoritarianism is replaced by a patient-led democratic environment, avoiding some of the more authoritarian aspects of institutional care. In the therapeutic community approach, psychiatric patients are encouraged to take active part in their own and each other's treatment and rehabilitation programs (Main 1946, Manning 1989, Wentworth et al. 2011). Ironically, this ideal is easily undermined or even contradicted by the management structure of hospitals, an institution that is authoritarian in nature (Fussinger 2011, Spandler 2009).

For about 40 years, the term therapeutic community has been perceived as pejorative in the United States, except in the fields of drug abuse and addiction. Drug-free residential settings are therapeutic communities based on "*a hierarchical model with treatment stages that reflect increased levels of personal and social responsibility.*" (Hanson 2002) The concept is therefore contaminated with the shadow of social control; according to Glen, as well as others (Mortari & Pino 2013, Moskalewicz & Welbel 2013, Abdel-Salam 2012): "*[p]eer influence, mediated through a variety of group processes, is used to help individuals learn and assimilate social norms and develop more effective social skills.*"

Therapeutic community has thus been regarded as an instrument of the total institution, until the Yuli model of therapeutic communities for the severely mentally ill was documented in a 2006 Taipei workshop. In the Yuli model, the severely mentally ill can maximize their residual functioning with professional empowerment and peer support. Not only is the spirit of democracy present in the Yuli Model, this model offers a promising option for balancing the opposed binary extremes of institutionalization and deinstitutionalization.

Based upon Taiwan's established international collaborations with Southeast Asian countries, this project adopted a participatory narrative approach towards a learning paradigm that is situational and relational. Using Jonsen's four-topic approach as a directing concept, we designed learning environments and service learning curricula in collaboration with mental health workers and appropriate patient groups. Institution-based therapeutic communities may be an important practice that Taiwan can share with developing countries of China and Southeast Asia (Jonsen et al. 2010).

Methodology

This analysis examines patient narratives collected for three independent oral history projects that took place between 2002 and 2013. These projects recorded narratives of various stakeholders in three kinds of therapeutic community, specifically: one for the Severely Mentally Ill (SMI), one for substance abusers, and support groups for ADHD children. The identity narrative method assumes that behind each person's rationality there is an individual structure of feelings that constitutes his or her own special logic of life. Psychiatric patients are no exception; their behavior and thinking have logic within their own realm. The difference is that the self-understanding of psychotic patients is subject to intrusion of voices or sensations that are not real, which causes them to experience life as occurring outside of their own volition.

The narrative method of life history, with close listening to patients, helps them to distinguish the real self from the false self, and this is the crux of whether or not they can reach a turning point. The oral history process brings the patient back to his or her experience of the onset of illness and memory of being unwillingly committed to the institution. We have discovered that how a patient perceived the external imposition of being committed to enter a therapeutic program is linked to the person's own understanding of their condition, the suitability of the environment for their recovery plans, and whether or not they are capable of exercising self-discipline (Tsai 2010).

We further identify the core mechanisms of different kinds of therapeutic communities, trying to connect them and considering what they suggest about health promotion strategies for even ordinary people. To this end, we apply Jonsen's four-topic approach to clinical decision-making to clarify the ethical dilemmas in assignment of tasks of caregiving and self-care, and to distinguish how each division of labor affects patients' empowerment in relation to medical professionals. This approach provides sequential decision making guidance, beginning with medical indications, followed by eliciting patient preferences, ensuring quality of life and, finally, understanding the patient's unique context. Moreover, the patient's context is embedded in the narratives they and others provide, and their residual functioning can be identified using narrative analysis. The understanding thus produced becomes the foundation for wisdom sharing among mental health professionals, support networks, and the mentally ill themselves. Combining Jonsen's approach with narrative analysis allows us to empower the patients by striking a balance between their medical indications and their personal preferences, in an attempt to guarantee quality of life according to their own understanding.

Discussion

The development and nature of these different models for therapeutic communities are clear, as are the key elements that foster empowerment in each model. It is important for SMI patients to recognize the necessity of medication and self-discipline for freeing themselves from the suffering associated with their illness. Assessing narrative competence may reveal to what extent, and in what ways, these patients could be free from institutional support, or whether it might be possible to reduce the intensity of medical treatment. Analyzing the narratives of substance abusers using

Jonsen's approach, it becomes clear that there are no strict medical constraints upon these patients. Medical indications are, in fact, by no means limited to pharmacological treatment, and more akin to behavior therapy for mental illness.

Patients' preferences are shaped by contextual features rather than physical constraints, except within the very limited time period required to relieve withdrawal symptoms from heroin or other hard drugs. They are, in fact, victims of social illness, rather than mentally or physically disabled. The new context provided by the therapeutic community helps residents to form a new identity and develop greater self-control, as well as to become willing to establish higher goals in their lives. The ADHD related narratives reveal that the family support group turned out to be a self-aware therapeutic community, because all stakeholders related to the ADHD child were working with the child and supporting each other. A family support group provided a foundation for maintaining the doctor-patient relationship.

Appropriate medical indications are crucial for helping ADHD patients become free of their biological constraints and for helping children with ADHD change their attitude toward life. Since an authoritarian approach is not appropriate for this situation, we have to respect the preferences of ADHD children by providing supportive strategies that empower these kids, with help from medical professionals. One common feature of these different models of therapeutic community is that they cleverly liberate patients from their current physical, mental, or environmental constraints by finding potential life opportunities embedded in the narrative of each so-called mentally ill patient. These constraints allowed their illnesses to grow out of control by limiting life opportunities at a particular point of no return, in a manner that would be characterized by a vicious cycle in their life narratives.

Along the line, this project proposes community mental health as a learning paradigm that encompasses a situational and relational approach for medical professionals in treating different kinds of patients with a contextualized empowerment approach. This approach presents a new essence for the mental health professionalism which may contribute to exchanges among regional professionals as well as protection of human rights. In conclusion, Taiwan's experiences can serve as evidence for a patient-centered professional model and open new horizons by addressing gaps in contemporary theories about professionalism.

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Enhancing professional obstetric care with competence in clinical bioethics

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Abstract

The rapid development of medical science and technology without attention to ethical values has raised moral issues in the field of obstetrics. Medical professions have found themselves in a dilemma because they all geared for the mastery of knowledge and skills in diagnosis and scientific decision-making, but lack the skills needed for ethical assessment. Formal education and training in ethical assessment is needed to help make medical decisions that can be justified. This paper intends to describe a new approach in improving the quality of medical practice in obstetric care based on competence in bioethics and clinical Ethics in accordance with the demand of society in developing countries. Ethics should be observed by every physician as indicated in the “Preamble of Indonesian Code of Medical Ethics”. It includes values such as purity of intention, generosity, humility, sincerity in work, scientific and social integrity, and amity among physicians. Ethics is related to legal aspects, and the two are complementary for achieving good practice in medicine. Obstetric care decisions cannot rely on a single approach; several alternative approaches including feminist ethics and bioethical principles should always be considered in medical decision-making. Consultation with experts in the field or a hospital ethics committee can also be helpful. Therefore no good ethical decision can be made without ethical guidance.

Introduction

Ethics has become a part of the medical world since the beginning of its development. Some statements in the Hippocratic's Oath are related to the ethics of the medical profession. Avicenna also wrote about the ethics of this. Concerns about ethics were not as intensive in the past as now (Kasule 2007). During the last quarter of the 20th century, ethical consideration became a major concern for several reasons: social phenomenon calling for the recognition of human rights, the development of medical science and technology that is not accompanied by the development of ethical and moral values, increasing moral crimes committed by medical practitioners, and increasing demands of professionalism from physicians in practice. These form a challenge to improve the professionalism of graduate medical education in Indonesia (National Workshop 2007, Samil 2001, Pendidikan Profesi 2006).

The medical profession actually has long been a sharp social criticism target. Less satisfaction with the medical profession has appeared in the mass media. So far, people usually just react when a violation of medical ethics happens in the legal field, both criminal and civil law. With the growing public awareness of their rights and obligations of the medical profession, actions that constitute a violation of medical ethics will be more easily visible. The things that were not known as an offense are now beginning to be noticed, even actions that are not included as ethics violations and are simply regarded as a breach of ethics, such as malpractice. It all gives the impression of an increasing number of cases of ethics violations. Advancement of medical science is also a new opportunity for the emergence of ethical problems.

The ability to make ethical decisions is not same in all doctors. Medical education is almost all geared to the mastery of knowledge and skills to make a diagnosis and scientific decision-making. Formal education and training in ethical assessment at making a decision that can be justified, are very little; many do not get it at all. So, ethical decision-making needs to be accustomed with a formal method that uses a reasoning path rationally (Pendidikan Profesi 2006). This paper intends to describe a new approach in improving the quality of medical practice in obstetric care based on competence in bioethics and clinical Ethics in accordance with the demand of society in developing countries.

Discussion

Basic bioethics approach and clinical ethics: Ethics, the Code of Conduct, should be the basics for each physician, as indicated in the “Preamble of Indonesian Code of Medical Ethics”. It includes values such as purity of intention, generosity, humility, sincerity in work, scientific and social integrity, and amity among physicians (MKEK and IDI 2002). Furthermore the relationship between ethical and legal aspects needs to be reviewed. Both of these norms have a close relationship and complementary in the sense of supporting each other to achieve their respective goals.

The rule of law was made official by the state so it can be obliged into the community including physician. This means that the law is a society value. While ethical behavior is said to be the value of values, it is required guidance in case infringements do appear. Several alternative approaches in ethical issues are (Merkatz 1993, Counsel on Ethical and Judicia affairs. 1991): Virtue-based Ethics , Care Ethics, Feminist Ethics, Communitarian Ethics, and Case-based reasoning.

Decision-making in the field of clinical ethics cannot specifically rely on a single approach to biomedical ethics. Clinical problems often are too complex to be solved with simple rules or rigid application of ethical principles. Special virtue that is emphasized may vary (from one case to another), but in women’s health care, there must be a special sensitivity to the needs of women. In feminist ethics, we focus on the experiences of women, reviewing traditional ethics. Although similar to care ethics, feminist ethics emphasizes on equality of women and men. There is evidence that women have been systematically ignored in healthcare research, finance and policy-making. Women’s health care should reflect where the growing feminist ethics come from.

Basic rules of bioethics: The theory of prima facie principles developed by Ross became the dominant and most effective adapted into medical ethics by Beauchamp and Childress in Principles of Biomedical Ethics. In this approach, Beauchamp and Childress (1994) outline four ethical principles needed in order to reach an ethical decision that are known as Four of Moral Basic Rules/Bioethics Basic Rules (Moral Principles).

The four principles offer a way to identify, analyze, and resolve ethical issues in medical care and therapeutic as well as a guide for professional action (Pellegrino 1993, Veatch 2002, Purwadianto 2003). The Four Moral Basic Rules are:

1. Respecting patient autonomy: Principle of ‘Autonomy’ (self-determination) is the principle that respects the rights of patients, especially the rights to self-determination and the strength of the patient to decide on a medical procedure. This results in the doctrine of informed consent.
2. Doing good: Principle of generous or ‘Beneficence’ is the moral principle that prioritizes actions directed to the good of the patient or the provision of benefits and balancing the advantages with the risks and costs. Beneficence is not only for good deeds, but also means benefits outweigh the harm.
3. Not harm: Principle of ‘Non-Maleficence’ (not harming) is the principle of avoiding damage or prohibiting actions that worsen the patient’s condition. This principle is known as “primum non nocere” or “above all do no harm”.
4. Justice (justice): Principle of ‘Justice’ is the moral principle that emphasizes fairness and justice in attitude and in distributing resources (distributive justice) or the distribution of benefits, costs and risks fairly.

Clinical ethics of Jonsen-Siegler-Winslade: Ethical decision-making especially in clinical situations can also be done with a different approach. Jonsen, Siegler and Winslade (2002) developed a theory of ethics that uses four essential topics in clinical services, namely (Jonsen et al. 2002):

<i>MEDICAL INDICATION</i>	<i>PATIENT PREFERENCES</i>	<i>QUALITY OF LIFE</i>	<i>CONTEXTUAL FEATURES</i>
<i>Diagnosis</i>	<i>Advance directive</i>	<i>Who decides?</i>	<i>Social</i>
<i>Nature of disease</i>	<i>Previous spoken</i>	<i>What standard?</i>	<i>Culture</i>
<i>Condition of patient</i>	<i>Previous choices</i>	<i>Suffering</i>	<i>Legal</i>
<i>Prognosis</i>		<i>Relation ships</i>	<i>Financial</i>
<i>Treatment options</i>			<i>Institutional</i>

1. Medical Indication: Includes all diagnostic and therapeutic procedures appropriate to evaluate and treat the patient's condition. Assessment of medical indications aspect is in terms of ethical issue and especially the basic principles of beneficence and non-maleficence. Ethical questions on this topic are similar to all the information that should be delivered to patients in the doctrine of informed consent.

2. Patient Preferences: On the topic of patient preferences, we consider the value and evaluation of the benefits and burdens that will be received, which means a reflection of the rules of autonomy. The question of ethics includes questions about the competence of the patient, the nature of volunteers, attitudes and decisions, understanding of information, who the decision maker is if the patient is not competent, values and beliefs patients held, etc.

3. Quality of Life: This is one of the goals of medicine, namely repair, maintain or improve the quality of human life. What, who, and how to assess the quality of life is an ethical question about prognosis, with regard to the basic principles of beneficence, non-maleficence and autonomy.

4. Contextual Features: The principles in contextual features are loyalty and fairness. Here questions of ethics on the non-medical aspects are discussed, such as family factors, economics, religion, culture, confidentiality, resource allocation and legal factors.

Ethical decisions: The easiest decision may seem to be ethical conduct, along which good and bad choices may be considered. People often consider ethical issues as simply a matter between good and bad, although with a little more thorough analysis it would appear that this is grossly underestimating the problem. Ethical problems usually occur when there is a better choice while the other option is worse. Decision-making becomes more difficult if the difference between the better to worse is very vague. In practice, most of the problems of medical ethics are in this category (Setiawan 1990).

All decisions of physicians can be put into two main groups generally: 1. Decisions regarding the human, as well as decision makers and who bears the consequences of that decision. 2. Decisions involving a choice between things that have a different result based on existing facts. Decision-making is done by weighing various values concerned with different decision-making results. It is clear that virtually all decisions in physician practices are also an ethical decision or at least the decision contains an ethical component in addition to the scientific aspects of the problem.

When decisions are taken in the doctor's office without considering the ethical component, it is because ethical issues are considered common issues with a solution that has been agreed upon almost universally.

There are several possibilities why a physician faces a dilemma: 1. Choosing 'anything' which is the custom of the moment; 2. Following habits that are considered 'common' in the society at that time; 3. Doing what he/she thinks right about 'feelings and emotions' at that time; and 4. Obeying their religion, according to his/her own interpretation.

The doctor should take a decision to act, which may be true in certain rational analysis. Clearly, this is a way of making that decision on the basis of the fragile, which is not easy to maintain especially if the decision turns out to bring new problems as well (Setiawan 1990).

Common problems in ethical decision-making: There are some problems that deserve close attention: the informed consent process, confidentiality and conflict of interest (American College of Obstetricians and Gynecologists 2004, Erlanger 2000).

Informed Consent Process: The main objective of the process is protection of patient's autonomy. With open communication of the relevant information, the doctor allows the patient to perform personal choice. Communication is central to the proper doctor - patient relationship. Unfortunately the discussion to educate and inform patients about their healthcare options has never been completely free of bias. Physicians should be wise to minimize this bias. Freedom to accept or refuse medical treatment is supported by law and ethics.

One of the essential elements of informed consent is the capacity to understand the patient's condition and the risks and benefits of treatment alternatives. The capacity of the patient to understand depend on maturity, awareness, mental, educational, cultural background, language and desire for asking, and the way information is delivered. Consulting psychiatrist may help in determining the capacity of the patient or the ability to understand the information provided. The essential element of informed consent is the concept of freedom of patients to choose an alternative.

Informed consent has three elements (Guwandi 2004): Threshold elements, Information elements, and Consent elements.

Confidentiality: Confidentiality is the most used component of medical ethics. It is based on the principle of patient autonomy that includes the patient's right to privacy and the doctor's responsibility to honor it. The assurance of confidentiality provides an opportunity for patients to give accurate information.

Obstetrics and gynecology specialists may have to deal with conflicting issues of confidentiality regarding patient adolescence, particularly regarding the diagnosis and treatment of sexually transmitted disease, contraception and pregnancy counseling. Physicians' desire and ability to maintain confidentiality should be discussed with all teenage patients at the beginning of consultation. There are many state laws that protect confidentiality for adolescent patients, and specialists in obstetrics and gynecology must be aware of that.

Conflict of interest: Conflicts of interest occur almost every day in the practice of obstetricians and gynecologist. This occurs when a primary interest (usually patient condition) faces conflict with a secondary interest (such as financial interests of physicians). Some of these conflicts are very real when a doctor finds it necessary to do many diagnostic tests for patients or when a doctor recommends a product to be sold for the benefit of patients. Some conflicts of interest are with sponsorship from drug companies and diagnostic aids.

Conclusion

Often more than one action can be morally justified. But at some cases there is nothing that could be accepted because it produces a significant loss. However one of the options that are available must be selected and the choice is supported by ethical considerations. Attempts to resolve the problem has to do with rational analysis of the various factors involved. Consultation with experts associated or hospital ethics committee can be very helpful for decision-making. It is important for physicians individually to develop steps of decision-making that can be used consistently when facing ethical issues.

Some useful steps have been proposed in which elements are incorporated herein.

1. Identify the decision makers. The first step is to answer 'whose decision is it?' Generally, the patient is considered to have the authority to accept or refuse treatment. At one time a patient's ability for producing a decision is not clear. Capacity to make a decision depends on the ability of the patient to understand the information and its implications. Assessment should be made. If the patient is unable to make decisions, the patient's guardian or family members should play a role. In some circumstances, the court must decide whether the patient is competent or not.
2. Collect data, facts and define the problem. Data collection should be done as objectively as possible. Use consultation if necessary to ensure that all information on the diagnosis, treatment and prognosis has been obtained.
3. Identify all appropriate courses of action. Use consultation if necessary and identify other options.
4. Evaluate the options for action in accordance with the values and principles involved. The values of the decision maker will be the most important. Decide whether there is an option that violates ethical principles. Eliminate these options, and recheck the remaining options according to the interests and values.
5. Identify ethical conflicts and try to apply a priority. Try to apply the principles of ethical problems that are visible (for example, non-maleficence and beneficence vs. autonomy). Or consider the principles underlying each of the arguments made. Does one principle seem more important? Does the way of proposed action appear to be better than the other?
6. Select the best choice of action. Try to resolve problems rationally.
7. Reevaluation after the decision is implemented. Has the best decision been made? What lessons can be drawn from the discussion and resolution of these problems?

Achievement of basic competencies of bioethics and clinical ethics will further improve professionalism and enhance the ability of obstetric care in clinical decision making with moral justification (deductive logic) that respects the values and interests of the patient (ethical decision that blends with the law on the patient's context).

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A study on the truth telling of Yemeni doctors to terminally ill patients

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Abstract

This work was conducted with the objective of exploring the attitude of Yemeni graduated doctors in regard to ethical issues in terminally ill patients. A cross-sectional descriptive study was applied. A total number of 130 doctors representing all graduated doctors from the Faculty of Medicine, Aden University, Yemen participated in the study. The opinions of doctors were obtained by means of self-administrated questionnaires that included different criteria regarding terminally ill patients. The results show that the majority of doctors answered 'always' or 'often' to the questions asking about truth telling to patients and relatives, informing patient relatives that patient would die, whether there was a lie used when asked by patient about the truth, informing the relatives that the disease was cancer, and telling the truth when asked by relatives with mean percentage scores of 99%, 96.5%, 94.2%, 93.3%, 92.5% & 91%, respectively. Ninety seven percent of doctors responded that they would involve the patients and their family when making decision on using artificial life support for a deteriorating patient while 80% of doctors would not like to be told about the truth if they were patients. The main reason identified by doctors for not telling the truth to terminally ill patients was that the patient would not like to know the truth, and the main reason for not telling the truth to the patient family was to protect the family from emotional stress. The study concluded that truth telling to terminally ill patients was a common dilemma in that 'to tell' or 'not to tell' was the main question which was evaluated differently by doctors.

Introduction

Dealing with terminal illness involves more than symptoms management and patient comfort; it involves changing roles within family units, difficulties with coping, added responsibilities for family members, major decisions concerning care of the patients, increased concern about financial matters and legal issues (James 1996.). It is important for the patient to have the conception to know about their health so they will have the ability to make their own decisions about treatment and care. Most importantly, keeping the truth from a patient does not allow them to have closure in their life for they are unable to carry out their dreams, say their goodbyes to families and friends or even create a will (Starzomski 2009). Withholding the truth is only acceptable when the patient states that they do not want to know it (Panagopulon 2008).

Unfortunately, truth telling to terminally ill patients is a common ethical dilemma: to tell or not to tell, is the main question (Sullivan 2007). The physician's communication skills and the manner with which he or she gives bad news is an important issue; most health care professionals would not intentionally do anything to harm a patient or family, however if health care professionals fail to become skilled in giving bad news honestly and sensitively, they may severely impede patients' and families' ability to deal with severe illness and/ or prepare for death (Glase & Cluxon 2004).

If we accept that the physician should tell the patient the truth, there are still some decisions to be made including determining to whom and to what extent of the truth. Dealing with this issue includes the person who discloses the information, the manner of telling news, available supports, such as family, spiritual and social support and the methods of coping with difficulties and stress in different cultures (Zahedi & Larijani 2009). The doctors do not have any right to lie to the patient but they are not obliged to tell the whole truth (Zahedi 2007).

The truth is fundamental in most humans and can be both objective and subjective. Objective truth is static and in agreement with facts or reality, whereas subjective truth is based on a person's experiences and is continuing and dynamic (Maria 2011). Truth telling in the communication of bad news entails much more than merely providing information related to the forthcoming death. It also concerns how physician or other health staff can support the

patient's existential survival by fine-tuning the communication of truth according to the individual's preferences (Hancock 2007).

General objectives of the study are to contribute to the study of ethical issues regarding disclosure of truth in terminal ill patients. The specific objectives include: to assess the responses of doctors regarding truth telling in terminal ill patients; to determine the opinions of doctors in regard to the using of artificial life support; to investigate the doctors opinions about truth telling to them if they were a patient; and to identify the reasons for not telling the truth to terminal ill patients and their families.

Methodology

It includes a cross section study, with study area the Faculty of Medicine, Aden University, Yemen. The study population is all graduated doctors for the year 2009/2010.(n= 160). Data collection technique is structural questionnaire and data analysis is done by SPSS Program. Ethical considerations included a verbal informed consent that was obtained from all doctors participated in the study, an ethical clearance obtained from the dean of the faculty of medicine before the conduction of the study, strict confidentiality of the obtained data, and the doctors right to refuse participation in the study.

Results

Table 1: Doctors' responds to ethical situations in terminal patients

Situation	Doctors' Response (in percentage)				
	Always	Often	Occasionally	Never	Mean
Telling the patient by doctor that her/his disease is cancer	4.4	6.7	22.2	66.7	37.2
Telling the patient by doctor that her/his disease is cancer when asked by him	9.4	12.8	25	52.8	44.7
Informing the patient relatives by doctor that the disease is cancer	79.4	15	1.7	3.9	92.5
Informing the patient by doctor that her/his disease is fatal	_____	21.1	5.6	73.3	37
Lie by doctor when asked by patient that she/he will die as a consequence of the disease	80.6	13.9	3.8	1.7	93.3
Informing the patient relatives by doctor that she/he will die.	83.3	11.1	4.4	1.2	94.2
Telling the truth by doctor when asked by relatives that she/he could die.	72.2	19.5	8.3	_____	91
Lie to the terminal patient protects him of emotional stress	69.4	25	5.6	_____	91
Patient generally is not confident regarding the communicated information about her/his problem.	52.8	36.1	8.3	2.8	85
In general, Yemeni doctors tell the truth to terminal patients.	1.1	1.7	19.4	77.8	31
According to experience, do terminal patients' relatives ask about the truth?	88.9	8.3	2.8	_____	96.5
According to experience, do the terminal patients' relatives ask about the truth?	96.1	3.9	_____	_____	99

Table 2: Decision making for using artificial life support for deteriorating terminal patient

Doctors' Opinion	No.	%
A professional decision without any other opinion	155	3
Involving patient and family in making decision	5	97
Total	160	100

Table 3: Doctors' opinion regarding telling the truth to them if they were a patient

Doctors' opinion	No.	%
Like	23	14.4
Do not like	128	80
No opinion	9	5.6
Total	160	100

Table 4: Reasons for not telling the truth to the terminal patients

Stated reason	No.	%
To protect the patient of emotional stress	147	91.7
The family ask the doctor not to tell the truth to the patient	8	5.5
The patient would not understand the information	3	1.7
The patient would not like to know the truth	2	1.1
Total	160	100

Table 5: Reasons for not telling the truth to the family of terminal patient

Stated reason	No.	%
To protect the family of the emotional stress	83	51.7
The patient asks the doctor not to tell the truth to the family	24	15
The family would not like to know the truth	47	29.4
The family would not understand the information	6	3.9
Total	160	100

Discussion

Worldwide variations of truth telling attitude and practice to some extent depend on cultures as well as the different roles of family members in the information and decisions making process of cancer patients. Cultures also affects patients' perception of disease and influence the patient – physician relationship (Hagerly 2005, Surbone 2006). In many countries , while most patients want to be informed about diagnosis of terminal illness, physicians are reluctant to disclose unfavorable medical information to patients with advanced cancer and instead give the bad news to the family(Mitchell 2007, Constartini 2009). The patients' desire for information may vary according to the treatment and to the stage of their diseases (Grunfield 2006).

In our study, the opinions of graduated doctors were analyzed through their responses to different questions on situations where the doctor diagnoses cancer with metastasis in different parts of the patient's body and the patient is going to die in several months. The opinions reflect different ideas ranging between always and often to never and occasionally. There were also answers of 'never' and 'occasionally' to aspects related to truth telling about disease to terminally ill patients by doctors, when asked by patients, and when asked by patient if their disease was fatal. The majority considered that Yemeni doctors do not tell the truth to the terminal ill patients in general.

Comparing our study with some studies that have asked specific questions about what patients need to know and other studies asking about patients' preference about truth telling, almost similar responses were concluded (Clayton 2005, Tang 2006, Jiang 2007). The professionals' attitude toward the balance between telling and not telling the truth has changed dramatically. A study in the United States of America (USA) among 219 physicians reported that they prefer not to disclose a diagnosis of cancer to their patients (Oken 1961); while in another study, 264 physicians agreed on telling cancer patients about their diagnosis (Norack 1979).

However, revealing the diagnosis to a patient with terminal cancer is not currently fully accepted in some countries such as Japan, China, Greek, Turkey, Spain and Italy; there is a tendency to disclose the truth more often than in the past in these countries, but full openness is still not very common (Mystakidou 2004, Elwyn 1998). In some countries like England, Canada and Finland, healthcare professionals have little choice whether or not to tell patients,

as current disclosure policies recommend that they should provide full information. Furthermore the patient right to participate in decision about their care is safeguarded by legislation (Seale 1991, Hebert 1997, Sainio 2001). In Japan, family members play a major role in the decision whether a physician should inform a patient with cancer about the true nature of his/her illness.

Physicians discuss the cancer diagnosis with the family before discussing it with the patient and commonly comply with the family members' request (Mizuno 2002). Comparing our results with other Arab and Islamic cultures, it was found that in Turkey a significant proportion of cancer patients (44%) did not know their diagnosis (Bozuk 2002). In Lebanon, where legislation allows non-disclosure, nearly half of physicians usually tell the patient about cancer (Hamedeh 1998).

The great majority of physicians (79%) in Kuwait withhold the truth if the patient's family requested them to do so (Qasem 2002) and in Saudi Arabia, 75% of physicians prefer to discuss information with close relatives rather than patients themselves, even when the latter were mentally competent (Qasem 2002). In response to decision making on using artificial life support for deteriorating terminal patients, our study shows that the majority of doctors (97%) gave the opinion of involving patient and family in making decision. In making decision about life prolonging procedures, physicians first establish the goal of the treatment, and then consider what the patient wants, what the best interest of the patient is, and what the prognosis is. It is very important that patients and their families discuss the use of life prolonging medical procedures (Mobeireek 1996).

Who really makes the decisions (hard choices) has little to do with the medical, legal, ethical or moral aspects of the decision process. The real struggles are emotional and spiritual (John 1992). Putting themselves in the position of terminally ill patients, 80% of the doctors do not like to be told about truth which reflects the same opinion they gave toward patients in terminal stage disease in the study. Among the reasons for not telling the truth to the terminally ill patients, 91.7% of doctors gave the reason of protecting the patient from emotional stress. While autonomy has gradually become a key concept in the doctor patient relationship, truth telling is far from being the norm in many countries in the world.

Despite the general agreement on the benefits of open communication between physicians and cancer patients, there is still strong resistance against disclosure of cancer diagnosis and prognosis in many cultures. Although fear of causing psychological morbidity to patients and their reluctance to find out the truth are two main justifications for non-disclosure attitude, there are other important contributing factors that need to be further explained and better understood including those related to relatives, doctors and healthcare system (Shalidi 2010).

In regard to not telling the truth to the family of terminal patients, different opinions were mentioned. About half of the doctors care to protect the family from emotional stress while 30% of them answered that the family do not like to know the truth and 15% answered that the patient asks the doctor not to tell the truth to the family. While the majority of physicians in both developed and developing countries tell the truth more often than in the past, the assumption that truth telling is always beneficial to patient can be questioned.

The issue of truth telling is still approached differently in different countries and cultures and there is a need for an increased awareness of cultural differences to truth telling among patients from ethnic minorities (Kazdaelis 2010).

Conclusion

Different opinions were reflected ranging between always & often to never & occasionally. The majority of doctors gave the opinion of involving patient and family in decision making for using artificial life support. Eighty percent of doctors do not like to be told about truth if they were a patient. Ninety two percent of doctors gave the reason of protecting the patient from emotional stress resulting from telling him the truth. Half of the doctors gave the reason of protecting the family from emotional stress resulting from telling them the truth.

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***Environment,
Environmental Ethics,
Environmental
Sustainability,
Ecotourism***

Climate change and island water governance: adaptation, challenges and options

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Abstract

Climate change poses serious risks and uncertainties to vulnerable societies and ecosystems. Fluctuations in temperature and their influences on the hydrologic cycle can lead to catastrophic consequences in terms of flooding, drought, water scarcity, water-related diseases and sanitation problems. Water governance amidst the threat of climate change is an urgent and critical concern in fragile, remote, and poor island ecosystems of developing economies. How do these island ecosystems cope with climate change? What is the current state of water governance in the islands? What options can be taken? This discussion focuses on the contents of existing *p*olicies, *p*artners or actors, *p*ractices and *p*erceptions of stakeholders (4Ps) along the water supply and demand management continuum in Marinduque Island, Philippines. The initial findings of the study show that the island is not yet climate ready. The majority of respondents in the six municipalities of the island province (except for one) expressed dissatisfaction over water service delivery; water supply is erratic and unpredictable and consumers are not confident about the safety and quality of water. Local government water utilities suffer from financial deficit due to uncollected revenues. The sources of water supply such as rivers, springs and underground wells need to be secured and protected. The municipal water utilities are limited in terms of resources and technical human resources. The management of water resources and its delivery to households is the sole responsibility of the municipal government units; partnerships with other sectors are non-existent. A comprehensive set of policies impinging upon the water supply and demand management interface have yet to be formulated. Political will, citizens' awareness and a supportive policy environment are essential elements for a more adaptive and responsive island water governance amidst threats of climate change.

Introduction

Climate change is here and it poses threats to ecosystems and human survival. Despite some claims to the contrary, climate change is a reality that nations and communities of the world have to reckon with. Climate change has been increasingly understood and there is a growing awareness as to its impacts on society and natural resources. According to the comprehensive IPCC Report, 2007, climate change is an inevitable reality.

Among the natural resources critical to global survival that is to be most affected by climate change is water:

“Among the most important impacts of climate change will be its effects on the hydrologic cycle and on water management systems and, through these, on socio-economic systems” (World Climate Conference 1990).

Scientists predict that even a slight variation in temperature can have concomitant changes in precipitation that could affect the average river flows making water availability increase by 10-40% in some areas or regions and decrease by 10-30% in some other places. Water therefore is the *“primary medium through which climate change will impact people, ecosystems and economies”* (GWP 2009).

It has been recognized that the most vulnerable places on earth to climate change are the small islands. Most islands are dependent on precipitation for their water supply for agriculture, domestic and other uses. Depending on the island's area, topography, rock and soil formation and characteristics, the size of freshwater aquifer, elevation above sea level and existing land uses, the impact of climate change would vary. Nonetheless, water security remains a critical concern in small islands. This sentiment has been highlighted in the 1994 Barbados Programme of Action, and later affirmed in the 2005 Mauritius Declaration. Both documents declared with urgency the need to protect, conserve and manage water resources in Small Island Developing States by employing all the knowledge, resources and instrumentalities to help achieve and sustain water security in the islands.

Water security refers to: *“the reliable availability of an acceptable quantity and quality of water for health, livelihoods and production, coupled with an acceptable level of water-related risks”* (Grey and Sadoff 2007). Considering the delicate nature of island ecosystems and the pressure of competing land practices and other economic activities, achieving water security is a daunting task that governments and communities in these islands have to deal with. Much depends on the responsiveness of governance in these islands, in particular water governance.

Making water governance effective at all levels has been identified as one of the highest priorities for action during the 2000 World Water Forum in The Hague. During this forum, the Global Water Partnership Framework for Action (GWP, 2000) stated that, *“the water crisis is often a crisis of governance.”* Recognizing this, the 2000 Hague Ministerial Declaration, the Bonn 2001 Freshwater Conference and the UN 2000 Millennium Assembly proposed to ensure good governance of water resources at all levels with greater involvement of stakeholders, putting all appropriate institutional arrangements in place and securing equitable access and adequate supply of water for all.

Water governance as defined by the Global Water Partnership (2002) refers *“to the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society.”* Water governance is bigger than government, as it is a collective enterprise involving a wider spectrum of participants and actors. It also involves policies that are results of consensus and inputs from other sectors. A responsive administrative system and practices must be in place and the perception and sentiments of the greater society being served must be considered in the decision-making processes. Also water scarcity challenges to good water governance may become more pressing and complex (Ballabh 2008). Effective water governance is seen as a climate adaptation strategy by itself. For the purpose of this paper, the water governance elements considered are the Policies, Participants, Practices and Perception, referred to as the 4Ps.

Methodology

This study seeks to answer this question: Is island water governance climate ready? It has the following objectives:

- 1) Identify water policies in the island
- 2) Describe the water delivery services looking at the supply-demand continuum
- 3) Identify the participants or actors in water resources management
- 4) Describe peoples' perception as to their satisfaction with the water service delivery
- 5) Recommend strategies for improving water governance in support of water security given the threats of climate change

The study was conducted in the island of Marinduque Province, Philippines with a descriptive, exploratory design. Data were generated using surveys, key informant interviews and from official records. A cluster accidental sampling was employed for the survey of households in urban centers or towns of the six (6) component municipalities in this island province. There were 316 respondent households in the study as shown in Figure 1.

Marinduque Island was chosen as a site for this study because its size is comparable with the Small Island Developing Countries in the Pacific, it represents the island provinces in the Philippines, water has been identified as a major concern, and it is accessible and provides opportunities for further studies. Marinduque is an island situated in the Sibuyan Sea to the south of Luzon Island. The island has a total land area of 95,258 hectares. The Philippine National Geodetic Survey regards it as the geographical center of the Philippines. Mt. Malindig, an inactive volcano of 1,157 meters is the highest peak in the island. The island also has many notable cave systems. The island has a population of 227, 828 (NSO, 2010).

Agriculture is the dominant livelihood with 48% involved in this sector. Primarily coconut plantations (66% of the agricultural land) and rice (18% of agricultural land) are the main agricultural land use, with corn, banana, vegetables, root crops, coffee, cacao and others constitute other crop types. Marinduque has rich fisheries. Each year about 10,000 metric tons of fishes are caught from the surrounding seas, and around 75% is exported to other provinces in the Philippines. The island has a coral reef ecosystem in its surrounding seas where about 9 types of corals are found. Recently these rich ecosystems are at risk due to unsustainable fishing activities such as blast fishing and cyanide fishing. The province is headed by an elected Governor and is represented to the National Congress by an elected congresswoman. The six (6) component municipalities are governed by their respective duly elected Mayors.

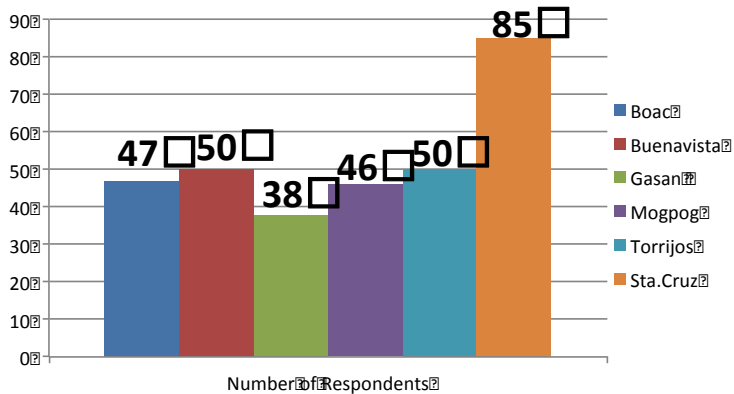


Figure 1 Number of household respondents per municipality

Findings and Discussion

A. Water policies and legislations

“Good water governance requires clear legal frameworks, comprehensive water policies, enforceable regulations, institutions that work, smooth execution and citizen-based mechanisms of accountability, as well as their interconnections” (GWP, Toolbox, 2002).

Water governance requires inclusive and coherent policies, transparent and accountable institutions, and mechanisms for active involvement from the other sectors of society. However, interviews with government officials and local legislators reveal a lack of comprehensive water policies, dearth of local water ordinances and regulations, low technical capability of water utilities and total absence of avenues for citizen participation in decision-making.

While there are legal bodies to formulate policies and regulations with respect to water management in both the municipal and provincial levels, these are not being harnessed to provide the needed enabling instruments for effective and efficient water resources management in the island province. These planning and policy development entities include the Provincial Board, the Provincial Planning and Development Office, the Municipal Councils, and the Municipal Planning and Development Office. The absence of comprehensive, province-wide water policies could indicate the lack of serious concern and sense of urgency among those in government and indifference on the side of the water users. This issue should be addressed in some future studies.

B. Practices

This section focuses on the manner of water delivery services, and the water supply and demand management issues.

Water Delivery Services: This is a function being performed by the Engineering and Technical Department in different municipalities. On the average, water utilities in the municipalities have 4-5 staff with the head usually an Engineer. Water service delivery is only one of the many functions being handled by this technical department. Personal interviews with staff of the local utilities revealed that the shortage of human resources with technical and managerial experience is a serious problem. They indicated that the municipal government does not have enough resources to finance more professional and efficient services. In fact, financial resources are inadequate even to conduct continuous maintenance of supply lines and to provide water treatment even to a modest level. Local taxes are not adequate to provide timely, regular and efficient water services. This problem is compounded by the poor water revenue collection rate as in the case of Boac Municipality, the only one that has a complete available financial record of the water utilities’ performance during the study period.

Figure 2 shows the average monthly water production costs, target monthly collection and actual collection for the year 2010. There is a considerable discrepancy or deficit between production costs and target collection that represents the volume of non-revenue water (NRW). Collection efficiency is low with a high volume of arrears or non-payment (Figure 3).

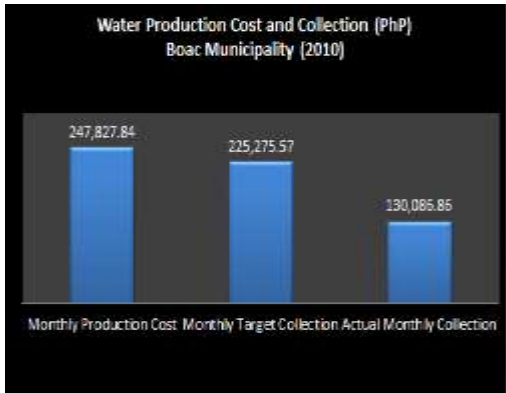


Figure 2 Average monthly production cost, target collection and monthly collection for Boac Municipality (Source: Boac Municipal Office)

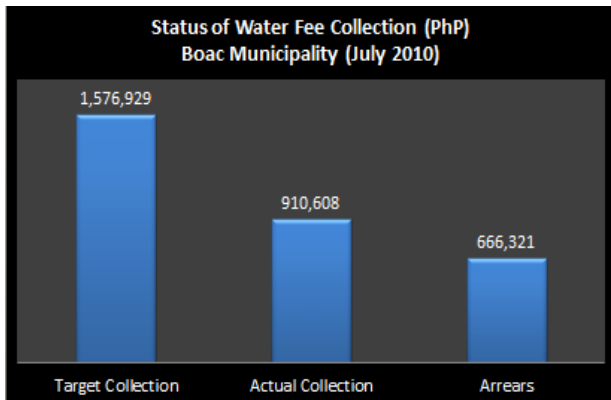


Figure 3 Status of water fee collection in Boac Municipality (Source: Boac Municipality)

Water Supply Management: There are three main sources of water supply in the province. These are rivers, springs and underground wells. Municipalities using water from underground wells that are powered by generators are: Boac, Gasan, Mogpog and Buenavista. Sta. Cruz municipality taps surface water from rivers while Torrijos municipality sources water from natural springs. Water from these sources is being stored in concrete tanks and reservoir and then delivered to households through pipes. Stored water is being chlorinated in the storage tanks and reservoirs. There are no water filtration facilities in all the municipalities.

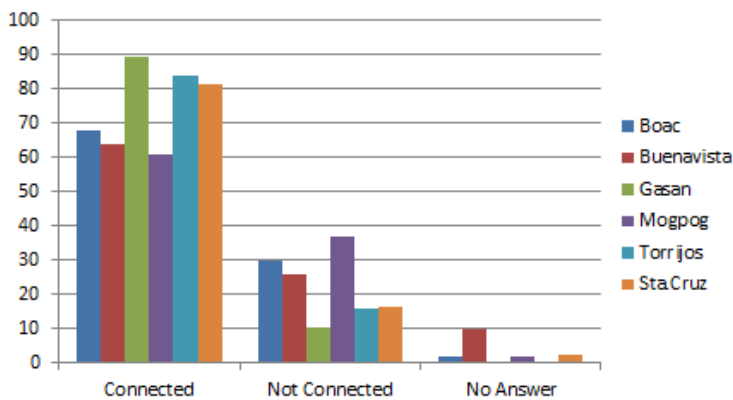


Figure 4 Respondents connected to municipal water utilities (%)

Most municipalities' urban households are connected to the water lines provided by the water utilities. The connection to the water lines ranges from a low of 60% of households in Mogpog municipality to a high of 89% in Gasan municipality. The rest of the four municipalities have their level of connections between these ranges. However, being connected and regularity of water supply are two distinct issues. Figure 4 shows the respondents' experience with respect to the regularity of water supply. The majority of respondents agree that water supply is irregular and unpredictable.

In addition to water supplied by the local water utilities, households use various sources of water for their household use such as drinking, bathing, cooking, laundry, cleaning and watering the garden plants. These sources in their order of level of usage are underground wells with pumps, dug-out wells, river and rainwater. Presently, there are no regulations in place regarding the use of underground water for households in the province. Anyone can simply dig a well without any guidelines or restrictions as long as they can financially afford to do so.

Water Demand Management: Demand Management “refers to actions that are oriented to improving the efficiency in use, conservation, recycling and reuse of water” (GWP Toolbox, 2002). It seeks to modify or influence human behavior and practices with respect to efficient use of water. Demand management employs various instruments such as communications and awareness raising, regulations, water pricing and other water conservation incentives.

Municipality	Water Charge (CU.M.)
STA. CRUZ	70/10 CU.M.
TORRIJOS	50/10 CU.M.
BOAC	50/10 CU.M.
MOGPOG	50/12 CU.M.
GASAN	100/15 CU.M.
BUENAVISTA	50/10 CU. M.
METRO-MANILA	69.16/10 CU. M.
LOS BAÑOS	193/10 CU.M.

Figure 5 Water charges per municipality, 2010 (Source: Municipal Water Utilities)

The study revealed that none the municipal water utilities in the province have a demand management instruments in place other than the prescribed water tariff. Figure 5 shows the rate of water charges/tariff in different municipalities relative to that of Metro-Manila and another rural town, Los Baños, Laguna. The rates are relatively lower than areas outside the province. The presence of arrears and non-payment in Boac as discussed in the preceding section, could indicate either that the water tariff is unaffordable to some of the households or it could be a matter of collection efficiency. It cannot be ascertained however, if the tariff rate is high enough for people to consume less and use water more efficiently.

Partners/actors: Effective water governance involves active participation from all sectors of society. While water delivery was traditionally considered within the exclusive domain of the public sector, the civil society, the community and the business sectors can immensely contribute to efficient and responsive water management. Active water users' organizations, an informed and involved public, and the involvement of the business sector will augment the capability and resources of the local water service providers. In fact, social participation in water management and governance is a present day reality that can potentially balance the power and control of a few over water resources which results in greater democratization and to meaningful water governance (Berry and Mollard, 2010).

Interviews and observations point to the absence of active partners in water resources management in the province. This is an area where information and awareness campaigns will be most needed. All sectors must realize that they have roles and contributions to improve the delivery of water services in their respective municipalities. In the same manner, the local government must create opportunities and incentives for the other sectors of society to get involved.

Some of the strategies include sharing of updates and information about the status of the water management and conducting opinion surveys to solicit and gather opinions from the water users.

Perception of water delivery services: The perception and level of satisfaction of users with respect to the quality of water and water services reflect the kind of water governance in place. Good water governance could be measured in the level of satisfaction of users based on their expectations and needs. Unmet needs and expectations can result from poor water governance. The conducted survey shows that among the six municipalities only Gasan respondents are satisfied with the water services. All the rest registered that they are either somewhat satisfied or not satisfied. A noticeable percentage of respondents did not give any answer at all. It could mean that the respondents are either ambivalent/unsure or that they are afraid of possible political repercussions of their answer.

Interviews and the survey revealed that the three main reasons for respondents' dissatisfaction were: poor water service delivery, unsure about water safety, and irregular/erratic water supply. The following Figure 6 shows the respondents' perception with respect to water safety/quality. All the municipalities except for Gasan indicated low percentages with regard to their perception of the quality/safety of water. In general, the figure shows the ambivalence of the respondents with noticeable percentage belonging to the "not satisfied" and "no answer" categories.

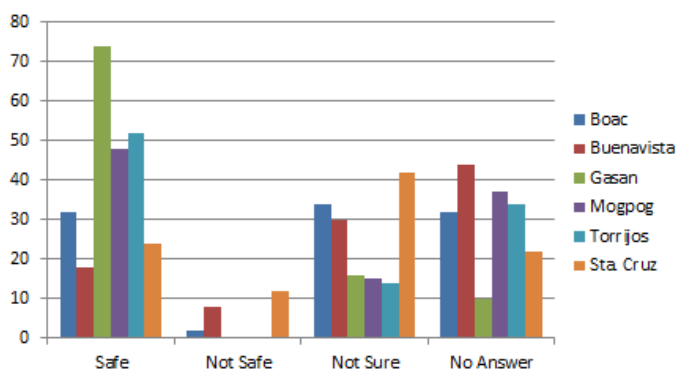


Figure 6 Respondents' perception of water safety/quality (%)

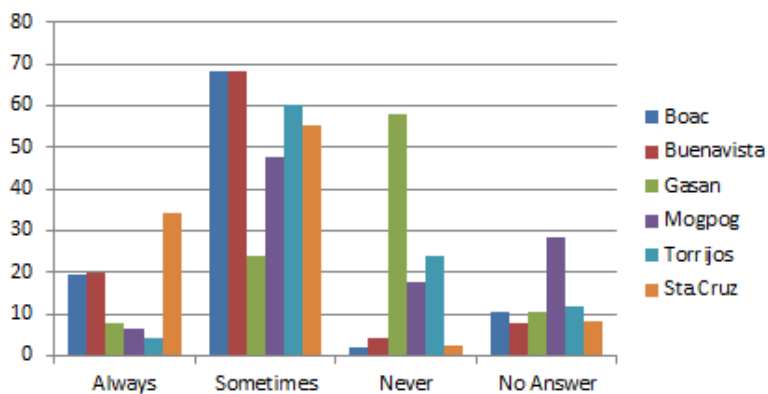


Figure 7 Consumption of bottled water by municipality (%)

The study in an effort to probe into the people's perception of water safety/quality, asked the respondents whether they consumed bottled water. Again, among the municipalities, Gasan indicated the least consumption of bottled water affirming that the respondents from this municipality believe that their water is safe for drinking. The rest of the municipalities indicated occasional consumption of bottled water implying that they are not convinced about the safety/quality of water in their area.

Conclusion

The study attempted to answer the question: Is the island water governance climate ready? As an exploratory and descriptive study survey, interviews and field observation were conducted, supplemented by collection and analysis of official records and documents. Water governance was described and assessed using the “4 Ps”, namely, Policies, Practices, Partners/Actors, and Perception. The study’s findings are summarized as follows:

The province and its component municipalities do not have comprehensive water policies, water regulations and adequately staffed organizations for efficient water service delivery. In terms of practices along the water supply-demand continuum, all the municipalities need serious improvements with respect to providing regular and continuous water supply to households. This also includes making sure that existing supply sources are adequately protected and new ones developed. The water utility infrastructure needs upgrading as well as the limited human resources employed in the water services units of the municipal governments. There is a notable lack of demand management instruments such as consumer education, proper pricing rates, and incentives for water conservation.

The stakeholders are not actively involved in the management of water resources and its delivery and conservation. There are no incentives and mechanisms by which the other sectors of society like the general public, the business sector and civil society can meaningfully participate in the planning, implementation and monitoring of water development programs. The responsibility was totally in the hands of the water units or divisions in each municipality. Indeed, stakeholders’ participation is seriously wanting in the province.

The respondents perceived the quality of water service provision to be unsatisfactory as well as that of water quality and safety. There is a general sense of ambivalence and lack of confidence as to the quality and safety of water being provided by the municipal water utilities. This is manifested in the growing consumption of bottled water in five municipalities. Gasan municipality appears to be an exception where consumption of bottled water is the lowest among the municipalities.

Given the current state of water governance, the island is not climate ready. Effective governance must be put in place. The business-as-usual attitude cannot hold anymore given the certainty of climate change. Reforms in water governance for Marinduque Island, Philippines are urgently needed. Likewise, the island province cannot be totally considered as water secure given periodic shortages of supply and lack of comprehensive policy and responsive institutional arrangements dealing with water resources management.

Recommendations:

1. The island population and its leaders must take the threats of climate change seriously as it has serious implications to water security in the island.
2. The officials need to take the lead in the formulation of comprehensive, integrative and participatory water resources management in the islands, employing a human ecological perspective and the guidelines prescribed by the Global Water Partnership. Involvement of other sectors must be sought.
3. An extensive climate change and water security awareness and education campaign must be undertaken to emphasize the seriousness of impending water crisis in the island.
4. Encourage the involvement and participation of the civil society, business and community in the issue of water security and governance.
5. An assessment of water supply sources and management review of existing water utilities in all the municipalities must be immediately conducted and proper measures to be put in place such as conservation and capability building programs, respectively.
6. This study must be broadened and replicated to include more respondents and variables to serve as input to policy-making.

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Attitudes of Sri Lankan university students towards animal ethics

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Abstract

The use of animals by humans is morally complicated regarding the raised ethical issues. Universities have an obligation to ensure that students, as a vital segment of the society, are made aware of animal ethics. The attitude of an individual about animal bioethical issues is governed by a range of factors. This study attempts to determine the attitudes of Sri Lankan undergraduates toward the use of animals for human purposes which may be affected by their field of studies. The views of 450 undergraduates in the fields of medicine (M), agriculture (A), veterinary (V), management (MG), engineering (E), and art (AR) were collected using a structured type questionnaire. The respondents from majors of V (98%), A (82%), M (95%) and AR (60%) held utilitarian views on the use of animals for human activities but nobody believed that humans have full liberty to use animals. The most accepted use of animals by M, MG, AR and E was as pets while that of A, V undergraduates were for livestock farming. Killing of unproductive farm animals including cattle was accepted only by V undergraduates. Many MG (88%), E (75%) and AR (81%) students opposed any animal experiments that would disable the animals whereas V (95%), M (69%) and A (61 %) said that their decision depends on the outcome of the experiment. More than 90% in any discipline were similar in their strong agreement with treating all animals kindly, preventing pain and providing space for animals to move normally; A and V were more in agreement than others with farm animals' interests being considered as important as companion animals' interests. The highest percentages of stating "disagreement" were in the category of animal use for transporting, fighting, hunting (of native wildlife), and inhumane treatment (castration, intensive housing). It was concluded that the undergraduate students' attitudes about the use of animals for research and other purposes vary depending on the field of study they follow.

Introduction

Millions of animals are used for human purposes in Sri Lanka. Approximately annually 115 million animals are farmed by intensive livestock production for produce food (DAPH, 2013). This does not include the millions of fish, other marine creatures such as oysters, prawns and aquaculture. Other than that animals are used each year for teaching and research purposes, kept as companion animals and draft purposes.

Animal ethics is not just about animals; moreover, it concerns how these animals ought to be treated. Animal ethics guides us in deciding whether the way we use animals is right or wrong and it has a long history. Without an adequate animal ethic, we are in trouble, because it makes our ethical decisions irrational. Preece (2007) presents detailed evidence that there has been considerable support for animals having souls, being sentient beings and not being created for human use, and that the debate on how animals should be treated has been contested throughout history.

The attitude towards the use of animals for different purposes is unique to an individual and it depends on a range of factors. Attitude and feelings are generally directed toward decision-making, and include important elements of perception. Variables known to influence individual differences in attitudes toward animals include gender (Driscoll 1992, Herzog et al. 1991), religion (Bowd and Bowd 1989), educational level, geographic region, age, and race (Driscoll 1992, Galvin and Herzog 1992). Furthermore, the species of an animal and type of animal use also might influence variation in attitudes.

Heightening undergraduate students' awareness of animal ethical issues seems a fundamental component to curricula in higher education and it may be more important for students to be more cognizant and to learn how to combine ethical principles and scientific knowledge to better understand animal issues. Today's university students will be tomorrow's decision makers; so the study of undergraduates' attitudes toward the use of animals for human purposes is worthy for policy makers, researchers, funding agencies, publishers and educationists. This study was to determine the attitudes and factors affecting attitudes of undergraduates' students concerning animal use for human purposes.

Methodology

The study was carried out among four hundred and fifty final year undergraduate students in the majors of medicine (M), agriculture (A), veterinary (V), management (MG), engineering (E), and art (AR). The data were collected by a structured type questionnaire and analyzed using statistical software SPSS 10.0 and Excel. A mean rating was calculated for attitudes toward use of animals for different purposes and the preference order of animal rearing for meat was analyzed using Kruskal-Wallis test and means were separated by using DMRT procedure. Chi-squared test was used to determine differences between the students in different faculties. The Spearman correlation coefficient was used to ascertain the relationship between the variables.

Discussion

The sample characteristics of the respondents are presented in Table 1. The sample was dominated with Buddhists (89 %) and females (62 %). It was found that students of M, A and V faculties had direct involvement with animals in their academic carrier.

Attitudes toward the use of animals for different purposes varied from faculty to faculty (Table 2). Overall, 74% of undergraduates significantly held utilitarian view of animal use by humans. As shown in this study and also by previous studies (De Silva et al., 2010), only a minority of undergraduate in majors A, MG, E, AR opposed the use of animals by human. However, no one believed that humans have an absolute right to use animals without considering animal's fate. Despite the fact that MG (51 %) and AR (60 %) held a utilitarian view on animal rearing, 72 % and 77 % opposed animal use for research purposes, respectively. Further they justified opposing animal use for research due to religious reasons. Undergraduates in V (91%), M (94%), and A (83%) highly accepted the use of animals for medical research with considerations on animal welfare aspects.

Table 1: Sample characteristics of the respondents

Variable	Range	A	M	MG	V	E	AR	Overall
Gender	Female	48 (64%)	47 (63%)	46 (61%)	40 (53%)	44 (59%)	52 (69%)	277 (62%)
	Male	27 (36%)	28 (37%)	29 (39%)	35 (47%)	31 (41%)	23 (31%)	173 (38%)
Religion	Buddhism	66 (88%)	63 (84%)	69 (92%)	56 (75%)	72 (96%)	74 (99%)	400 (89%)
	Christian	5 (7%)	4 (5%)	6 (8%)	9 (12%)	2 (3%)	1 (1%)	27 (6%)
	Islam	3 (4%)	5 (7%)	0	3 (4%)	0	0	11 (2%)
	Hindu	1 (1%)	3 (4%)	0	7 (9%)	1 (1%)	0	12 (3%)
Living area	Urban	45 (60%)	47 (63%)	42 (56%)	54 (72%)	48 (64%)	40 (53%)	276 (61%)
	Rural	30 (40%)	28 (37%)	33 (44%)	21 (28%)	27 (36%)	35 (47%)	174 (39%)

Parenthesis represents percentages

When inquired if animals become disabled at the end of the experiment, MG (88%), E (75%) and AR (81%) students significantly opposed that while V (95%), M (69%) and A (61%) supposed that their decision would be based on the type of research. Considering the stream of majoring, A, M and V students supposed the use of rat and mice while MG, AR and E undergraduates supposed cockroach as the model animal for experimentation. Hagelin et al., (1999, 2000) have carried out a few studies on the undergraduate students of medicine, veterinary and other departments; they mentioned that most of the participants stated that animal used for research was acceptable in terms of moral aspect.

Table 2: Attitudes towards the rearing of animals for different purposes and research

Faculty	Yes for any purpose	Yes for some, but no for other	No for any purpose	No for any research	Decide according to research
A	9 (12%)	61 (81%)	5 (7%)	7 (9%)	68 (91%)
M	4 (5%)	71 (95%)	0	2 (3%)	73 (97%)
MG	1 (1%)	38 (51%)	36 (48%)	54 (72%)	21 (28%)
V	2 (3%)	73 (97%)	0	0	75 (100%)
E	2 (3%)	47 (63%)	26 (35%)	44 (59%)	31 (41%)
AR	0	45 (60%)	30 (40%)	58 (77%)	17 (23%)
Overall	18 (4%)	335 (74%)	97 (22%)	165 (37%)	285 (63%)

These results reinforce the findings of a previous study (De Silva et al., 2010) where the highest ranked use of animals was as pets while the least accepted purposes were for skin and fur (Figure 1). It should be noted that 42 % of respondents kept animals as pets, mainly dogs and cats. Students in M, MG, AR and E gave the highest mean rank for animal use as pet while A and V undergraduates agreed with animal use for livestock farming. This preference order result was seen among many Buddhist respondents who believed that killing of animals for whatever purpose would be a great sin.

However, results of this study suggest that companion animals are an important component of our culture as well. Wells and Hepper (1997) stated respondents were less supportive of uses that lead to death of animals compared to nonlethal uses such as entertainment. When inquired about preferred animal species reared for meat, students of MG, AR and E answered fish but M, A and V undergraduates answered chicken. Interestingly, the majority of the respondents were Buddhists but rearing animals for meat was opposed by only 48% of them. Many undergraduates significantly opposed cattle rearing for meat of other species due to the role of cattle in Sri Lankan culture. According to these results, rabbits were less preferred to sheep and goat maybe due to its use as a pet animal.

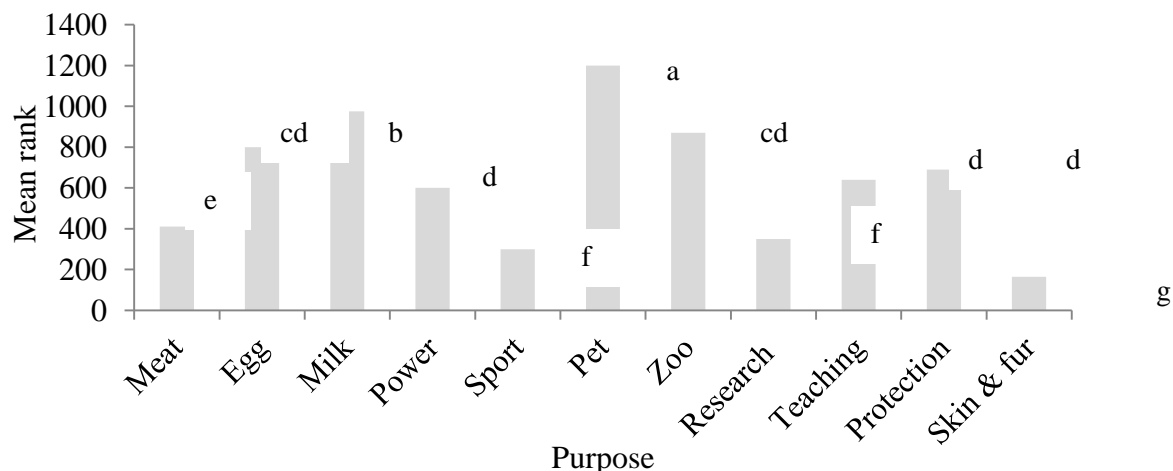


Figure 1: Respondents' preference for rearing animal for different purposes

Although many were Buddhists and the rearing of animals for meat was considered as the least preferred use of animals, some accepted the killing of unproductive and weak animals. When asked about killing of unproductive cattle, undergraduates significantly opposed that except V undergraduates. Further AR, E and MG significantly disagreed with killing weaker farm animals but A, M and V undergraduates significantly agreed with it. The above findings suggest that even though they consider financial aspects when taking ethical decisions, those decisions depend on the animal species concerned.

Students showed strongly compassionate ethos in relation to the treatment of animals generally, with 90% or more in agreement with treating all animals kindly, and preventing causing pain to animals (Table 3). While A and V undergraduates agreed more than others with the interests of farm animals being as important as the interests of companion animals. There was minimal agreement with the confinement housing of animals, animal use for transportation, fighting, hunting, castration, dehorning and tail docking of animals.

Table 3: Undergraduates' Concerns about the Ethical Treatment of Animals

Statement	Agree	It is ok if essential	Disagree
Kindly treatment to animals	92%	7%	1%
Humane handling and transportation	71%	28%	1%
Prevent pain	94%	6%	0
Providing space to behave normally	58%	31%	11%
Farm animal interest= Companion animals	45%	24%	31%
Use for transportation	14%	21%	65%
Use for fighting	5%	12%	83%
Hunting wild animals	4%	11%	85%
Intensive housing	27%	42%	31%
Castration	28%	25%	47%
Dehorning	19%	36%	45%
Tail docking	12%	39%	49%

Spearman correlation coefficients between different variables are shown in Table 4. Christians had a more positive attitude about animal use by humans, killing weak animals and cattle than other religions and also towards animal welfare, compared with Buddhists. Many of the respondents were Buddhist and their belief that killing of animals is a great sin may have a great influence on their choice. More male undergraduates agreed on killing unproductive and weak animals than female counterparts. Female students rated themselves as having higher levels of emotional empathy toward killing unproductive animals than the male students. It was found that welfare knowledge had a significant positive correlation with animal use for different purposes. Respondents with higher welfare concern held a more negative attitude toward killing of unproductive animals.

Table 4: Correlation matrix among the different variables related to the attitudes towards animal use

	Sex	RL	U	AW	LY	CT	WK
<i>Sex</i>	1.0						
<i>RL</i>	-0.28	1.0					
<i>U</i>	0.14*	0.68**	1.0				
<i>AW</i>	0.08	0.52*	0.35**	1.0			
<i>LY</i>	0.26*	0.20	0.26*	-0.37*	1.0		
<i>CT</i>	0.41	0.33*	0.02	-0.22*	0.61**	1.0	
<i>WK</i>	0.07*	0.15**	0.29*	-0.18**	0.58**	0.43**	1.0

** Correlation is significant at the .01 level, * Correlation is significant at the .05 level (RL= Religion U = Use of animals for different purposes, AW= Knowledge about animal welfare, LY =Killing unproductive layers, CT= Killing unproductive cattle WK= killing weak animals)

Conclusion

This study showed that students who follow science subjects have rational attitudes toward animal use for different purposes. No one held extreme anthropocentric views toward the use of animals for different purposes and many believed that animals have rights, expressed empathy toward animals and opposed animal cruelty with regards to any use. This moderate view may have been supported by the educational background and the future employment prospective of the respondents. It was also concluded that a vast majority of undergraduates hold moderate views regarding ethical issues related to animal husbandry and experiments. These results demonstrate that support for animal research and further academic discussions can be carried out to reduce negative moral judgments. One important issue is to alert science students to their future obligations as part of their curriculum. It should be an ideal to promote the humane care of animals used for scientific purposes.

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Bioethical issues in food animal production: public concerns about animal welfare in Sri Lanka

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Abstract

Food animal production systems that supply food to society have been directly affected by societal demands. Ethical issues are a crucial factor for the livestock industry today. There are significant ethical questions associated with food animal production that the society demands to be answered. Ethical questions and concerns focus on all aspects of animal uses in our food production system, including humane handling, housing, feeding, watering, castrating, tail docking, teeth clipping, beak trimming, de-horning, breeding, transporting, slaughtering, and preventing illness. Consequently, society has turned to science for guidance and animal welfare has been identified as the key attention point for future livestock production. This paper analyzes the public concerns about farm animal welfare issues especially in the advent of ethical basis of current commercial livestock production and processing of food animals. Survey information indicates that the public expresses great concern for issues related to conventional animal production systems in Sri Lanka. The public is unwilling to accept food which embodies poor animal welfare, but also willing to pay a premium for ethical (higher farm animal welfare) products. Also Sri Lankans are perhaps philosophically ready to accept and support the urgent changes needed to improve animal welfare standards in their country. This study does not wish to push for an end to eating meat by the public but strongly believes that animals should receive appropriate treatment during their lives. The study proposes that the establishment of food animal production practices that are viewed as ethically defensible is not only the right thing to do but also the pragmatic action to be taken as a business tool.

Introduction

Most of society favors the consumption of livestock products (meat, milk, eggs and their products), as evidenced by our shopping habits. In response to increased demand for livestock products, there has been an increase in the number of animals being produced and unit of food produced per animal. At present, annually approximately 115 million animals (cattle, buffalo, poultry, swine, goat and sheep) are farmed for food in Sri Lanka (DAPH, 2013). The intensification of animal production has promoted more abundant, cheaper food. However, the dramatic increase in the amount of food generated per individual animal has brought forth new problems. Specifically, some animals (laying hens, high producing dairy cows) are metabolically challenged to the point where bones become leached of calcium, health problems (Rauw et al., 1998) arise, and high growth rates cause leg problems and abnormal behavior.

Additionally, large scale, intensive confinement farming systems have brought about questions related to animal welfare (confinement space, social isolation), the continuing decrease of small farms and environmental issues. Consequently, a number of conflicts have arisen between productivity and the interests of the animals, and the rationale behind animal protection has changed dramatically. Although, animal products have been made readily available at cheap prices, questions are being raised as to whether some aspects of animal production ought to be modified with many concerns related to animal welfare.

Animal welfare has become an important component of consumer motivation to provide animal friendly living conditions for farm animals (Harper and Makatouni 2002). An increasing number of consumers expect their food to be produced with greater respect for the needs of farm animals. In this way consumers have the possibility to buy food that is closely linked to the ethical value of animal. While a number of food scandals have stimulated consumer

concerns about the safety and quality of food, consumers are also becoming increasingly interested in foods produced according to the ethical aspects of animal welfare principles (Verbeke and Viaene 2000).

Today, there is a growing tendency in discussions about applied ethics to livestock industry and it is argued that ethics is a necessary part of the planning and development of sustainable livestock production systems. Ethics is a discipline that deals with questions about what ought to be done. Accordingly, the term bioethics is sometimes used to define our moral relationship with animals. Moreover animal welfare and animal ethics are two distinct approaches, although both work to help understand and articulate man's proper relationship to animals of other species (Fraser, 1999).

What constitutes acceptable treatment of farm animals is determined by legislation and consumer choice. However, consumers can only act in accordance with their animal welfare values if they are aware of the welfare issues surrounding livestock production. It is therefore vital that information is effectively disseminated to the public, to lead to a change in demand for higher welfare products, in order to improve the welfare of animals on farms. The aim of the current study therefore, was to identify public concerns about farm animal welfare issues especially in the advent of the ethical basis of commercial livestock production and processing of food animals.

Methodology

Three hundred consumers, who toured the local markets and supermarkets were purposively selected and interviewed. The data were collected by a structured type questionnaire and analyzed using Excel. Age of participants varied from 20 to 65 years; the mean age was 40.5 years. All participants were livestock product consumers. More than half of the participants (88%) indicated that they consume any of livestock products every day, 91 % several times a week, and 76% once a week or less.

Discussion

The majority of participants (72%) claimed to know "a little" about livestock farming. Roughly 61% stated that they consume livestock products and were concerned about the welfare of farmed animals. 36% of consumers said that animal welfare was somewhat important to them, while another 19% said it was very important, and 6% said extremely important. When asked for factors that influenced their choice when buying livestock products, the most common factors were 'quality/freshness', 'price', 'appearance' and 'how it is farmed'. Ninety-five percent of the respondents indicated that 'antibiotic free' was ranked as the highest in importance over 'humanely raised', 'organic', and 'natural'.

Almost all participants agreed or strongly agreed with the statement: "Animal welfare means more than providing adequate food, water and shelter; it also includes adequate exercise, space, and social activities for the animals". Animal welfare is a high profile ethical concern for animals that are under our care and management. Among the main issues involved in the concept of welfare are the concepts of 'suffering' and 'need,' as well as the 'five freedoms' which are more related to animal husbandry and management by man (Duncan, 2006; Lund et al., 2006).

There are a number of housing and management practices that can use some improvement, but no one has been able to create a perfect management system that accounts for all animal behavioral, physiological and other needs. No management system is perfect, even though some want the society to believe that perfection exists and it is only because of bad intentions on the part of farmers that these are not being practiced.

The majority of public highlighted serious animal welfare issues as battery rearing/crowded conditions, restricted feed and water, poor housing, inhumane handling, inhumane treatment (castration, dehorning, tail docking, teeth clipping, beak trimming) and inhumane slaughtering. These issues directly impact the success of food animal systems and our food security. Therefore everyone in the food animal industry understands these issues and has to get potential appropriate courses of action.

More than 56% stated that humane animal treatment is an important issue to them. Fifty-one percent of consumers said the claim “humanely raised” was very important or important in causing them to believe that food is ethically produced. A large majority (91%) would support a law requiring that farm animals, including pigs, cows and chickens, are provided with enough space to behave naturally. Enacting laws to protect farm animals from cruelty was supported by 96% of those surveyed.

All of these competing interests become consolidated under the philosophical question of ethics. Is it ethical to harm the welfare of an animal? Is it ethical that we should expect farmers and companies to not respond to demands for cheap and at the same time high quality, convenient, attractive, tasty food thus, not to increase the size of their operations? Should societal demands consider the farmer’s need to respond to low prices by increasing output or make other management decisions that allow the farmer to successfully compete by decreasing their costs per unit of output? Is it ethical to even think of units of output when dealing with animals? Is the society willing to pay for incremental costs of greater levels of perfection in animal welfare, or just demand changes through regulations?

On their willingness to pay for welfare trusted food, fifty-seven percent of consumers said they would be willing to pay 1% to 10% more “for food that promises to be produced to higher ethical standards” while twelve percent were willing to pay 10% more. The food animal production system should consider that effective and honest communications can stimulate a change towards the ethical requirements or demands by some advocates and various decision makers for recognition of the validity of situational ethics. In many cases situational ethics is equated with hypocrisy, but here it refers to understanding the range of options available to manage animals and selecting those options which will do so in the most humane manner possible. This paper will hopefully in turn result in improved management and processing of food animals and better communications with stakeholders regarding our commitment to humane food animal production and processing.

Conclusion

Any animal that has been born into this world deserves our support. At the very least, we should fight for better rearing conditions and care, humane handling and safer, faster anesthesia/death. Sri Lankan consumers’ demand for products of animals reared on a free range and with practical protection of animals. This may enable the quality of life of individual animals to be raised, and some of their dignity to be protected. It is not appropriate to take the easy way out, hide behind ethics and focus blame on companies in our livestock production system for initiating the current conditions. It is appropriate to use ethical questions as part of an analysis of our actual situation and for individuals in society to accept responsibility for change through their market demands.

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The Homo sapiens' place in nature from an objective 'biocentric' point of view

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Abstract

Are humans part of nature? Clearly we are, or we wouldn't be able to interact with it. The real question is what part are we? Most texts define an exotic species as one translocated by humans to an area where it had not previously existed; this would seem to make us, throughout most of our range, an exotic species, although this fact is never mentioned. But the effect the species has on its new surroundings has little to do with how it got there, and more to do with its being a newcomer. What is a native species? It is basically one that has been around a long time, i.e., not a newcomer. The question is, how long? A length of time that makes sense is the length of time that it takes for the other species in the area to evolve to adapt to the newcomer – on the order of a million years. That would make humans native only to Africa, and everywhere else a rank newcomer (exotic species). This is not a value judgment, just biological fact, but maybe also a good indication of how we should behave: with restraint: with the manners of a guest.

Introduction

Are humans part of nature? Many answers have been given to this question, but none, to my knowledge, based on science. Even scientists, apparently, often avoid applying their knowledge when it may be inconvenient (e.g., through interfere with our preferred lifestyle). For example, open any biology textbook and find where it defines “exotic species”. Do you see any mention of the fact that humans are, throughout most of our range, an exotic species -- or even a discussion of whether we are an exotic species? If biology is so valuable (which I think it is), why do we shy away from using it?

“For hundreds of millenia, evolving humanity was a native species ... in Africa and Asia. ... The modern Races of Homo sapiens were a true alien species when they colonized the rest of the world, from Australia to the New World and finally the distant oceanic islands.” E.O. Wilson, p.98.

“The behaviours animals use to avoid predators are both genetically based and learned. The genetic component is acquired through natural selection and so can only slowly be developed. This may account in part for the fact that most of the world's surviving large mammals live in Africa, for it was there that humanity evolved, and it was only there that animals had the time to acquire the genetically based behaviours that allowed them to cope with the new predator.” Tim Flannery, p.198.

“... his dominance and his faculties for upsetting so much of the rest of life serve to rule him out of what we think of as 'natural' relationships of living things”. Paul Errington, p.41.

“To really come up with something new that's going to allow a species to live in a completely new environment takes a million years.” Camille Parmesan

Discussion

It is often claimed that humans are a natural part of our environment -- we are just an animal like any other animal. If that is true, then why aren't humans mentioned in the vast majority of natural histories? The fact is, we consider ourselves a part of our ecosystems when it's convenient (e.g. when we want to justify recreation in wildlife habitat), but not when it's not convenient (e.g. when choosing where to live: in a house!). When you die, will you re-enter the ecosystem just like any other dead organism? No! We are either cremated, or buried in a box, specifically to avoid the natural process of decay. It is obvious that we are a part of nature, or we couldn't touch and interact with it. The real question is which part of nature are we?

Biology texts usually define an "exotic species" as one transported by humans to a new location, where it hadn't existed before. However, this is not a good definition, since the effect of the exotic species on its new surroundings has nothing to do with how it got there, but more to do with the fact that it is a newcomer. However, every species was new at some time in the past. So the question is: how long does it take to become a native species? I would like to suggest that a length of time that makes sense, biologically, is the time that it takes for the other species in the ecosystem to evolve (i.e., make persistent – 'beneficial' -- genetic changes) to adapt to the newcomer -- say on the order of a million years. This would make humans (*Homo sapiens*) native only to (parts of) Africa, and everywhere else, a relative newcomer -- an exotic species. This is not a value judgment, but simply a statement of biological fact. Does this mean that we should all move back to Africa? I don't think so -- it wouldn't help! Even in Africa, our behavior changes so rapidly, on an evolutionary scale, that the only things that can evolve fast enough to keep up with us are bacteria and viruses! So even in Africa, we might as well consider ourselves an exotic species.

But what I do think it means is that we should act with restraint -- with the manners of a guest! What does this mean in practice? I think it means, first of all, to 'listen' to other species, and what they are trying to tell us! For example, what is the first thing that every child learns about wildlife? That they don't want us around: that they run away whenever we try to approach them! And then, of course, because we are the curious animals that we are; we proceed to ignore their wishes.

Jane Goodall, Dian Fossey, and Birute Galdikas all had the same experience when they began trying to study apes in the wild: the apes didn't want them around! They told that to the researchers clearly and unequivocally. Jane couldn't get close to the chimpanzees until she started bribing them with bananas. The gorillas charged Dian and tried to scare her away. And the orangutans pushed over trees toward Birute, apparently trying to kill or intimidate her. The apes desperately need us to deliver their message to the rest of humanity. Although the message is impossible to miss, most humans ignore it. Rather than arguing over to what degree the apes resemble or differ from humans, the most important message that we can derive from studying them is that they want to be left alone!

This is perhaps a bitter pill, but one that humanity urgently needs to take. With our population increasing rapidly, it is more important than ever to give wildlife what they want, which is also, therefore, what they need: freedom from the pressure, irritation, infection with diseases, and outright danger of the presence of humans. It is utterly inexcusable that we continue extending our hegemony into every square inch of the Earth -- and soon, other defenseless planets as well. This is a tall order? Very well, then it is a tall order. But I do not see why we shouldn't aim for what is needed, instead of pretending that less is adequate.

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Structural change, resource sustainability and the environment: China's development and its impact on the Asia-Pacific Region

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Abstract

In worldwide specialization, developing countries may constantly face the issue of shifting out of low-tech goods where their current comparative advantage resides and into high-tech industries where they may currently lack a comparative advantage but may foster such a comparative advantage in the future as a result of a greater growth potential or positive intersectoral interactions. This structural change may have significant environmental implications as different industries generally carry different pollution intensities. In the past few decades, China has experienced substantial structural transformation, which has supposedly exerted a deep impact on the rest of the world, particularly as the Chinese economy is being opened to greater foreign trade and foreign direct investment. However, while the processes of opening up and development have increased the level of income and reduced overall poverty, there has been a heavy reliance on increasing inputs of environmental resources. Environmental damages are now a very serious problem in China, where unsustainable environmental practices are posing serious threats to China's ecosystems and energy supplies. Environmental degradation and resource depletion accompanying China's rapid opening up and development has thus become a growing concern calling for continuous attention of government policies. To explore the potential impacts of opening up and economic development on resource sustainability and the quality of the environment in China, one central issue is to find out whether China is using up excessive amounts of environmental resources in producing its economic output, so that environmentally friendly (or 'green') growth and development cannot be sustained. The present paper, under a theoretical framework of dynamic comparative advantage, and by applying the basic concept of the environmental Kuznets curve, investigates China's structural transformation and the evolution of the pattern of its opening up, their impact on resource sustainability and the quality of the environment, as well as the role China is playing in the development of the Asia-Pacific region.

Introduction

Opening up and development may exert impacts on environmental outcomes through a variety of mechanisms. One channel is the scale effect, which is normally considered harmful to the environment. Another channel is the technique effect considered conducive to the environment, where domestic firms could enjoy the spillovers induced by opening up and have access to less-polluting technologies. A third channel is the composition effect related to structural changes occurring in the economy, where opening up shapes the pattern of production specialization, and by driving the reallocation of resources across different domestic sectors, affects the overall pollution intensity of domestic production activities. One more channel is the income channel, where along with the income gains allowed by openness and development, the country may desire higher environmental standards, more stringent regulations, and better enforcement by the government; these are all conducive to a better environmental quality.

The relations between openness, development and the environment have been widely discussed in the literature, mostly within the framework of the Environmental Kuznets Curve (EKC) (Grossman and Krueger 1993, 1995). Early studies within the EKC framework focused on the effect of economic development on environmental degradation (Grossman and Krueger 1993, 1995, Selden and Song 1994, Vincent 1997, Gale and Mendez 1998). However, the relationship between income growth and the environment may vary with the source of income growth, as different types of economic activities have different pollution intensities (Abdulai and Ramcke 2013). That is, the pollution consequences of economic growth may depend on the underlying sources of growth (Antweiler, Copeland and Taylor 2001). Further, the EKC framework does not usually account for the effects of openness on the environment. In fact,

trade patterns may partially explain reductions in pollution in high-income countries and meanwhile increases in pollution in low-income countries.

Specifically, the pollution haven hypothesis postulates that disparities in the stringency of environmental regulations between developed and developing countries will generally lead to increased pollution-intensive production in the developing countries (Cole 2004). The factor endowment hypothesis, in comparison, argues that shaped by trade and specialization patterns, countries that are relatively abundant in factors used intensively in polluting industries will generate more pollution as trade barriers are lifted (Mani and Wheeler 1998).

Methodology

We are interested in examining the environmental implications of China's processes of opening up and economic development. Environmental resources are unpaid factors of production in an unregulated market, as the cost of pollution is not internalized. To examine the effects of foreign trade and economic development on pollution emission in China is effectively to see whether China is contributing a substantial amount of environmental resources to the production of its total economic output.

If the aggregate production function takes the form $Y(t) = F[K(t), L(t), N(t), B(t)]$, where K is the level of physical capital stock, L is the amount of human labor, N is the quantity of natural resources used in the production process, and B stands for the level of technology or total factor productivity, then our idea behind the model is that the production process per se generates pollution emission: pollution emitted is not directly related to the level of aggregate output, but to the quantities of the various arguments in the production function. Formally, $E(t) = \rho[K(t), L(t), N(t), B(t)]$, in which $E(t)$ is pollution emitted at time t . We can then write $B(t) = \phi[Y(t), K(t), L(t), N(t)]$, which is implicitly determined by the functional relationship in the aggregate production function. Therefore, $E(t) = \rho\{K(t), L(t), N(t), \phi[Y(t), K(t), L(t), N(t)]\}$, which shows that pollution emission $E(t)$ can be written as a function of four arguments, $Y(t)$, $K(t)$, $L(t)$ and $N(t)$.

Consider the situation of an economy with m different sectors. Pollution emission of the j th sector is determined by $E^j(t) = \tilde{E}^j[\varphi_Y^j(t)Y(t), \varphi_K^j(t)K(t), \varphi_L^j(t)L(t), \varphi_N^j(t)N(t)]$, where the φ 's are respectively the shares of economy-wide $Y(t)$, $K(t)$, $L(t)$ and $N(t)$ in sector j , with the sum of all the φ 's equaling one for any t . Total pollution emission of the whole economy at time t is now written as $E(t) = \sum_{j=1}^m \tilde{E}^j[\varphi_Y^j(t)Y(t), \varphi_K^j(t)K(t), \varphi_L^j(t)L(t), \varphi_N^j(t)N(t)]$. The total economy-wide pollution emission is determined by $E(t) = E^*[Y(t), K(t), L(t), N(t), \Phi(t)]$, in which $\Phi(t)$ is a vector containing all the φ 's.

Structural transformation and the shift of comparative advantage can be illustrated by the model of Lim and Feng (2005). Let $A(t)$ be the number of farms in the agricultural sector at time t , any level of which is attached to a corresponding sectoral output or income. Let the sector grow according to an intrinsic per unit rate r_A , which is the rate at which the sector would grow in isolation, without receiving the positive or negative impacts from other sectors. This rate may depend on factors such as the economic environment and social infrastructure. We use \bar{A} ($\bar{A} > 0$) to denote the physical upper limit to the number of farms (the carrying capacity) that may exist in the agricultural sector, owing to resource constraints. The logistic growth of the agricultural sector is given by $\dot{A} = r_A(1 - A/\bar{A})A = (r_A - a_A A)A$, where we define $a_A = r_A/\bar{A}$.

Further, we incorporate the manufacturing sector into the model. Suppose two sectors, agriculture and manufacturing, which are mutually supportive or complementary: $\dot{A} = (r_A - a_A A + a_M M)A$ and $\dot{M} = (r_M - m_M M + m_A A)M$, where $M(t)$ represents the number of manufacturing firms, and $m_M = r_M/\bar{M}$ by definition, in which r_M is the intrinsic growth rate of the manufacturing sector and \bar{M} is its carrying capacity.

The parameters a_M and m_A each capture the respective intersectoral interaction, both of which are assumed to be strictly positive. The non-trivial equilibrium for the system is given by $A^* = (\bar{A} + \alpha\bar{M})/(1 - \alpha\beta)$ and $M^* = (\bar{M} + \beta\bar{A})/(1 - \alpha\beta)$, where $\alpha = a_M/a_A$ and $\beta = m_A/m_M$. It can be proven that provided the equilibrium is stable, then with mutually beneficial intersectoral spillovers, $A^* > \bar{A}$ and $M^* > \bar{M}$, where, again, \bar{A} and \bar{M} are the maximum sizes of agriculture and manufacturing when the sectors are each left to grow independently.

Discussion

The model above reinforces the view about intersectoral complementarities. A positive stimulus from agriculture enhances growth of manufacturing. The complementarities between sectors may lead to a structural transformation, a shift from one stage to a higher stage in its development process. If we measure structural transformation by an increase in the ratio of the equilibrium level of manufacturing, to that of agriculture, then it can be proven that the ratio rises if there is an increase in the positive intersectoral coefficient from agriculture to manufacturing (m_A), as well as a reduction in the positive intersectoral coefficient from manufacturing to agriculture (a_M). If the manufacturing sector changes the share of its output to be supplied to agriculture as inputs, then the positive intersectoral coefficient from manufacturing to agriculture, a_M , falls.

Agriculture now tends to require more of other inputs, such as labor, to support its expansion. As this labor is no long available to be released to manufacturing, the expansion of agriculture thus induces a higher opportunity cost in terms of manufactured goods forgone. On the other hand, an increase in the positive intersectoral coefficient from agriculture to manufacturing, m_A , arises from resource transfers from agriculture. In the case of China, rising farm incomes induced by agricultural reforms enhanced investment in labor-saving technologies, so that underemployed farm labor was released to manufacturing at a low opportunity cost in terms of farm output forgone (Shi et al., 1993).

Our discussion here implies that if comparative advantage initially lies in the agricultural sector, then structural transformation (an increase in the ratio of the equilibrium level of manufacturing, M^* , to that of agriculture, A^*) means a relative shift in comparative advantage from agriculture to manufacturing. This is because an increase in m_A expands the manufacturing sector at a low opportunity cost in terms of agricultural output forgone while a fall in a_M forces the agricultural sector to expand at a higher opportunity cost. As manufacturing expands at a lower opportunity cost compared to agriculture, comparative advantage shifts from agriculture to manufacturing (Lim and Feng, 2005).

Seen from above, we see that the processes of opening up, development, and structural transformation are closely interrelated. More importantly, these interrelated processes may have various impacts on the environmental outcomes through varying mechanisms and channels. To explore the effects of opening up, structural change, and economic development on resource sustainability and the quality of the environment in China, one central issue is to look into whether China is relying on excessive amounts of environmental resources in producing output, and whether environmentally friendly (or 'green') growth and development can be sustained in the long run. The present paper, under a theoretical framework of dynamic comparative advantage, and by applying the basic concept of the environmental Kuznets curve, investigates China's structural transformation and the evolution of the pattern of its opening up, their impact on resource sustainability and the quality of the environment, as well as the role China is playing in the development of the Asia-Pacific region.

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Rural experience for urban students visiting Suo Oshima, Japan

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Abstract

The Seto Inland Sea is a shallow sea that separates the Honshu, Kyushu and Shikoku Islands of Japan. This body of water serves as a waterway connecting the Pacific Ocean in the East and the Sea of Japan in the West of the Japanese archipelago. The Seto Inland Sea is dotted by a number of small islands, characterized with traditionally managed, human dominated landscapes with an economy based on fishery and agriculture. This paper investigates one of these islands, Suo Oshima in Yamaguchi Prefecture, as a case study. In addition to its fishing economy, the island was developed for tangerine (*mikan*) cultivation due to its relatively warm temperature. After the peak of the bubble period in Japanese economy, this type of rural livelihood became an attraction for urban people. Urban people started using Suo Oshima's beautiful beaches for recreational purposes after the Oshima Bridge was constructed. A number of beach resorts and campsites were developed for attracting urban tourists. Furthermore, in more recent years, people from urbanized areas started to recognize the educational importance of agriculture and fisheries for the younger generations. These two factors combined to create economic sustainability through island tourism in Suo Oshima, which has become remarkably successful in attracting school students from Osaka and Tokyo. The paper explores this type of island tourism model to analyze how it can contribute to the sustainability of rural economies in small islands.

Introduction

The focus of this study is the recent tourism phenomena in small islands especially in Suo Oshima in Yamaguchi Prefecture. Suo Oshima is the 3rd largest island in the Seto Inland Sea; however, its land area is only 138.17 km² (Suo Oshima Cho 2014: web). Suo Oshima was formed after merging the towns of Oshima, Kuka, Tachibana, and Towa in October 2004. Like other small islands in the Seto Inland Sea, Suo Oshima is characterized by traditionally managed, human dominated landscapes, with an economy based on fishery and agriculture.

The Seto inland sea is characterised by shallow waters with ample penetration of sunlight. This has supported good seagrass beds. This attracts clams, crustaceans, herbivorous and carnivorous fishes, making the small islands in Seto inland sea good fishing areas. Furthermore, due to its warm, temperature with ample sunshine, and a mild climate, the island was used for tangerine (*mikan*) cultivation, also called Oshima oranges. The history of Oshima oranges dates back to 1848, when Fujii Hikoemon (藤井彦右衛門), after a visit to Kishu (紀州) area, Kii Province in Wakayama Prefecture, brought some tangerine oranges and planted in his garden (Suo Oshima kankou kyokai 2014: web). Orange orchards cover as much as 80% of the land in Suo Oshima at present, and approximately 80% of the oranges in Yamaguchi Prefecture come from this island. The island is often called *mikan no shima* or island of oranges. There are two main seasons where tourists can enjoy the being involved in the islands agricultural landscape. The fall season marks the period when tourists can enjoy being involved in picking oranges; in summer (off season), they can enjoy the view of flowering orange orchards.

Although the importance of Suo Oshima orange is still considerable, like other rural areas in Japan, rural depopulation has caused a shrinking of this agricultural industry. After World War II, the secondary and tertiary industries in the urban areas became more attractive, especially for younger generation. Suo Oshima had approximately 60,000 residents just after World War II; however this population reduced to 18,334 in April 2014 (Suo Oshima Cho 2014: web).

During the post bubble period after 1990s, however, rural livelihood became an attraction for urban people as it provided much needed relief from competitive and stressful urban life. Urbanites enjoyed visiting the beautiful beaches

in Suo Oshima for recreation. They created the first wave of tourism at Suo Oshima, who appreciated and enjoyed its rural ways of life. Visits to the island were facilitated by the Oshima bridge (the bridge was opened in 1976, and became a toll free way to access Suo Oshima from 1996). In the more recent years, however, people from urbanized areas started to recognize the educational importance of agriculture and fisheries for the younger generations, as knowledge about these activities are not found in the urban areas. These waves of tourism development in Suo Oshima have become one of the models for nature-based educational tourists in Yamaguchi Prefecture.

Methodology

This paper is based on literature analysis, together with basic statistics related to Suo Oshima. Some of the specific literature used in this study, are reports and newsletters published by Suo Oshima Town, and Yamaguchi Prefecture. Suo Oshima Town has started to publish its own newsletters, which include some useful statistics on the website (Suo Oshima Cho 2014: web). Yamaguchi Prefecture also has been publishing reports related to rural tourism such as “*Yamaguchi no Inaka de Taikengata Kyouiku Ryokou*” in 2010 and “*Yamaguchi Slow Tourism Suishin Jigyo*” in 2013.

In addition to literature survey, field visits were also carried out with observations, together with photographic records, which show the nature of tourism activities at Suo Oshima. As the first author of this study is one of the committee members for promotion of nature-based educational tourism in Yamaguchi Prefecture, his own raw data based on field works such as interviews and participant observations have been used. In-depth qualitative survey is supported to fill up the missing part of related reports used for this study.

Discussion

In this section we provide a short description of the nature, and characteristics of tourism activities at Suo Oshima through photographs. Table 1 shows the number of rural oriented school excursionists to Yamaguchi Prefecture. It shows the outstanding number of excursionists who visit Suo Oshima. The majority of these tourists visits Suo Oshima to experience, and learns about its rural ways of life.

Figure 1 is a map of public transportation in Yamaguchi Prefecture. Yamashiro District is located relatively near to Shin Iwakuni Station and Nagato City is a neighbor of Shimonoseki City which has the largest population in Yamaguchi Prefecture. Hagi City and Suo Oshima are categorized as a remote area compared with previous two cities. However, the number of excursionists in Suo Oshima is large. Furthermore, Yamashiro District is near to Hiroshima Prefecture which has the largest population in Chugoku region.

Figure 2 is a typical farewell scene of excursionists and local host families. Like other rural tourism destinations, host families of Suo Oshima are aged. In this case, there were only two buses because the number of excursionists in this excursion was relatively small. As Suo Oshima is far from airports and shinkansen stations, it is difficult to carry a large number of tourists at one time. In addition, generally, each homestay hosts can handle approximately 5 students. Compared with educational tours in Kyoto and Nara, the number of students in one group is relatively small in Suo Oshima. This type of small scale community based tourism is regarded as more environmentally friendly for Suo Oshima, compared with mass tourism which creates developments of resorts and shopping malls thereby creating urbanized resource use patterns in the destination.

Table 1: Rural-oriented school excursionists to Yamaguchi Prefecture by regions in 2012

Municipalities	Number of Schools	Number of Students
Suo Oshima	22	3914
Yamashiro District	2	303
Hagi City	1	110
Nagato City	1	84

Yamaguchi Prefecture (2013) *Yamaguchi Slow Tourism Suishin Jigyo*, Yamaguchi Prefecture, Fact Sheet

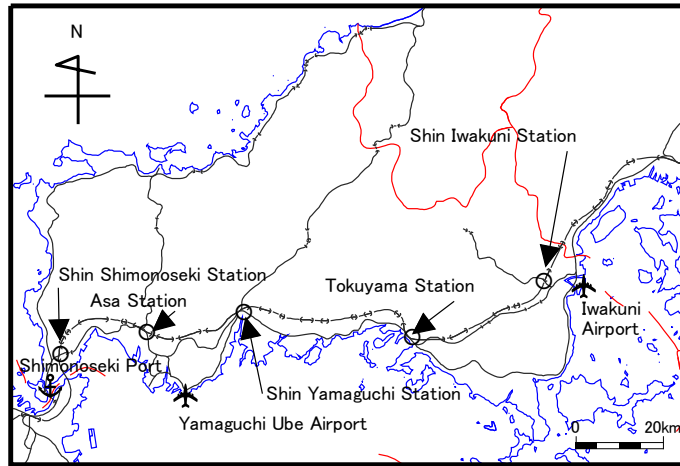


Figure 1: Public Transportations in Yamaguchi Prefecture (Source: made by author)



Figure 2: Farewell (Suo Oshima, 2014, Photo by Author)

Figure 3 shows a scene from a typical educational tour in rural area. Here, a hand-made flag which shows “we will never forget you”, “please come back again” and “we are always waiting for you” written in local dialect can be seen. Local products such as *mikan* (tangerine) and local wild animals such as *tanuki* (Japanese Raccoon) are also drawn in this flag, together with introduction of local dialect of the island. This type of simple but heartwarming hospitality moves attendants. This type of hospitality makes the visitors from the same school repeat their visits at Suo Oshima. Some of the graduates also came back to Suo Oshima individually, and without any organized tours. These repeated visits are one of the strengths of excursion tours in Suo Oshima.



Figure 3: “We will never forget you” (Suo Oshima, 2014, Photo by Author)

On the other hand, these home stay hosts are also well organized. Figure 4 is a scene from a meeting with Mayor and host families. As soon as the farewell ceremony finished in the morning, the next excursionist bus tourists arrived in the afternoon in the same day. Here meeting is being carried out not in a room but on the spot, to save time. Leadership of the Mayor, together with well trained host families can make school excursions possible in the way it is at the island.



Figure 4: Mayor and Host Families (Suo Oshima, 2014, Photo by Author)

From a point of tourism management, school excursionists have another advantage. Like other island tourist destinations, the peak season of tourists in Suo Oshima was summer. Generally speaking, this seasonal gap between summer and other seasons made difficulties in island destinations especially in beach resorts. However, as school excursionists generally visit Suo Oshima in spring and fall, the seasonal gap in tourist number is reduced.

At Suo Oshima much of the leadership functions as well as hosting activities are done by the aging population of the island. This case suggests that, in small islands tourism, where working age population is low, aging population can take its place to perform economic activities. A balance is established between *visitors*, the majority of whom are urban youths, and the *visited*, represent by the aging population of the island. Together, they has put a balance between simplicity and commercial management regarding rural tourism in small islands.

Conclusion

This paper introduced a case of school excursion strategy in Suo Oshima as one of the recent tourism phenomena in small islands in Japan. The need of rural experiences by urban people is one of the social backgrounds for these excursion activities. From a point of scale, relatively small excursionist groups are also environmentally friendly. The low key and education based approach is regarded as an advantage for these tours. On the other hand, good leadership and well trained personnel are also important to sustain this type of rural tourism activity. As Suo Oshima is much remote than other tourism localities in in Yamaguchi Prefecture, human resources are key to attract visitors on a long term basis. Thus, the present tourism activities in Suo Oshima is centered around a balance between the youths who come from urban areas to experience and learn about rural areas, and the aging population of the island who carry out much of the tourism planning and management activities.

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Is the UNESCO inscription positive to Ha Long Bay? A question from visitor management perspective

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Abstract

The global heritage includes sites and monuments of worldwide importance and recognized as World Heritage Sites (WHS) by UNESCO. Some countries have reported an increase in visitor arrivals at heritage properties once they have been listed as WHSs (Su & Lin, 2014); other studies have found that such listing has both negative and positive outcomes to social and environmental sustainability (Jimura, 2011). Acknowledging the controversy of the topic, this paper aims at analysing the case of Ha Long Bay of Quang Ninh Province, Vietnam. By reviewing the issues of visitor management over twenty years (1994-2014) since the inscription, authors argue that even though the inscription has contributed to the development of tourism, but uncontrolled visitor influx resulting from the designation has negatively affected the conservation for universal value of the WHS.

Introduction

The objectives of the United Nations Educational Scientific and Cultural Organization (UNESCO) World Heritage Convention are to identify, promote and protect unique natural and cultural sites. There is a structured nomination process of sites with “*outstanding universal value*” requiring the nominated area to meet at least one of the ten selection criteria. Bandarin (2011, p.5) has identified “*the challenges that would confront these sites worldwide as a consequence of . . . the explosion of mass tourism*”.

Ha Long Bay was first inscribed on the World Heritage List in 1994 as a natural property under criterion of landscape value and in 2000 the inscription was extended to include criterion of geology and geomorphology. Located in Quang Ninh province in north-east Vietnam, Ha Long Bay extends over 1,500 km². The UNESCO World Heritage covers an area of 434 km², including 788 limestone islands. The case of Ha Long Bay, the first of two natural properties established among the total of seven World Heritage properties in Viet Nam, is an example illustrating for the ambiguous task to balance tourism development and heritage conservation. Owing to the inscription, booming tourism to Ha Long Bay over the past 20 years has affected the universal value of the site in addition to industrial development, population growth, aquaculture and fishing in heritage surrounding areas (IUCN 2013).

Visitor Management at WHS: World Heritage listing provides the highest level of recognition of heritage significance that can be associated with an area (Pedersen 2002). Although the authentication of the WHS aims to protect historical and natural assets belong to human beings, many countries have adopted the World Heritage designation as a marketing tool to attract foreign tourists, primarily because of the social, cultural and economic wealth this industry generates. Some countries have reported an increase in visitor arrivals at heritage properties once they have been listed as WHS (Su & Lin 2014), other studies however, found that listing certainly is not a guarantee for tourism growth (Huang, Tsaur & Yang 2012).

Assessing the impacts of WHS designation on local communities in Ogimachi in Japan, Jimura (2011) found that the inscription caused the shift of local industry to depend on tourism and ironically declining the level of conservation. It is now widely acknowledged that protected areas are impacted by increases in visitation, often to the detriment of both the site and the visitor experience (Buckley 2004, Hall 2006).

In visitor management, carrying capacity is a concept referring to a finite capacity for a tourist facility or destination established in order to restrict any detrimental impacts. Integrating the concept of carrying capacity into Destination Life Cycle Model (Butler 1980), Weaver and Lawton (2009) argue that at the fourth stage of consolidation, once the number of visitor goes beyond the carrying capacity of the site, the destination might encounter many environmental, social and economic problems resulting on the detriment of the visitor experience.

Despite of being one of the most important natural tourist attractions in Vietnam, few tourism researches have been conducted at this site, even though the urgency of problems concerning visitor management has been mentioned in numerous reports and projects by national and international agents. This research reviews findings from previous industry reports conducted in Ha Long Bay, and authors' initial research by participant observation and reviewing tourist comments in order to comprehend readers' understanding of the visitor management issues at the site.

Methodology

The current research employed a case study method. The case study is an empirical inquiry investigating a contemporary phenomenon in depth and within its real-life context (Yin 2009). Ha Long Bay was selected for analysis as it is a major national, regional and international tourist destination; therefore it is an example of the challenge that WHS are facing under pressure of mass tourism.

The data for the case study were derived from 1) the review of secondary sources researching about the site such as provincial and national archival records (tourism statistics), documentation of Non-governmental Organization such as UNESCO, International Union for Conservation of Nature (IUCN), reports by European Union's Environmentally and Socially Responsible Tourism Capacity Development Program (ESRT) and a survey by Japan International Cooperation Agency (JICA), 2) the review of tourist comments on Tripadvisor from July 2013 to July 2014, and 3) the observation of site visit in 2014 conducted by authors of the paper.

Findings and Discussion

Being a major national, regional and international tourist destination, over the past two decade, the number of tourists visiting the property has dramatically increased more than 20 times from 236,000 in 1996 to 4,768,000 in 2013, about 50% of whom are foreigners (Ha Long People Committee 2013). The primary activities are cave visits, sightseeing, swimming, trail walking, kayaking and appreciation of nature and culture. Tourists normally access by boat and visit a limited number of popular sites. The World Heritage Committee has addressed the issue of visitor management at the site since 2003.

Unprecedented increases in visitor numbers (see Figure 1), had resulted negatively on natural environment of the Bay. In 2009, the Committee again expressed its serious concern that the property remained under pressure from tourism development, and in 2011 it encouraged Vietnamese authorities to consider options for a better management of visitors (IUCN 2013). Ha Long People Committee (2011) who drafted The Management Plan for Ha Long Bay 2013-2015 acknowledged the following shortcomings: overcrowding at some sites, excessive waste production from tour boats, inadequate facilities and limited use of modern technology, lack of properly trained tour guides, absence of specific regulations on new tourism developments such as mountain climbing, diving and cultural tourism, and inadequate eco-tourism opportunities.

According to JICA's (2013) survey, inappropriate activities and behavior of tourists are discharging waste, trampling, breaking, writing and drawing on the stalactites and stalagmites in the cave or making degradation the biodiversity of the area. On average, tourist discharges about 0.5 kg of solid waste and approximately 100 liters of wastewater per trip. Carving one's name or writing, drawing on cliff and touching touch the stalactites and stalagmites to take photos. The stalactites and stalagmites are damaged by CO₂ emission from dense tourists, which recorded, for example, the average visitation of up to about 5,500 tourists per day to Thien Cung and Dau Go caves during the peak month of July 2008 (Ha Long Bay Management Board, 2009).

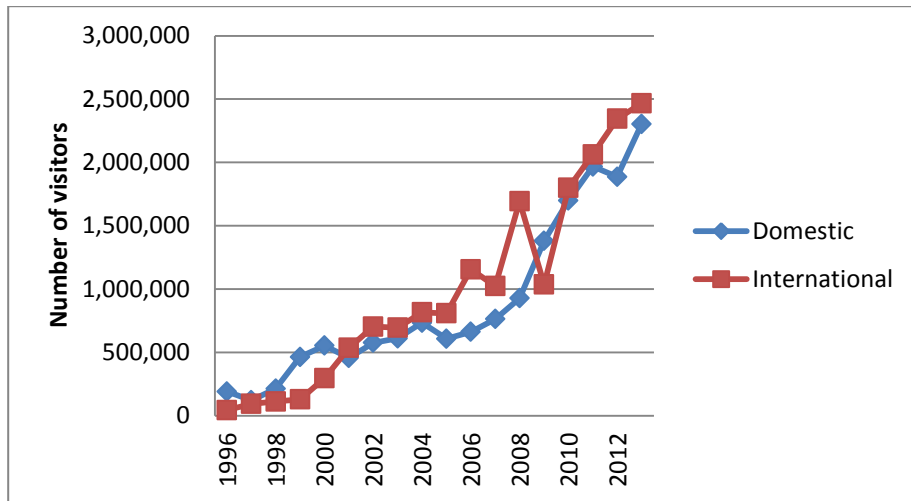


Figure 1. Number of Tourist Arrivals to Ha Long Bay (1996 – 2013)
 (Source: Ha Long Bay Management Board, 2009 and Ha Long People Committee, 2010-2013).

The detriment of both the site and visitor experience is evidenced in Ha Long Bay. In terms of tourism facilities, the number of boats has increased 1,6 time from 329 boats (2006) to 527 (2013), of which overnight boats account for 30% (167 boats) putting high pressure over the ecological environment of the Ha Long Bay (IUCN, 2013). Many boats do not have equipment for collection and treatment of hazardous liquid waste. After each trip, about 50 to 100 kg of garbage and food waste are disposed /boat/day (JICA 2013). A lot of solid waste such as shell, crab shell, rotten fruit, vegetable even syringe is discarded disorderly along the sea coastline. Operation of boats and vessel in the Ha Long Bay stirs sediment in the sea bottom making turbid and collides with the marine species, particularly the anchoring on coral reefs, sea grass, oil scum spreads widely on the sea surface.

Poorly regulated tourism activities result on detriment of visitor experience. In a national survey of major tourist destinations conducted for European Union’s ESRT (2014), the preliminary findings indicated that Ha Long Bay was rated lowest on the criteria of environmental friendly destination (M=4.4) and on overall evaluation of stay at the site (M=4.8) among five destinations (Sapa, Ha Long, Hue, Da Nang and Hoi An) in the survey. Many international guests in Ha Long showed their great concern about the environment there being polluted by too many boats operating around the bay all day. In addition, they also reported that during their trip, they saw lots of rubbish not being treated properly. A great number of international and national respondents showed their serious concern about the environment in the destinations of Ha Long with 17% of international and 15% of national responses about it. The lowest score (M= -0.6) was also recorded for the effort to maintain the destination. As a result, tourists stay shortest of only 1.4 nights and spend less in Ha Long as compared to other popular tourist destinations in Viet Nam i.e. Sa Pa, Hue, Da Nang and Hoi An.

Being concerned about visitor experience at Ha Long Bay, a study on tourist comments about the site on Tripadvisor has been conducted. Of the total 2,373 reviews of Ha Long Bay as an attraction from July 16, 2014, a total of 51 (2.15%) reviews classified the attraction as ‘terrible’ while 80 (3.37%) classified their experience as ‘poor’. Further exploration revealed that out of 51 reviews as ‘terrible’, 24 reviews (47%) concerned that the environmental condition was poorly protected (Le, 2014).

Overall, despite a rapid increase in the number of visitor to the site, the length of stay, expenditure and satisfaction level remains relatively low. This shows that there is problem of over carrying capacity resulting from a massive increase of visitors over the last 20 years. In addition, the market had become saturated with irresponsible tour operators unconcerned with environmental issues, leading to a recommendation that visitor regulations be effectively enforced to limit tourism impacts in key areas while enhancing visitor experience (IUCN, 2013). Hence, according to the Destination Life Cycle (Butler, 1980), the site of Ha Long bay is at the stage of saturation. 20 years since the designation of UNESCO World Heritage, tourism in Ha Long Bay has developed with dramatic increase in the volume of visitors; however, the site now is at its cross-road demanding a comprehensive revision of visitor management towards more sustainable development options.

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Education, Education for Sustainability, Ethics Education

The impact of a local university on its immediate community in the province of Laguna, Philippines

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Abstract

This study analyses the relevance of a local government-owned university located in the Province of Laguna, the Philippines. Through a qualitative descriptive study, the roles, functions and relevance of a 'local university' (LU) as well as its impact on the community are explained though it is regarded as a "diploma mill" by more established Institutions for Higher Learning (IHL). The respondents of the study included students enrolled in the academic programs that the institution offers, and the public perception survey was conducted among the people living within the vicinity of the institution since they are the ones directly affected by its presence. A desk review of related literature, policy and documents on theories and trends for managing local universities was also done. The LU appears to have some overlap with the roles and functions of a better equipped and bigger State University near its vicinity creating redundancies that lead people to question the existence of the smaller institution and the ethics behind its establishment. However, both of these higher education institutions were borne out of a need to provide affordable and effective academic programs for the marginalized constituents of the immediate community and beyond. The author has developed a diagram based on Paolo Friere's "pockets of hope" statement and Merilee S. Grindle's "good enough governance" which try to show how the presence of the LU affects their immediate community's ability to combat poverty and pave the way for sustainable development.

Introduction

The Local University was born out of a need to provide an affordable and relevant academic program for the ordinary constituents of the Philippines. Curiosity regarding this institution was primarily raised upon reading an article posted by the Philippines Today (CHED: Convert local universities and colleges, 2009, para. 1) documenting that the Commission on Higher Education (CHED) battled the conversion of Local Colleges and Universities (LUCs) that proliferate across the country into community colleges and polytechnic schools.

In Sta. Cruz, Laguna, the presence of two public institutions, a State University (SU) and a Local University (LU), located in the same *barangay* poses a big question on the relevance and impact of the smaller structured Local University (LU) which, from a glance, appears to be reforming its roles and functions similar to that of the bigger state university. This study has tried to answer the question "What are the roles, functions and impact of a local university in the community in the availability of a state-funded tertiary educational institution?"

The specific objectives for the study are the following: To describe the profile of the LU and its immediate community; to analyze the LU in terms of vision and mission, admission requirements, school fees, programs offered, number of enrollees, library holdings, faculty qualifications, faculty publications/research projects, faculty evaluation, the number of graduates per program, and the percentage of board examination passers as compared to the national performance; and to assess the impact of the LU as a provider of tertiary education to its immediate community based on the following indicators: responsive academic and non-academic programs that address the needs of the community, partnership with the Local Government Unit (LGU), perceived employability of its graduates, and to recommend strategies that will strengthen the role of the LU in the community.

Methodology

The conduct of the study is limited to two institutions in Laguna. One is an LU institution run by the LGU and the other, a state-funded institution of higher learning. The State University was also looked into for possible comparison of the LU to a much bigger and established institution. The reason for this particular choice of institutions is that both

schools are located within the same locality in a town in Laguna. They are just a 15-minute walk away from each other separated only by the national road.



Figure 1. Aerial view of the LU and SU Campuses (generated from Google Maps, 2013), approximately 1.5 Km away from each other.

In order to get the necessary information to build this descriptive study, a survey was conducted on students of both schools from the respective HEIs as well as the immediate community where it is located. This was done in order to get a good picture of how students perceive their institution as well as their own perception as a product of the HEI. A random sample of ten percent (10%) was taken from the students enrolled in the seven colleges that were common to both institutions regardless of year level, age and gender.

Secondary data like the Vision and Mission, admission requirements, programs available, Faculty Profile, evaluations and publications as well as the list of books available in the library and the number of graduates and percentage of board exam passers were also obtained from these institutions.

The community survey was conducted among the people within the immediate vicinity of these two institutions since they are the ones directly affected by the presence of these two academic establishments. Thirty (30) respondents were purposively sampled from the immediate community. The number of respondents was then divided into half, having 15 respondents who have or had relatives studying at the SU and the other 15 for those who have a kin studying or having studied at the LU. A 20-minute, Key informant interview with the respective heads of the two institutions were also conducted.

Findings and Discussion

The Local University: Located in a *barangay* with a population of 5,627 in Sta. Cruz, the capital of the Province of Laguna (Figure 3), this local university was established on February 15, 2006 by virtue of Provincial Ordinance No. 1, series of 2006 during the term of the first female governor of the province. A university upon conception, the LU was established to provide access to quality education for the underprivileged students. This particular LU is an ALCU-accredited institution whose funding is directly under the office of the provincial governor. It was created to promote the rights of all Lagunenses to quality education at all levels. Some of its obligations are to give the less privileged but talented and gifted students of the province of Laguna the opportunity to “develop their potentialities and commit to establish and operate vocational, technical, and higher education to accommodate graduates of secondary schools to pursue vocational, technical and higher education courses.” (LU website, 2006)



Figure 2. Aerial view of the LU Campus (generated by Google Maps, 2013).

Organizational Structure: The LU has a distinct structure. Since it is directly under the Governor’s office, the incumbent Governor of the Province sits as both President of the University and Chairman of the Board of Regents. The Board of Regents consists of ten (10) members. Special seats in the BOR are reserved for the Vice Governor, the Provincial Board Member in-charge of Education, the CHED Regional Director, the Division School Superintendent of the DepEd, the President of the Association of Local Colleges and Universities-Commission on Accreditation (ALCU-COA), and the rest are leaders from the private sector with ties to the university.

There are no full-time administrative personnel in the LU. All of them hold positions in the local government. In terms of day-to-day operations of the school, the ones in-charge are the Vice Presidents (VP). The VP for Academic Affairs is the one overseeing the school affairs, activities and the Department heads, who in turn checks the faculty members under them. The VP for Administration is the one who oversees the office operations especially the Treasurer, Human Resource Officer and the Budget officers. The Provincial Treasurers Office, Provincial Human Resource Officer and the Provincial Budget Officers also have a hand in supervising their respective campus-based representatives.

Vision: In their respective visions for their institutions, both the LU and SU indicated that they are centers of development in their communities.

Mission: Both universities in their mission are aiming towards producing scholars who will have an opportunity to help in their society and nation building.

Table 1. Vision and Mission of the Universities

	LU	SU
Vision	Globally competitive and socially responsive center of quality education and development in the Province of Laguna	A center of development transforming lives and communities
Mission	The University is committed to produce academically prepared and technically skilled individuals who are socially and morally upright citizens.	The University provides quality education through responsive instruction, distinctive research, sustainable extension and production services for improved quality of life towards nation building.

Admission requirements: The LU and the SU have similar requirements for admitting students. Not one of the HEIs indicated that they require students to take an entrance examination for acceptance. The only difference between the two institutions is the residency requirement of the LU. One must be a resident of the province of Laguna in order to matriculate in this institution. The SU does not require such proof of residency and thus, they open their doors not just to people from the province but beyond it.

Matriculation Fees: The LU has a lower rate for its school fees. What makes it unique is that the Php 3,550 price remains the same for all courses, regardless of the number of units enrolled. At Php 7,000.00 the SU commands almost double the fee requested by the LU. They also have more miscellaneous and other fees. But relatively, the SU's fee still remains low at Php 100 per unit as compared to other universities in the province.

Courses and programs offered: CHED also requires that a university must have at least a four-year course in liberal arts, a four-year course in the Basic Sciences/Mathematics, and a four year course in the Social Science. There are seven courses common to both SU and LU: Bachelor of Elementary Education; Bachelor of Secondary Education; Bachelor of Science in Mechanical Engineering; Bachelor of Science in Entrepreneurship; Bachelor of Science in Information Technology; Associate in Computer Technology; Health Care Services (TESDA). As of First Semester A.Y. 203-2013, the LU has no Graduate courses being offered in their curriculum.

Number of Enrollees: The size of enrollees of the LU, 2,559 students, is just ¼ the size of the SUC. The SUC enrollees numbering at 7,069 students are just for the Sta. Cruz campus alone.

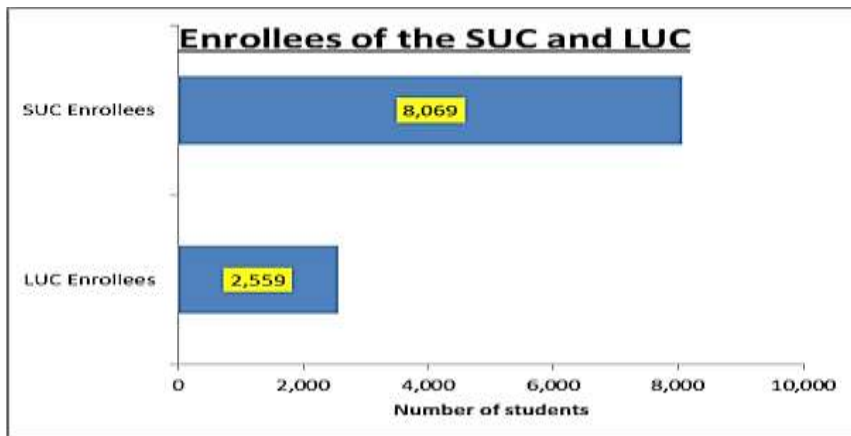


Figure 3. SU-LU Enrollees for First Semester, 2013-2014.

Library holdings: Both LU and SU need to upgrade their library holdings in order to be more academically competitive.

Faculty qualification: There are more PhD holders in the SU faculty (Table 2). The Masters' degree holders at the SU numbers to 64 professors while the LU has 13 which is a good size since CHED requires at least a Master's degree for teaching at university level. But both institutions still have Bachelor's degree holders in their faculty which, by virtue of M.O. 48s1996, should be addressed if these HEIs want to keep their "University" status.

Table 2. Faculty Qualifications

Academic Degrees	LU	%	SU	%
	Numbers		Numbers	
Ed.D/Ph.D.	10	28	15	15
Master of Arts (MA)/Master in Science (MS) with Ph.D. units	2	6	27	27
Master of Arts/Master in Science	11	31	36	36
Bachelor of Science with MA/MS units	0	0	22	22
Bachelor of Science	11	31	1	99

Faculty publications and research projects: As of First Semester A.Y. 2013-2014, both the LU and SU have yet to produce a faculty publication/research project.

Faculty evaluation: Faculty Evaluations are one factor in assessing the instructor's teaching effectiveness. Since their establishment, both SU and LU have yet to undertake a faculty evaluation by their respective Human Resource office.

Number of Graduates: In the seven courses common to both institutions, the LU's biggest number of graduates for

A.Y. 2012-2013 is 38 students who are in the Associate in Computer Technology (ACT) certificate course. The biggest number of graduates for the SUC is 186 students for their BS Information Technology (BSIT) course. Looking at the enrollment of the two courses in A.Y.2013 – 2014, where the LU Associate in Computer Technology (ACT) course had 45 enrollees and the SUC's BS IT had 513, being both quota courses that only accept a certain number of students due to the limited capacity of their IT laboratories and computers, there are more students who do not get to finish the BSIT course (513 enrollees: 186 graduates) than the LU's ACT program, which has an enrolment figure of 45 enrollees and 38 graduates.

Board examination performance: The Dean of the College of Teacher Education of the SU said that they let all students who are willing to take the Licensure Exam for Teachers (LET) during the scheduled date take the test if they feel they are ready to do so. This is not the case with the LU since they pick only the students who show promise in passing the exam. According to the Dean of Education of the LU, they need to do this in order to spare the student and the school unnecessary expenses.

Table 3: Percentage of Board Examination Passers for the Licensure; Examination for Teachers (LET), March 10, 2013

BS in Elementary Education	LU	SU
Total Examinees	2	250
Failed	0	30
Passed (%)	100	88
National Performance (%)	27.78	40

Student Survey

Profile of Respondents: The student respondents from both institutions were of the 17 to 22 age range. Female respondents from the LU represented the majority of the sample population at 67% while the SU had more male respondents at 55%. Seventy percent of the LU respondents were in their second year of studies, 20% were in their fourth year while 10% were in their freshman year.

Respectable reputation: Sixty four percent of student respondents from the LU strongly agree that their school has a respectable reputation, while 47% of SU students firmly believe that their institution is respectable.

Exhibited professionalism of faculty: Fifty percent of the students in the LU strongly agree that faculty members of their institution exhibit professional conduct, while only 38% of the SU agree to the claim.

Reliable support staff: When asked on whether they have reliable support staff in the LU, only 30% of the students strongly agreed. The LU result is only one percent more than the SU since they only had 29% who strongly agreed.

Wide-range of courses available: Twenty three percent of the LU respondents say that they have a variety of courses to choose from while 53% of the SU student respondents strongly agree that their school has a wide range of courses to offer.

Clean and complete school facilities: Cleanliness of the toilets, classrooms and surroundings as well as having complete facilities are desired in institutions. Thirty three percent of LU respondents agree to the availability of both in their school while another 30% are moderately convinced. Forty two percent of the SU respondents agree that they have these qualities in their campus while 28% are also just moderate on their opinion.

Sufficient classrooms: Having sufficient classrooms to accommodate all students comfortably is the ideal for all institutions of all levels. Thirty two percent of LU respondents are moderate on their opinions on the availability of this in their school while 42% in the SU agree that they have enough rooms to accommodate all students.

Availability of relevant publications and literature in the library: Thirty three percent of the LU students are moderate in their opinion regarding the availability and relevance of publications and literature in their library to their respective courses. As for the SU, 55% agree that they have books and study materials that are relevant to their course.

Choice of Institution: Both LU and SU students were asked why they chose that particular university and were requested to rank the top three reasons behind their choice (Table 4). Based on the results, students who favored the LU chose to study there primarily because it has affordable fees; it is also accessible to them and has a high quality of instruction. On the other side, the SU respondents chose their institution due to its high quality of instruction, affordable fees and then accessibility.

Table 4. Top Reasons for Respondents' Choice of Institution

Rank	LU	SU
1	Affordable school fees	High quality of instruction
2	Accessibility	Affordable school fees
3	High quality of instruction	Accessibility

On Getting a Degree and perceived employability: The LU and SU students were asked the crucial question of why they want to have a university degree. Both respondents from the LU and SU prioritized on looking forward to having a better life as the primary reason for studying. This is followed by the possibility of getting employed and then having a degree titled to them.

On the chances of getting employed after graduation, 98% of the respondents from the SU believe that they will be hired immediately while 92% from the LU strongly agreed that the education that they received will land them a job and hopefully give them a better life.

Table 5. Top Reasons of Respondents for pursuing a University degree

Rank	LU	SU
1	To have a better life	To have a better life
2	To get employed	To get employed
3	To have a degree	To have a degree

Financial resources: The student respondents were requested to indicate the financial resources that cover for their school fees. The majority of students from both LU and SU still receive financial support from their parents. Scholars are quite abundant in the SU as compared to the LU. This is explained by the fact that the SU demands higher school fees than the LU and not all can pay from their own pockets. The LU also has nine student respondents who pay using their own money earned from part-time jobs. The SU respondents have three working students. Both institutions had equal, three student respondents each, who rely on their relatives to cover their school fees.

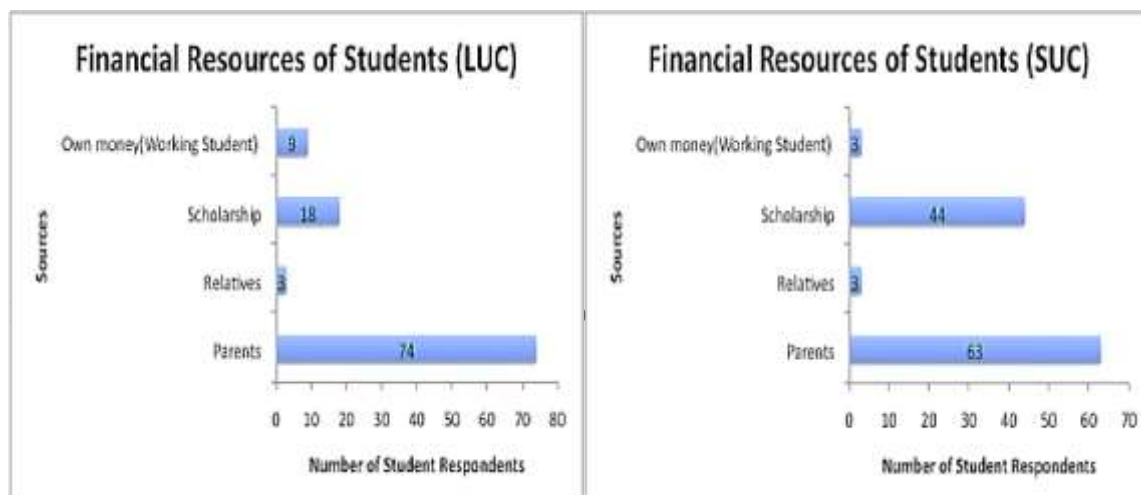


Figure 4: Financial resources of the two schools

Importance to the community: When the student respondents were asked whether their institution of choice was important to the community or not, the answers that they gave in some ways, summarizes the level of relationship between the institution and the community. Ninety eight percent of LU respondents said that their institution is relevant since they provide the community with affordable education.

Academic programs for the community: Forty six percent of the student respondents from the LU agree that they have academic programs that are targeted towards the community: “*Meron kaming Aerobics, Fitness at Basic First Aid Seminars para sa mga residente ng Barangay.*” (We have aerobics, fitness and Basic First Aid seminars for the residents of the Barangay.)

Fifty two percent of SU respondents agree that they have academic programs for the community. But none could identify a solid program except for one Education student who mentioned the program for teaching of English language to Korean students after class hours.

The president of the LU mentioned that the school provides mechanical engineers for this massive Japanese Automotive company. The president said that there has been a Memorandum of Agreement (MOA) between the school and the company, that the school will provide the employees and the company with help with their employment. The SU also has connections with a locally-owned fried chicken restaurant chain which, according to the university President, is the biggest employer of their Hotel and Restaurant Management (HRM) graduates.

Support for local government projects: Fifty two percent of the respondents from the LU strongly agree that they support the activities of the local government. Students participate in clean-up drives initiated by the barangay, and assist in decorating during fiesta.

Forty nine percent agree that the SU supports projects of the Local Government. During the La Laguna Festival, the students join the parade and other activities. The criminology students help in the facilitation of traffic. Students also help clean the river during NSTP.

Community Survey

Profile of Respondents: The age range of the respondents was from 36 to 40 years old. 19 of them were male while 12 of them were female.

Educational attainment: Six of the respondents were high school graduates, nineteen college graduates and one of them finished a vocational course. Four of the respondents attended high school but did not finish.

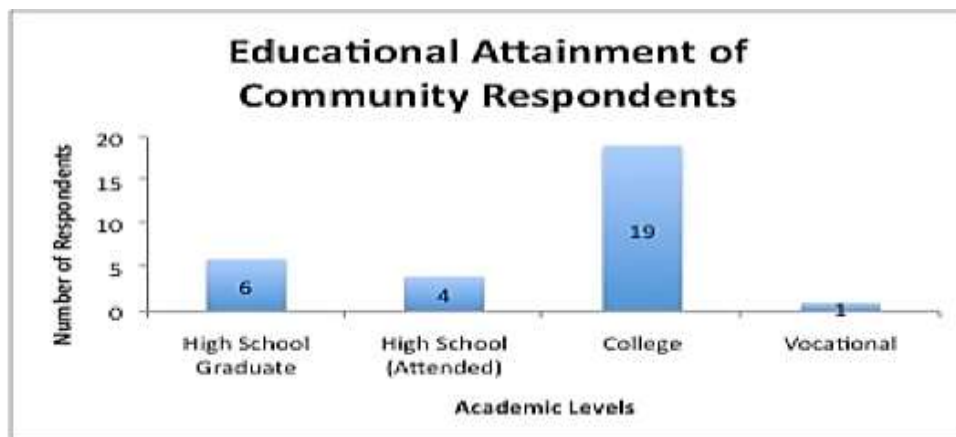


Figure 5: Educational Attainment of Community Respondents

Choice of institution: The respondents were asked why they chose that particular university and ranked the top three reasons behind the choice. Based on the results, we can see that respondents who favored the LU, chose to send their relative to study there primarily because it has affordable fees, is accessible to them and has a high quality of instruction. On the other side, the SU respondents chose their institution due to its high quality of instruction, then accessibility, and lastly because of its affordable school fees.

Table 6. Top Reasons for Community Respondents' Choice of Institution

Rank	LU	SU
1	Affordable school fees	High quality of instruction
2	Accessible	Accessible
3	High quality of instruction	Affordable school fees

Financial resources: Respondents were requested to divulge their monthly income. This was done in order to get an idea of the economic background of the people in the community who support their respective HEI. Fifty three percent of respondents from the LU group belong to the monthly income bracket of Php 5,000 and below while the SU respondents have only 40% of the same Php 5,000 below bracket, 13% less than LU respondents. Though both are equal in number when it comes to the Php 5,000-Php 10,000 and Php 10,001-Php 15,000 brackets, the difference crops up again in the Php 15,001-Php 20,000 and above bracket. This bracket is represented in the LU group as only 7% while the SU group has 20% of its respondents belonging to this income bracket.

Based on the figures given, though both have respondents belonging to the Php 5,000 and below bracket, there are more financially capable people who prefer the SU than the LU.

On getting a degree: All the respondents were asked a general question on why they wanted their relatives to finish college. Eighty seven percent of the respondents said that they wanted their relative to go to college in order to have a better future. The second answer that had the same percentage of respondents agreeing to it was so that their relatives, upon getting the degree, would easily be employed.

Relevance to the community: When asked whether their institution of choice was important to the community or not, the respondents had very informative answers. Ninety three percent of the LU respondents said that their university is relevant, as one respondent said: *“Tuition is affordable; it also has high quality of teaching. It is very accessible too. We benefit a lot from that school.”*

As for the SU, 100% of the respondents said that their institution is relevant to their community. The reason behind this is summarized by one respondent:

“This school has been here long before. It has a good reputation in teaching and the tuition is cheap. This is also the first university in our area that is why we are so proud of it.”

Conclusion

Education for Filipinos will always be an important part of life. People go to great lengths, working odd jobs with odd hours just to get enough resources to fund their schooling in order to get that coveted diploma. Most look at the college diploma as a trophy won, another boar head mounted on the wall. But for the majority of students in the SU and all the more in the LU, a diploma means a ticket out of poverty. *“To have a better future”*, that was what most of the respondents from the institutions surveyed placed first when asked on why they wanted a college education.

There were a couple of questions raised before the undertaking of this paper. The first was if these institutions of higher learning stay true to their respective mandates as a state funded and local government-funded institutions of higher learning? The answer to this is that both, in their own way, have tried to stay true to their mandate. The SU has a clearer purpose for itself, given that it operates on a much bigger budget and is, by law, allowed to develop academic programs catering to the needs of the nation. But with the LU, the situation is more of confusion on whether it should remain as an institution focusing on technical-vocational education as mandated in the local government code or become a degree giving institution. The LU's dilemma still leaves a lot of room for debate and for further research.

But does the LU have any impact on its community? Yes it does. Because it gives people hope. Horton and Freire (1990) in their book, *We Make the Road by Walking*, mentioned that in every community stricken with poverty, there will always be *“little pockets of hope”*. This is what the LU does for the community. It creates a pocket of hope by telling them that there is a way out of the rut that they are in and that way is through what this author calls *“Good Enough Education”*.

Recommendations: Merilee Grindle (2002) came up with a concept in governance called, “*Good-Enough Governance*”. This does not address macro problems that are in the to-do list like good governance wants, but rather, it identifies the “small holes” that it can patch up to stop the leaking bucket. In this light, LUs offer what this researcher refers to as Good-Enough education. It is giving people good-enough training to get a good-enough job that will get them out of poverty. One respondent expressed the benefits of having children hired by a multinational company abroad she said: “*All my kids were scholars of the Governor. This school has been a big help to us. We are poor. My husband was an automotive mechanic but because of old age, he cannot work anymore. My children are all overseas. One is an IT degree holder and the other finished Health Care. They just send us money for our daily needs and for house renovations.*”

The Pocket of Hope/Good-Enough Education framework may be conceptualized as a combination of Grindle’s Good enough Governance with Horton and Freire’s Pocket of hope concept. It simply illustrates that in order to maximize the positive effects of these “*pocket of hope*” institutions that provide “*good-enough education*”, certain measures and adjustments are highly recommended.

First, the leadership in the LU should ensure that the quality of instruction will not forever be just “*good-enough*” but on its way to being “*good*”. The LU should determine what it envisions itself to be, a provider of quality and affordable education to the community, and then create a plan based on that long-term goal. The education being taught at the LU should not just prepare people to be future employees but to capacitate young men and women who can be future leaders of their respective professional niche.

Second, the local government directly in-charge of operating the LU should provide the school with full-time administrators and employees who can devote their attention and efforts solely to the school. Currently, all of the personnel in critical administrative positions of the university hold office in the local government as well.

Third, internationally recognized, credible and well-equipped universities like the University of the Philippines should be a model to both the other SUs and most especially, to LUs. Rather than dismissing them as sub-par institutions, bigger and more established universities can provide training and guidance for curriculum development and faculty enhancement to these smaller HEIs.

Fourth, the national government agency that oversees the quality and standards of these HEIs must be stricter in monitoring and implementing the standards that they have set. In the absence of a goal-oriented, strong and dynamic leadership in the LUs and SUs, only sound policies with effective implementation can be relied upon that may guide and set the benchmarks for improvement of these institutions. Establishing an LU by a local government should be handled systematically and with a critical eye so as to avoid the schools becoming merely “*tax-havens*” or used by politicians for their own political machinations. Instead, it should continue to serve as an inspirational entity for people in the community and provide them with its most basal purpose which is unadulterated education.

Lessons Learned: Before the undertaking of this study, the researcher had some degree of bias against SUs and LUs. Having been given the privilege of attending the premiere institution of higher learning in the country, one cannot help but have this sense of academic superiority over others. The feeling is like looking down from a scholarly pedestal and observing with a smirk how mere mortals from “*other universities*” go about their pursuit of petty education. But this bias was not born out of some whim; it was brought about by these so-called “*institutions*” upon themselves. How? By not adhering to the standards set upon them by the governing authorities. It seemed like they have sacrificed quality for quantity and excellence for mediocrity. You can see students from these schools dressed in sloppy-looking uniforms, hair dyed, not appearing much like scholars. Some of them could even hardly articulate themselves both in English and Filipino and would rather communicate in what we call “*Jejenese*”, a sort of counter-culture Filipino mobile phone text language which requires words spelled by sound in the worst way possible, a fad among Filipino youths that belong to the lower bracket of Philippine society (Claro, 2010). Because of this “*unscholarly*” conduct, one can easily dismiss the institutions where these students sprang from as diploma mills.

But taking a second look, life is all about giving chances. In order to be a good scholar, one must rid itself of bias and pursue truth with an open mind and an open heart. The truth is that in our country, poverty is everywhere. It has plagued our communities time and again. But resilient people always find ways to combat this social disease and one path is through pursuing education. It is a fact that these LUs fall short of the academic standards that top universities in the country have achieved. But the kind of instruction that they give to their students is enough for them to have a

chance of making a better future for themselves and their family. It gives people an opportunity to put food on the table and a hope that one day life will be much better. Having said this, this researcher has developed a sense of respect for these institutions and for what they stand for in the community, a “pocket of hope”.

In closing, we must look beyond the “diploma-mill” bias that we have towards these universities. They only appear to be so due to poor management and virtually zero teeth in the implementation of standards supposedly imposed on them. Instead, let us view them as ground-zero for the war against poverty. The LU is indeed a pocket of hope in their community that offers good-enough education that can lead people to a better life. Let us support and develop it further to exact more change in communities that are in dire need of inspiration and hope.

“*Hope is the elevating feeling we experience when we see, in the mind's eye, a path to a better future.*”

-Jerome Groopman, *The Anatomy of Hope*

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Teacher talk in early primary Tamil classes

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Abstract

Language is a very powerful tool which empowers teachers with the strength to influence children and enable them to comprehend abstract concepts. Its power lies in one's choice of language because the very differences in the way languages encode cultural and cognitive categories also affect a speech community's thoughts and actions (Sapir-Whorf's hypothesis). In a classroom setting where Tamil is taught, the pedagogical approach used by teachers to interact with students is the very essence of speech. Teacher talk can thus provide observations on pedagogical approaches. The teachers, while teaching, should simultaneously raise interest amongst the students towards the language being learned by offering them the independence to explore the language within and beyond the classroom setting. Furthermore, by creating an interactive and inclusive classroom setting (Cohrsen et al. 2014), teachers can help students draw parallels to real-life scenarios where students can apply procedural skills to solve real problems (Schoenfeld 1988), enhancing their acquisition of the language. Data from video and audio recordings of classroom observations collected from 10 early, lower primary Tamil classes have been analyzed for this study.

Introduction

Singapore, a globalized city, is multilingual and multicultural in nature. Here, English is not just the Lingua Franca but it is also taught as the first language in all the elementary and high schools. In addition to English, other languages such as Chinese, Malay, and Tamil are also taught as the second and mother tongue languages in schools. As far as the Indian students are concerned, most of them learn Tamil as their second language. In order to provide good quality Tamil language education to the students, the curriculum is regularly appraised and reviewed. A review also on Tamil Education was published by the Tamil Language Curriculum and Pedagogy Review Committee (MOE, 2005). Based on the suggestions, some improvements were made to enhance the teaching of the Tamil language. Suggestions such as giving importance to the Standard of Spoken Tamil language in the classrooms and inspiring students to speak more in Tamil were made in that review.

Background: To achieve the above, it is essential to understand what happens in the domain of the children's homes. Among the Singaporean Tamils, the use of the Tamil language is on the decline; however, the English language is used frequently. In fact, it is undeniable that the younger generation is using both Tamil and English when they converse with their parents and friends. Hence to encourage the use of more Tamil, the revised curriculum emphasis on encouraging the students to express their thoughts in Tamil. This will, consequently, prevent the dissipation of the language among the youth in Singapore.

The teachers are also encouraged to conduct the Tamil lessons by providing more examples to them. To make the lessons more lively and creative, stories related to the themes taught in class are suggested. By doing so, students will be encouraged to interact in the classes. This opportunity will also help them to improve their social skills in the future. Though several research studies have been conducted on the Tamil education, there is still a major concern that the pedagogy is not innovative enough and it does not seem to interest the students. It is felt that the class worksheets and examination preparation are given more importance rather than the pedagogical practices. However, it cannot be denied that the interactions and discussions connect to the real time experiences are carried out in all the classrooms. This teaching method is appreciated more and expect to become popular among the Tamil parents and students.

Profile of the Tamil educators:

The profile of the Tamil teachers in Singapore is diverse. Among them, there are those who are born and brought up in Singapore and went through Tamil education; some of those who went through English education and learnt Tamil as second language; there are some who have been invited from other countries with degree and higher education in Tamil; there are some who came as relatives of employees who came here to work in Singapore.

Those who came from other countries, mostly had completed their teacher training already. If they had not started teaching, the training is provided by the National Institute of Education and if they are already teaching, then the training is given by the Ministry of Education.

Previous research studies and their findings:

In the review report on the Tamil Language Curriculum and Pedagogy, it was pointed out that the acquisition of the Tamil language was important for students but it was felt that the Tamil lessons were not very interesting. Therefore, the report highlighted that the Tamil lessons should be revised to inspire and be interest of to the students (see Table 4) (Ministry of Education, 2005, p. 135).

The report also highlighted that for many of the primary students, English remains as the dominant language spoken at home. For example, of the total students in the primary 4 classes, around 45.2% of them use English as a spoken language at home. Similarly, among those in primary 6, 44.8% use English at home but of secondary 2 students, 54.1% spoke English in their homes. In the families of secondary 4 students, 52.7% of them spoke English at home. Hence, the trend shows that as students get older the frequency of Tamil they speak at home decreases. This figure continues to decline further among older Tamil students. The percentage dropped from 23.7%, 13.1%, 16.5%, and 13.4% respectively (please refer to table 1)

Table 1: Home language of the students who have mentioned that Tamil language is difficult (MOE, 2005:137)

Home Language	Primary 4 students (10years old)	Primary 6 students(12 years old)	Secondary 2 students (14 years old)	Secondary 4 students(16 years old)
English	45.2%	44.6%	54.1%	52.7%
English and Tamil	22.7%	13.3%	27.2%	21.4%
Tamil	23.7%	13.1%	16.5%	13.4%

Hence, it is evident that when the students move on to higher level, the Tamil language usage decreases and English dominates their conversation. The reason could be either that they are acquiring English education in school or their parents would like them to converse in the English language so that they improve in it. There is also a possibility of them not having enough inputs in Tamil and they are not being efficient in carrying out a conversation in Tamil.

Parents' views: At the same time, the parents who speak English at homes with their children, pointed out they have difficulties in learning the Tamil language (MOE, 2005: Seetha Lakshmi et al., 2006). They are worried that their children may encounter difficulties in learning the grammar rules. Also the parents explained that there are no interesting story books in Tamil for their children to read and practice the language easily. Therefore it is evident, that there are insufficient Tamil books with sophisticated language to enhance the vocabulary level of the readers. It is also evident that when the language ability is limited, it is fairly difficult to master the grammar as well.

It was also noted by some of the parents, though they speak Tamil at home, they do not have knowledge to teach the grammar to their children.

Evaluation of the situation: Does this mean that the Tamil lessons are difficult or does this mean that the Tamil lessons do not cater to the real life needs of the present and the future? Nevertheless, it was claimed by the students that Tamil lessons were not interesting enough to inspire the learning process (MOE, 2005:143). In conclusion the research findings clearly indicated, more attention should be given to the Tamil language and further steps should be taken to improve the Tamil language and make it a language of choice among the Tamil speaking Indians in Singapore. It was

also decided that the listening and speaking skills are to be improved and more of such activities should take place in the classes. In that way, the Tamil lessons will gain importance amongst the students.

Teacher's role in the classroom: As a facilitator, he or she should concentrate and improve on the ways, the lessons are conducted and give life to their curriculum; It is imperative teacher's talk should take place in the classroom. The teacher's talk has to express the importance of the lessons and he or she should display his or her confidence while teaching the students. The classroom event should be tailored in such a way that the central focus is always the students, as recommended by the Ministry of Education.

In today's context, the students should be the centre of attention as they will face challenges in the future and must overcome them. Hence, the role of the teachers is to prepare the students by interacting and interrogating them, constantly encouraging them to look for answers and honing their skills. One recommended way would be for the teacher to provide the students with opportunities to speak more during the classes and to refine their skills. This should help them to respond appropriately to the questions, thereby getting them ready to face the world.

In any Tamil class, the Tamil teacher is a very significant person as he or she is the one who can impact the student by making the lesson more interesting with anecdotes and examples that depict the Tamil culture and tradition. He or she should be able to teach the students and enable them to appreciate the Tamil language and follow the Tamil traditions in their lives. This would enable us to nurture good Singapore citizens in the future .

When the teacher gives confidence, the students feel encouraged and they try to reach that standard that is expected of them. The teacher should encourage both the male and the female students to take part in the class activities and clarify their doubts on the lessons. Also they should be encouraged to express their thoughts on views presented by their fellow classmates, If these steps were taken it can be assured that the teacher is doing whatever that is to enhance the interaction amongst the students to attain their goals.

Going further, it is essential for a Tamil teacher to know more about the culture and impart them to his or her students. As the students are living in a society that is very much influenced by the western practices, the Tamil lessons are the only means through which students they can be guided on the Tamil traditions and customs. During such lessons, the teacher can initiate the learning by asking questions that are related ~~about~~ to the Tamil culture and finally clarifying their queries with suitable explanations. Lessons as such will be appreciated by the students if they are well-handled.

Hence the role of the teacher is not only to impart knowledge but also to identify the students' potential. By doing so, the teacher is serving to fulfil his or her professional requirements. Also by evaluating his or her lessons, the teacher is trying to ensure that progressive improvements are made over time. In addition to the above, the teacher should be aware of how he or she should talk to the students and teach effectively. This can be achieved through careful analysis and design of supplementary materials.

There have been many research studies(MOE, 2000:1, 2000.2, 2011Ramiah1990, 1991, 1996,2000, 2001,Saravanan 2001, 2004, Schiffman, 1999, 2002, SINDA 1996, Parasuraman, 1999, Muthiah 2004,Mani & Gopinathan, 2014, Gopinathan 2014,.) conducted a, nd papers published on Tamil education and Tamil usage since long back. Also, there have been several articles coming up on Tamil teacher and the Tamil learning by students. In Singapore, as Tamils are given good preference compared to any other countries where Tamils have gone and settled, our Tamil community is also willing to take more steps on keeping Tamil language as the living language in Singapore.

However, there are few areas which were least touched upon, in which there need to be researches to be carried out. This has been the longing for quite a few known linguists and researchers in the Tamil world. In that order, how a Tamil teacher does his talk in the Tamil class is one of the important topics which have to be researched further. Ramiah(1996) has done an extensive research on this paper for his doctorate degree on Teacher's talk. He has shown several theories on this topic and has explained them in greater detail with examples. Following him, there are several but smaller research studies conducted on Teacher's talk, but then there has to be still an expanded research expected to happen on Teacher's talk in the class. This paper attempts to analyse how the Teacher's talk in the Tamil classrooms and the nature of the Teacher Talk in the Early primary Tamil classrooms.

Methodology

The CIEPSS study team (Silver et al., 2012) did the audio and video recordings of 10 Tamil lessons conducted at 8 different schools as part of its major research project. Altogether, there were 5 primary one classes and 5 primary two classes which were involved in the research. Moreover, the lessons were coded and observed by a trained research assistant. A total time of ten lessons lasted for 20 hours 10 minutes. The recorded lessons were transcribed in Tamil and later translated into English by experienced research assistance and verified by the language expert. With regard to the teachers' profiles, they are a mix of novice and experienced teachers and all of them are female teachers. They were all born and brought up in Singapore and had undergone teacher training at the National Institute of Education, Singapore. This research is qualitatively analysed.

Findings and Discussion

A typical Tamil class: Generally, a Tamil class in Singapore will have relatively fewer students when compared to other language classes. Most of the Tamil students are from English speaking homes. Schools which are situated at certain places of Singapore, may comprise students from Tamil speaking expatriate families. Although many students are from Tamil speaking families, generally, they use English to converse in both the formal and informal settings. Most of the time, the lessons are teacher-centered and the group works are conducted in small groups. There are occasions when some individual work is given. At times there will be some pair works between students.

Based on the paper (Seetha Lakshmi), there is no individual public work (individual student working in front of others) in the Tamil classroom. The Tamil lessons, generally, begins with the pledge taking in Tamil, and followed by the recitation of special slogans and poems. Then students will greet their teacher and peers in Tamil (*vanakkam aasiriyai and vanakkam nanbargale*) and start their lessons. The students generally enjoy coming to the Tamil class mainly because they can have an opportunity to meet all their Tamil friends in the same level. Also they can share their life experiences with their own ethnic group in the class which is not possible in their English class. In the Tamil class, there are more listening, speaking and reading activities than writing activities.

Writing activities include gap fillers and essay writing or comprehension practices. The students generally do not enjoy the writing activities, especially, when it comes to comprehension and composition which are challenging for them. When talk about the physical, social and affective environment, the Tamil classes are psychologically warmer. In Tamil class, there is a high level of promoting problem solving skills and it is an added strength to the class and the teacher. The class has strength of high level of promoting the problem solving skills.

Teachers' Talk: Teacher's talk can impact the children in many ways. One such example is giving and maintaining respect among the students. Here, in the Tamil classroom, the teachers show respect to the children and that encourages the class to participate more actively. Young children, in particular, are active in nature and it is necessary for a teacher to be creative in the classroom. At the same time, they are sensitive to how respect bestowed both verbally and physically. The following excerpt shows how teachers were respectful towards their students.

Equality is a critical feature that should be paid attention to in the language classroom. As the recordings were done mostly in mixed-gendered classrooms, we could witness the teachers expressing equality and encouragement to both the boys and girls. Research studies (Apaydin C., & Seckin M., 2013) have shown that generally female students were neglected while male students were encouraged to raise questions and answer teachers' questions. Here in the Tamil class, we observed that both genders were given significant level of opportunities to ask and answer questions.

Teacher's positive mindset: The teachers mainly used language and speech to carry out their pedagogical approaches. The teacher talk provided us with an opportunity to observe how they handled teaching pedagogies. When the teacher asked the students to utter a word, especially, when they had added a syllable to it, she was actually checking with them the original word and how they had spelt it. This proved that she was being very careful about the spelling and the phonetic form of the word. This is essential, especially, when they have to use it correctly in their oral and written exams. Hence, the teacher's meticulous attitude is displayed in her speech.

The repeated practice and explanation helped the students to remember the correct use of the words which will enable them to use them in their writing. Here the strong foundation is provided by the teacher here. The teachers,

while teaching, should simultaneously raise the interest level amongst the students in the language that is being learned by offering them the independence to explore the language within and beyond the classroom setting.

Excerpt 1:

ஆசிரியர் Teacher	இப்பல்லா ஆண்களும் போடுறாங்க. ஆனா இந்த அளவுக்குத் தொங்குற மாரி போடமாட்டாங்க. Ear stud மாரி போடுவாங்க. ஆனா இது பேரு தோடு. பொதுவா பெண்கள் வந்து ரொம்ப நீளமா போடுவாங்க இல்லையா? யாரு அந்த மாதிரி நீளமான தோடுகள் போட்டுருக்கீங்க? Nowadays, males are also wearing. But they would not wear the hanging kind. They wear the ear stud kind. But the name of this is <i>Thohdu</i> . Usually, females used to wear like that. Have you wear long ear studs.
மாணவர் Student	ஜிமிக்கி <i>Jimikki</i>

For example, the teacher asked the students to share their prior knowledge with each other and provide the differences between the use of ear studs by males and females. The discussion turned lively as it was something connected to their culture and day to day experiences in Singapore. Furthermore, by creating an interactive and inclusive classroom setting (Cohrsen et al. 2014), teachers can help students draw parallels to real-life scenarios where students can apply procedural skills to solve real problems (Schoenfeld 1988), thus, enhancing their acquisition of the language.

Discipline and Unhappiness: At times, the teacher also shares her unhappiness over their behavior. Here the following excerpt shows it and when the teacher talks in an unhappy or anger tone, the language shows her unhappiness.

Excerpt 2:

ஆசிரியர் Teacher	ஆ அப்புறம் தலை ரொம்ப கனமா ஆயிடுச்சினா மேசையில போயி விழுந்தற கூடாது. சரி என்னம்மா இது? இது மைக்ரவ். போன். Ah. if your head is weighing more, take care, you should not fall on the desk. what is that? oh, this is microphone
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Encouraging and Engaging: Teacher encourages the children to share their real life experiences in class. When they read a story about the banyan tree and the swing, the teacher asked them about the swing attached to the tree. Students shared their knowledge on how to make a swing on the tree.

Dialogic Teaching: Dialogic conversation (Alexander 2006) focuses on chain conversation in an active classroom (Maureen and Markarian 2011). The following is an example of the dialogic teaching. Here the young students are conversing with one another in an interesting way and sharing their knowledge and experience in the standard spoken Tamil. If a teacher asked a number of relevant questions on a issue, then that teacher is considered as an active teacher as she has attempted to bring out the knowledge and experience of the students through these kinds of chain questions. Dialogic teaching (Alexander 2006) focuses on chain conversation in the classroom.

For example, the teacher attempted to raise a question about a grandmother's false teeth and the students gave interesting and enlightening answers and explanations for that term. Here the students themselves were knowledge creators instead of just knowledge receivers. This kind of approach will also add to a more interesting and fun lessons. Tamil class also has routine reading of letters which can be boring. Here the teacher just sat down and asked the

students to read aloud as a group. Teacher ensures that the students understand what is taught so that they can perform better in the exams and score high marks. Teacher asks students warm-up questions, and eventually, draws them to that day's lesson and then explains the topic to them.

The Tamil lessons have some interesting features of teacher's talk. At the same time, the teacher's talk shows the teacher's pedagogies of Tamil teaching and learning. Some teachers allow the students to read aloud, explain the content and ask questions. Some teachers just follow the text book and use some disciplinary talk while others create their own lessons and teach them. There are still others who create interesting questions and encourage the students to learn more about the Tamil language and conversation.

Explaining class activities and at the same time, undermining the students' ability. It is important that teachers do not undermine the children. They should be taught that in order to earn respect from others, one should give respect as well. Although this can be taught by their family members, teachers should not assume that every child would have learnt this value at home. In fact, there are several opportunities and individuals from which a child can learn from. However, one must be mindful of the fact that such values can be instilled by his teacher.

While language is a communication tool, it also reflects a person's culture, ethnicity, traditions, a community's literary resources living values. Language is a reflection of a community and its history. In a Language classroom, it is also important for the teacher to converse well in the language to show mutual respect to her students. Generally, language is expressed through words, symbols and multimodal gestures. Furthermore, the power of the vocabulary helps to reflect a person's own experiences, and also the experiences of others and the world, and how he interprets and understands them.

Authoritative Teacher: Teacher is giving incentive to the students and later threatens to withdraw it if the students do not do their work properly. So the teacher explicitly shows the children that she is the person-in-charge. In her attempts to teach the language, the teacher is able to teach and portray certain cultural values for them to emulate. Since teachers are influential, they can help the students synthesise their thoughts, and elevate their knowledge.

During the analysis of the Teacher Talk in Tamil lessons, the following were identified:

- Teaching values to the students by giving instructions on how to greet the guest of the class
- Teacher asks students for their understanding. Then she attempts to connect the lesson prior knowledge and experiences
- Teacher explains the classroom rituals and encourages her students
- Teacher rendering praise to students regularly:
- Use of Closed and open questions (Maureen and Markarian 2011). However, there are many closed questions and related Initiate-Response-Evaluate (IRE) patterns in the Tamil lessons (Margutti & Drew 2014).
- There are some typical examples of monotonous lessons in the package of these 10 lessons.

Language is a powerful tool. When the teacher uses it to teach or talk (Cazden 2001) to the students, it has to give its optimal advantage in developing the students' and their potential. As conversations are always providing opportunities to learn (Johnston, Ivey & Faulkner 2013) and understand the language and the world, teachers have to give due recognition to the Teacher and Student Talk in the classroom. This happens in the Early Primary Tamil Language Classes.

In the Tamil classes, there are, generally, fewer students. This is, especially so, in the lower primary classes. In addition to the above, the students are also quite obedient, and respectful towards the teachers. Besides, they are also very cooperative. This enables the teacher to teach without any disruption. Hence most of the time the teacher's talk is directed towards their learning. Here, as Guven, 2004 (cf Apaydin & Seckin 2013) claimed, the teacher is displaying friendly approach, affectionate aspects of independence development, courtesy, respect, and viewing the students as individuals and showing passion towards them and the lessons.

Additionally, it has been claimed by Mercer and Dawes (2014) that teacher's talk helps the students to actively construct their knowledge. According to them, the teacher-student talk ratio was about two third in general. That simply means that when the teacher talks twice, the students respond once in the class. However, during the Tamil lessons, it appeared as if the students responded to the teacher after she had spoken five times. This was noted from the data collected from the teacher's talk in a classroom. The teacher spoke a total of 23,575 words and the students only

spoke around 6064 words which was approximately one fifth of the teacher's talk (Seetha Lakshmi, 2014). Though the topic was on culture, student's participation rate was rather low and.

As it is essential to cultivate the 'Confidence in Speaking and Communication' which is one of the 21st century survival skills, this was, indeed, a cause for concern. However, it was speculated that this was a result of their shallow vocabulary, less exposure and opportunities provided to the students to practice speaking in Tamil class. Also it was felt that the high level of respect the students had for the teacher and the fear of speaking more in the presence of the authority- that is the teacher could be other reasons for the low response. Besides, the less wait time given by the teacher, the increased number of closed questions rather than open questions, and the heavy Teacher's talk could be other reasons for the low response from the students.

All these meant that the lessons were not interesting enough to draw the attention of the students. A Tamil class should be one the fun and cool elements that offer independence to students to express their thoughts freely in the classroom. To make this come true, today's Tamil teachers should follow the skills required for the 21st century pedagogical skills and practices. For this to happen, the teachers should be given additional training and in-service courses. These training sessions should be designed based on the research conducted to bring about pedagogical improvements. In the teacher training sessions, more importance should be given to the content, pedagogy and technological knowledge and development. If more researches are done on the classroom teaching, we can gather and collect more data on Teacher's talk and pave the way for the teachers to improve through more professional development courses. This would definitely prepare our Tamil students in Singapore to become more responsible citizens and would also make our Tamil language more popular among students. All these depend on effective teacher's talk lessons.

The teacher's respect for his/her students is depicted by the way she addresses them- like his/her equals. This is achieved by adding the "நீங்க" (*nga*) suffix to the end of the verb in the Tamil sentence. However, this was not practised earlier when the teacher addressed one of the students. This could be seen as a way of improving the teacher's talk in the classrooms and getting them involved in the learning process. The respect shown by the teacher has a great impact in the way the students respond to the teacher. It must be pointed out at this point in time that this has become a new practise in the Asian community. Here the learners are treated like consumers and are served politely by their teachers. Moreover, the teacher's talk in the Tamil classroom is also strictly restricted to the use of Tamil only.

Apart from using the names of the students, he/she also uses polite verbs when addressing them. This leads to a active participation of students in the classrooms (Allwright 1980 in Waring 2013). At the same time, a teacher must ensure that all the students, instead of a specific group, participate in class discussions. Equal participation of all the students in the class can assure that the classroom teaching has been a successful one. The teacher can then evaluate the effectiveness of her teaching by assessing the responses given by the students. This helps the teacher to understand the students' needs better and respond accordingly- thus, helping individual students to achieve a sense of satisfaction.

Conclusion

A teacher, being a mediator / molder of the future, depicts himself/herself as the role model. He is also a strategic planner and implementer of lessons, constantly ensuring that the content delivered is fun and enjoyable. A teacher is also, viewed as a researcher and reviewer, proliferating with knowledge of the curriculum. Furthermore, he must exude passion and be able to empathize with his students and empower them to attain higher goals. Hence, a teacher must present the lessons in an interesting manner so as to sustain students' interest and at the same time, embolden them to handle the challenges in the future. In order to achieve the above, teachers must constantly attend training sessions, workshops and conferences to develop his Pedagogical Content Knowledge (Niess 2005) and Professional Knowledge.

A teacher should always ensure that he/she poses questions to all the students in the class. By using both the open and close-ended questions, the teacher is able to identify the students' strengths and weaknesses. While closed questions enable him/her to get quick responses from his/her learners, the open-ended ones are likely to challenge them. This is because the latter type of questions is likely to make students cogitate and tap on their prior knowledge

which will, eventually, help them to come up with logical responses. Hence, a single, good question is can actually elicit out many intelligent responses from the students.

According to Ramiah (1996), Tamil teachers need to ask more open-ended questions and organize cooperative learning activities to encourage the students to use spoken Tamil with their peers without any fear or inhibition. Consequently, the students will be able to work on their weaknesses and enhance their strengths. Tamil, in general, a quality one emulates from the Tamil class. However, the students are not able to speak qualitatively as like their teachers. As the country is multi-lingual and the social life in general speaks English, to communicate different communities, the students have less chance to speak in Tamil, outside their homes. Hence the teachers have to take more care in students to encourage them speaking in Tamil and give them confidence to converse in Tamil among themselves.

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Teaching ethics to professional scientists

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Abstract

Supporting the view that ethics can be taught, this paper will explore the frequent lack of a philosophical foundation in scientific training and its impact on a course on 'Science and Ethics'. The incidence of cases of misconduct by scientists engaged in basic research led the United States to establish the Office of Research Integrity. Their publication covers the ethical conduct of research and defines misconduct as fabrication, falsification and plagiarism. Concern for breach of public trust with dubious repercussions in scientific funding has led to mandated courses in ethics for students training for scientific research careers. Having concentrated their course work in laboratory-based science, they have less familiarity with philosophy and consequently struggle with the ethical reasoning aspects of a course in science and ethics. Discovery of a therapeutic drug or device opens a complex web of regulations by Food and Drug Administration for the ethical use of human subjects. Again the ethical system is one of rules and conduct based norms without foundational philosophical support for the ethical principles used in the guidelines. Rules of law reflect corrective action. Engaging students in case studies helps alert them to potential ethical dilemmas and invites them to explore why one action is right, good, or better than an alternative. Narrative ethics provides a human presence to competing and compelling claims, the intersection of which is the ethical issue and concept. Dissecting narratives helps students explore how ethics can be taught and learned in a pluralistic society and remain relevant to the field of expertise they have chosen. The challenge is determining the best methods in teaching ethics in a particular discipline. Is there a code of ethics that applies cross culturally and cross disciplinarily? Early and often should be the mantra of teaching ethics throughout the development of the individual and emergent professional.

Introduction

Graduate students who work in scientific research or related biotechnology jobs are trained in the scientific method, critical thinking, and analytical skills which help them in laboratory based studies. Controlling for variables and being open to affirmation or rejection of the working hypothesis is central to the scientific method. Concentration on foundation and elective courses to build laboratory skills may result in a minimal number of electives in the humanities such as political science, history, or philosophy.

The United States Office of Research Integrity (ORI) was founded in 1989 to reduce instances of scientific misconduct under the auspices of The Public Health Service (PHS). A training document was released containing exercises to use with students to prevent misconduct (Steneck, 2000). The government requires that every institution receiving PHS funding have procedures to handle allegations of misconduct. Academic institutions receiving government funding are required to train scientists in proper conduct, with the aim of reducing the incidences of scientific misconduct (fabrication, falsification and plagiarism). This mandate has translated into various courses on "research ethics."

I offer a graduate course within the Master of Science Program in Biomedical Science entitled "Science and Ethics." Having taught this course in various permutations for over fifteen years to hundreds of students, I extract from this experience some broad implications for teaching applied ethics.

What is ethics? For the purposes of this paper, ethics is a decision making paradigm that relies on philosophical foundations about what is good for individuals and communities. As a branch of philosophy, ethics focuses on right action, or a reasonably justified action that is at least as good as any alternative action. Aided by a set of rules, principles, norms and values, ethical reasoning imagines alternative actions for a given set of circumstances, discerning among the options the better or best of the alternatives. Ethics as moral philosophy analyzes concepts such as

goodness and moral truth. An ethical choice is acceptable to the larger community and based on culturally accepted norms and values and may become codified in guidelines or laws (Penslar, 1995).

It may be that people develop a sense of right and wrong early in life, during childhood at the instruction of parents and elementary school teachers, or so students often assert. If it is true that every person develops a moral compass along with strong bones and muscles, ethics education would be purely academic and unnecessary. However, if one does not inherit a moral code, or acquire one naturally in the course of primary education, then ethics must be taught and the pregnant question is how to teach ethics in professional disciplines.

The danger addressed by the ORI for awareness and prevention of misconduct is appropriate because scientific research is a matter of public trust. It is a challenge to translate complex scientific knowledge into useful terms for the good of the public. If and when data is manipulated for individual or corporate gain or misconduct pollutes truth and trust, the public becomes skeptical of the results and potentially of scientists.

Research ethics is not limited to biology but is the domain of investigation – search for knowledge in any discipline. Plagiarism is relevant for all writers. Conflict of interest is not exclusive to science or scientists. We live in a time when information is available at our fingertips through numerous electronic devices. Assigning proper credit to an idea or person is important for every author. The speed and easy access to information today may so flood our senses that it is more likely we will neglect to recognize and attribute our sources.

A set of professional ethical norms or rules directing behavior should reflect the cultural values of the society unless we allow diverse disciplines to create their own ethics norms, which pushes the ethical relativism card to the limit and risks loss of all social cohesion. Listening to students over the years has alerted me to the fact that social forces shaping our ethical norms are strong but individual students who are aware of their own strong desire to succeed acknowledge the counterweight of wealth, fame and power. Students often appeal to a relative or situation sensitive analysis. If the norms that guide behavior are relative to culture and/or discipline, the emergent problem is that we lose a sense of the commons as the social good within which individuals flourish. If students are strong proponents of ethical relativism, they find practical ethics, as the norms of a professional praxis, unpersuasive. This raises the question: can ethics be taught, generally, and if so is there any difference when the students are already engaged in a professional discipline?

One way to look at teaching is to think of conveying knowledge from generation to generation. Systems of morality are collective acquisitions, built up in various cultures over millennia. Emphasized in social units such as family, schoolrooms, and beginning with the simple maxims e.g. lying and stealing are wrong, such values are communicated between generations. Social norms or values aim at social and moral order. “Bioethics is a universally important subject, fully consonant with a liberal arts and science education, and as such it should not be taught first, let alone only, at the professional level” (Lee, 2013).

It may be that there are graduate students in science who have never given much thought to the moral aspects of their behavior. If we have a pessimistic attitude about human nature, we may rely on regulations designed to correct and prevent misconduct. When rules become guidelines those who adhere to them must recognize their value, or at least accept the punitive impact of infringement. Compliance as obedience to the rules can give a false sense of safety, especially if the ethical reasoning grounding the rules is not apparent or understood. Asking why is a central tool of ethical reasoning.

For the daring professor of science and ethics there are tools available and it may be important to not overstate one’s goals. One course in genetics will not make a student a professional and productive geneticist, nor will one course in ethics make students ethical for life. What one course can do is explore the range of positions a scientist may find herself in during a career, especially one with divergent paths each of which may carry unique ethical challenges. Teaching and doing research differs widely between the research conducted in academia and that done for a private firm. Students may learn from a mentor about the subtle points of data recording, analysis, reporting, authorship, peer review and funding. Company codes may require different formats for data recording and have restrictions on proprietary information about when and if it can be published. Practicing scientists are ideally suited to sharing with those in training the various demands, pressures, temptations, and advantages to scientific conduct that promotes integrity and success (Penslar, 1995).

Discussion

Reducing cases of misconduct in Science:

It may be that cases of misconduct are reported more frequently as a result of increased awareness born of research ethics courses. David Wright, director of the ORI, reported that in 2012 more than 400 allegations of scientific misconduct were received, double the number from the preceding year (Wright, 2013). Among students expected to study ethics – science students for example – current education is not meeting expectations. Responsible conduct of research (RCR) promoted by the ORI through training courses describe forms of research misconduct. It would be difficult to show that such a course reduces misconduct which is reported at the rate of one incident per 100,000 scientists per year (Plemmons, 2006). While the goal of reducing research misconduct may be hard to document other goals are measurable, such as knowing the expectations set forth in the guidelines.

A study conducted to explore how common misconduct is among U.S. scientists revealed that over 33% of the several thousand scientists surveyed admitted to one or more forms of misconduct. For example, 15% dropped data points from an analysis on the basis that they had a gut feeling the data points were inaccurate; 15% changed the design, methodology or results of a study in response to pressure from a funding source; and 10% said they inappropriately assigned authorship credit (Martinson, 2005). Martinson's survey data suggests more misconduct is taking place than is either reported or recognized and it is this reality that courses in science and ethics are designed to correct.

The high profile misconduct cases such as the hoax that the MMR vaccine (measles, mumps, and rubella) is associated with autism garners so much attention that there is a risk of not paying attention to “minor” cases of misconduct (Wakefield, 1998). Despite the fact that 10 of 13 authors retracted their interpretation of the findings in the Lancet article, the association continued to be accepted by parents resulting in lower vaccination rates of children. The General Medical Council of the UK ruled that Wakefield had acted unethically and Lancet retracted the paper. The British medical Journal's editor in chief said in a news release: “The MMR scare was based not on bad science but on a deliberate fraud. Such clear evidence of falsification of data should now close the door on this damaging vaccine scare.”

What is the current rate of MMR compliance? CDC reported on vaccination coverage among kindergarten children in the U.S. in the school year 2011-2012 that MMR vaccination was 94.8% among 47 reporting states. While the overall vaccination rate is good, local areas where vaccination rates were lower experienced 17 outbreaks of measles with 222 cases among unvaccinated persons (MMWR/CDC, 2012). It is true that measles is a childhood disease from which most children recover without harmful consequences, but not all. Humans are the only reservoir of the virus with 30-40 million cases per year globally with 1-2 million deaths. The vaccine (MMR) is effective (In 1941 there were 894,134 cases of measles in the US, and in 2013, 113 cases with 99% of those cases occurring in unvaccinated children). There are serious complications of progressive neurological degeneration albeit rare, but severe enough to justify the vaccine. Measles is the leading cause of vaccine-preventable deaths in children less than five years of age. It is regrettable that parents think they have to choose between trusting a vaccine to protect their child against a viral infection and trusting a scientist to warn them of harm from that vaccine.

The deceptive linkage of vaccination and autism demonstrates how integrity in science is vital to public trust. Sadly the media amplification of the study made it difficult to correct when the hoax was revealed and corrected in the normal process of peer review. Retraction by the authors of the Lancet article did not reach the attention of the media or the parents who were inclined to not vaccinate their children. If only a few in a community are not vaccinated, collective immunity protects the few who are vulnerable. This example illustrates why science and ethics should be taught.

Course format: Courses designed with an emphasis on case analysis and discussion among participants consistently shows stronger understanding of the norms of ethical conduct, over a more didactic approach (Brown, 1998, Plemmons, 2006, Powell, 2007). One published study surveyed students about their perspectives after completion of one of eleven different research ethics courses at ten different institutions. Undergraduate and graduate students enrolled in these courses. The students received a voluntary anonymous survey from their instructor after completing the course. Seventy-seven percent of open ended responses listed kinds of information learned, with 75% of the respondents noting that the course was useful in preparing them to recognize, avoid and respond to research

misconduct. The majority reported better understanding of what was expected but no significant impact on their individual attitudes (Plemmons, 2006). These results suggest that such courses increase awareness but raise the important question of whether awareness converts to more ethical conduct.

Plemmons and Kalichman surveyed 50 RCR instructors from 37 different institutions about their goals for teaching skills in their courses. Responses varied widely, “from a focus on teaching the skill of ethical decision making to the perceived importance of ensuring that trainees understand the importance of the community in some research relationships” (Plemmons and Kalichman, 2013). The responsible conduct of science requires diverse skills: the ability to conduct research, design experiments, record data, cite resources, write papers, manage stress, and have the ability to recognize ethical issues and make ethical decisions based on moral reasoning. It is difficult to measure all these skills and course objectives aiming at them. Results of the survey by Plemmons and Kalichman suggest that “ethical decision making” and “critical thinking” are skills given highest importance in the RCR courses taught by the respondents, but teacher expectations varied widely. Interestingly many of the respondents expected students to have critical thinking skills prior to their RCR course. In answer to “what goals do you have for teaching the skill of ethical decision making?” one respondent answered “none” (Plemmons and Kalichman, 2013).

Ethics for a career in science: The content of my course, Science and Ethics, has evolved from focusing on the misconduct ORI material to an expanded effort to cover various ethical challenges at different stages of a scientific career. A scientific career may diverge from basic research into clinical trials involving human subjects. A scientist may be asked to serve on an ethics review committee, or be a peer reviewer for a journal or funding agency. Each of these stages in the development and practice of the profession have ethical relevance. The course therefore includes sections on career choices, and ethical intersections at various stages of professional development. Knowing that I, the teacher, cannot follow students throughout their careers, it is my intent to provide an ethical toolkit to take along on their journey.

The first segment deals with proper conduct, why misconduct is harmful to one’s own career and potentially damaging to science and society. A series of cases illustrating why and how to maintain data records, ways to retain an objective perspective in data analysis, shared responsibility in assigning authorship in publications, journal expectations about peer review and the scientific community’s trust in peer review to certify and validate the integrity of research findings. It is important that students pursuing a career in science understand why misconduct is harmful to them individually and to the larger realm of scientific knowledge. Cases in which the student can relate a question posed about what should or should not be done help clarify the nuances of plagiarizing ideas and concepts, who and what to attribute, as basic norms of honesty and trust.

Stress may be the primary cause of misconduct and an ethics course will not remove career stress, but awareness can help students create ways to deal with it. A commitment to the overall value of science for the public good, the trust the public places in scientists to advance medicine and technology for the benefit of life can help counter-balance temptations to falsify data, adjust experimental protocol, or yield to external pressure. Teaching students to take time to get an objective and fresh look at a situation and discuss the situation with a dialogue partner can help. The benefit of conversation is modeled in small group discussion of cases followed by having each group feedback their decisions, where they had agreement, where they disagreed, what they learned from one another, and if anything in the case scenario surprised them. Comparing and contrasting the feedback from a collection of cases carefully chosen to represent the situations that could lead to misconduct helps increase awareness and helps students articulate what they should do in such situations.

A guideline set of rules or norms for proper conduct of a research scientist seems straightforward – almost intuitively obvious. Rules of conduct are like steps in the protocol of an experiment as a step by step instruction in what to do and when. Students struggle with the why questions: why should all the data be reported? Why must all contributors be cited? What value does negative data have for scientific progress? These questions require more thoughtful reflection and reasoning, which often causes frustration.

Case study and narrative help hone the student’s understanding of ethical reasoning in the context of scientific praxis. It may be difficult to wedge a book on justice into a single course on ethics and science, but it is simple to construct a narrative about selective authorship on a publication. A student who works hard to gather data and finds himself omitted from the authors of the resulting paper will immediately see that the practice was unfair. It may be

difficult for a student to understand why throwing out some data believed to be a product of experimental error is wrong until the larger problem of not reporting negative data results in harm or misdirection in research. I use selected cases from “Case Studies in Biomedical Research Ethics” by Timothy F. Murphy (2004) with a variety of examples of study design, conflict of interest, authorship and publication, and social effects of research.

In a second section of the course, I compare the norms of research with the guidelines for clinical research, because a research scientist would be very happy to have a discovery proceed to a therapeutic intervention. Should the scientist desire to shepherd the drug or vaccine through clinical trials, an entirely new set of ethical norms and regulations emerge. Many of these regulations are born of historical cases of subject abuse...what could be described as clinical misconduct. Reading about cases that failed to consent participants, or trials designed with a placebo when a proven therapeutic drug was available but unaffordable in the geographical context of the trial, helps students identify why the guidelines stress informed consent as respect for the participants as persons, why the risks and benefits for the putative subject should be ethically evaluated in the design of the trial and why inclusion and exclusion criteria can limit access (justice) or so circumscribe data obtained that general applicability, safety and efficacy is limited to those who fit the test subjects profile. Small groups of students discuss a variety of cases and their feedback as with the cases on misconduct in research, are reported to the entire class generating broader discussion (Dunn and Chadwick, 2001).

The third section deals with roles scientists could or might play in broader social discourse on contemporary topics, such as genetics: preimplantation genetic diagnosis, selection and enhancement. Science uses a vocabulary specific for disciplines such as genetics. What a geneticist understands about genetic pathways must be translated for the average consumer in order to bring the issues forward for public debate. Public policy guidelines emerge from recommendations made by panels of ethicists and scientists reasoning together. Larger public debate is helpful before restrictions in funding or social prohibitions emerge where consensus is impossible. I assign a series of ethical articles for and against genetic diagnosis for late onset genetic diseases and selected articles that are for and against efforts to genetically enhance offspring, in order to capture the philosophical grounding each author uses for their position.

Philosophical Foundation: Helping students find a moral compass, a grounding of why one ought to behave in ethical ways in their profession and more generally in life is challenging. For many years, I appealed to moral theories as a grounding point for ethical reasoning, selecting a consequentialist approach, because it was likely that students would relate to a rules - based approach. Some students are open to recognizing the rewards or punishments as consequences when rules are upheld or broken, but most are resistant to seeing themselves as morally culpable. Students focus on their individual opinion and values, not because they are universally valid but because they believe their morals are their own, learned in childhood. Increasingly students insist that ethics is relative, embracing a strong sense of tolerance for diverse value systems.

Having tried to teach the contours of consequentialist utilitarianism, respect for persons as teleological or ontological arguments to ground an ethical choice, I find students less and less willing to stick to any theory or set of principles for every situation, case or narrative. The voices claiming, “It depends” become louder by the semester. In the context of students without prior courses in philosophy and already engaged in a scientific career, narrative ethics has become more and more appealing.

Narrative ethics uses stories that provide ethical insight and wisdom for action without appeal to ethical principles, rules or maxims or narratives that support and expose the ethical wisdom embedded in principles, rules or maxims (Brody and Clark, 2014). Well-chosen stories communicate values and actions, and demonstrate moral virtue. By critiquing and comparing stories students are helped in the discovery of what values they resonate with and encounter desirable virtues they may choose to develop.

Narrative helps embody ethical dilemmas: real characters in real situations wrestling with real decisions. Students repeatedly assert that there are no universal rules or standards or principles that address every conceivable ethical dilemma. When students cluster in small groups to discuss a case they start with an intuitive sense of right and wrong, and they make moral claims based on the values they have acquired thus far in their lives. They do not all start at the same place, and hearing what someone else thinks often leads to a reinforcement of their starting position. Talking about the case does not immediately give way to consensus, but it exposes the contours and conflicts of the ethical case (Lantos, 2014).

Trying to explain why one answer or response to a case is good or better than another exposes a lack of overall conception of the good. If each student can freely express his or her idea of the good, and suggest an action as a free autonomous agent, we are left with silence because each student is their own judge of right and good. Such plurality reflects a cultural arc toward relativity and away from universal or absolute ethical normative philosophy. No one moral authority has the ethical trump card in today's debates. So how do we know what is right or good in a given situation for ourselves and for those with whom we share common culture, space, and resources?

Students appeal to early teaching and childhood experience as their moral grounding. Their values are products of their childhood development, similar to their preferred foods. If that is true, and we do acquire our values from parents and teachers, how is it we claim to be autonomous free moral agents? Do our moral values change in the same way our culinary delights do by trying other options? Perhaps talking about what we think, why we think it, and listening to what others think and their reasoning, is a good beginning place for ethics education in any discipline.

In teaching across disciplines it is useful to be vocabulary sensitive because every discipline has its favored jargon. Students find it difficult to believe that anyone would actually lose sleep by having failed to maximize happiness. Articles from the bioethics literature inevitably send students for the online dictionary. Simplifying without diluting the substantive claims of the moral theorists is necessary if we want students to believe that ethics and moral actions are for everyone. If misconduct is to be overcome, it is important that people without advanced degrees in philosophy can participate in the discussion.

Smart students can remember technical terms, memorize mantras, solve complex theoretical problems but that does not portend a working knowledge or willingness to apply the theoretical when the practical situation takes place and they are the moral actor. Students are aware of ethical dilemmas from their own lived experience. They have had to decide to tell the truth or not when the answer they give may bring punishment on themselves or others. They have decided to give or receive unauthorized aid on an exam. They have decided whether to help someone in need at some cost to themselves. Telling the truth, not stealing, are common value choices that are not the exclusive purview of research or medical scientists.

Students have a personal ethical code that has emerged from experience, education, and human relationships are still forming. Anyone who is intellectually honest does not think the same thing for four score and ten years. Students may not have a philosophical background that will allow them to quote Plato or a contemporary bioethicist but when they see a virtuous leader in their field of chosen pursuit, they know it. Students are generally unaware of the variety of dilemmas they could face in their scientific careers, therefore a course in Science and Ethics should strive to increase awareness of potential dilemmas and offer an ethical toolkit for the journey.

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A disability conscious universal bioethics curriculum for an inclusive society

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Abstract

Disability is one of the inherent disparities beyond human control. Though biomedical engineering has advanced significantly, the number of persons born with disabilities has not come down. A disabled person may be considered a liability to the family as well as the society, and hundreds of millions of families in developing countries are affected. Currently around 10 per cent of the total world population, or roughly 650 million people, live with a disability. Eighty percent of persons with disabilities live in developing countries, according to the UN Development Program (UNDP). The World Bank estimates that 20 percent of the world's poorest people have some kind of disability, and tend to be the most disadvantaged in their own communities. Statistics show a steady increase in these numbers. The reasons include: a) Emergence of new diseases and other causes of impairment, such as HIV/AIDS, stress and alcohol and drug abuse; b) Increasing life span and numbers of elderly persons, many of whom have impairments; c) Projected increases in the number of disabled children over the next 30 years, particularly in developing countries, due to malnutrition, diseases, child labor and other causes; d) Armed conflict and violence. For every child killed in warfare, three are injured and acquire a permanent form of disability. In some countries, up to a quarter of disabilities result from injuries and violence, according to WHO. The two-way link between poverty and disability creates a vicious circle. Poor people are more at risk of acquiring a disability because of a lack of access to good nutrition, healthcare, sanitation, as well as safe living and working conditions. Once this occurs, people face barriers to education, employment, and public services that can help them escape poverty. A study in the United Kingdom found that the poverty rate for disabled people was 23.1 percent compared to 17.9 percent for non-disabled people, but when extra expenses associated with being disabled were considered, the poverty rate for people with disabilities shot up to 47.4 percent. In this grave situation an 'Inclusive Society' should emerge so that the rights of the disabled persons can be protected and they can enjoy their lives like able-bodied persons. In this context Bioethics Curriculum in schools can include topics on disabilities and teach the concept of 'Justice' in bioethics by interesting methods and help them realize that disability can affect anyone at any time however disability can be challenged by therapies and a life full of joy is still possible. Here we share a model curriculum designed for the slum dwelling children in Chennai, India on 'Disability Management'.

Introduction

According to the Oxford dictionary, the word disabled came to be used as the standard term in referring to people with physical or mental disabilities in the second half of the 20th century, and it remains the most generally accepted term in both British and US English today. It superseded outmoded, now often offensive, terms such as crippled, defective, and handicapped and has not been overtaken itself by newer coinages such as differently abled or physically challenged. Although the usage is very widespread, some people regard the use of the adjective as a plural noun (as in the needs of the disabled) as dehumanizing because it tends to treat people with disabilities as an undifferentiated group, defined merely by their capabilities. To avoid offence, a more acceptable term would be people with disabilities.

More than half a billion persons are disabled as a result of mental, physical or sensory impairment and no matter which part of the world they are in, their lives are often limited by physical or social barriers. Approximately 80 per cent of the world's disabled population lives in developing countries. Disabled persons often suffer from discrimination, because of prejudice or ignorance, and also may lack access to essential services.

Types of disabilities include various physical and mental impairments that can hamper or reduce a person's ability to carry out his day to day activities. These impairments can be termed as disability of the person to do his or her day to day activities. These impairments can be termed as disability of the person to do his day to day activities as previously. "Disability" can be broken down into a number of broad sub-categories, which include the following:

a) Mobility and Physical Impairments: This category of disability includes people with varying types of physical disabilities including: upper limb(s) disability, lower limb(s) disability, manual dexterity, disability in co-ordination with different organs of the body. Disability in mobility can be either an in-born or acquired with age problem. It could also be the effect of a disease. People who have a broken bone also fall into this category of disability.

b) Spinal Cord Disability: Spinal cord injury (SCI) can sometimes lead to lifelong disabilities. This kind of injury mostly occurs due to severe accidents. The injury can be either complete or incomplete. In an incomplete injury, the messages conveyed by the spinal cord are not completely lost, whereas a complete injury results in a total dis-functioning of the sensory organs. In some cases spinal cord disability can be a birth defect.

c) Head Injuries - Brain Disability: A disability in the brain occurs due to a brain injury. The magnitude of the brain injury can range from mild, moderate and severe. There are two types of brain injuries, Acquired Brain Injury (ABI), and traumatic Brain Injury (TBI). ABI is not a hereditary type defect but is the degeneration that occurs after birth. The causes of such cases of injury are many and are mainly because of external forces applied to the body parts. TBI results in emotional dysfunction and behavioral disturbance.

d) Vision Disability: There are hundreds of thousands of people who suffer from minor to various serious vision disability or impairments. These injuries can also result into some serious problems or diseases like blindness and ocular trauma, to name a few. Some of the common vision impairment includes scratched cornea, scratches on the sclera, diabetes related eye conditions, dry eyes and corneal graft.

e) Hearing Disability: Hearing disabilities includes people that are completely or partially deaf; deaf is the politically correct term for a person with hearing impairment. People who are partially deaf can often use hearing aids to assist their hearing. Deafness can be evident at birth or occur later in life from several biologic causes, for example Meningitis can damage the auditory nerve or the cochlea. Deaf people use sign language as a means of communication. Hundreds of sign languages are in use around the world. In linguistic terms, sign languages are as rich and complex as any oral language, despite the common misconception that they are not “real languages”.

f) Cognitive or Learning Disabilities: Cognitive Disabilities are kind of impairment present in people who are suffering from dyslexia and various other learning difficulties and includes speech disorders.

f) Psychological Disorders: Affective Disorders: Disorders of mood or feeling states either short or long term. Mental Health Impairment is the term used to describe people who have experienced psychiatric problems or illness such as: Personality Disorders, defined as deeply inadequate patterns of behavior and thought of sufficient severity to cause significant impairment to day-to-day activities. Schizophrenia is a mental disorder characterized by disturbances of thinking, mood, and behavior.

h) Invisible Disabilities: Invisible Disabilities are disabilities that are not immediately apparent to others. It is estimated that 10% of people in the U.S. have a medical condition considered a type of invisible disability.

Discussion

Evolution of the care for the disabled occurred in a few stages. The first step was the evolution of Human Rights of Disabled Persons. In the 1940s and 1950s the United Nations was active in promoting the well-being and rights of persons with physical disabilities through a range of social welfare approaches. The United Nations provided assistance to governments in disability prevention and the rehabilitation of disabled persons through advisory missions, workshops for the training of technical personnel and the setting up of rehabilitation centers. Seminars and study groups were means of exchanging information and experience among experts in disability. Fellowships and scholarships were awarded for trainers. As a result of initiatives from within the community of disabled persons, the 1960s saw a fundamental reevaluation of policy and established the foundation for the full participation by disabled persons in society.

In the 1970s, United Nations initiatives embraced the growing international concept of human rights of persons with disabilities and equalization of opportunities for them. In 1971, the General Assembly adopted the “Declaration

on the Rights of Mentally Retarded Persons (1)”. This Declaration stipulates that mentally retarded persons are accorded the same rights as other human beings, as well as specific rights corresponding to their needs in the medical, educational and social fields. Emphasis was put on the need to protect disabled persons from exploitation and provide them with proper legal procedures. In 1975, the General Assembly adopted the “Declaration on the Rights of Disabled Persons (2)” which proclaims the equal civil and political rights of disabled persons. This declaration sets the standard for equal treatment and access to services which help to develop capabilities of persons with disabilities and accelerate their social integration.

The International Year of Disabled Persons: In 1976, the General Assembly proclaimed 1981 as the International Year of Disabled Persons (IYDP). It called for a plan of action at the national, regional and international levels, with an emphasis on equalization of opportunities, rehabilitation and prevention of disabilities. A major outcome of the International Year of Disabled Persons was the formulation of the “World Programme of Action concerning Disabled Persons”, adopted by the General Assembly in December 1982.

In order to provide a time frame during which Governments and organizations could implement the activities recommended in the World Programme of Action, the General Assembly proclaimed 1983-1992 the “United Nations Decade of Disabled Persons”. Marking the end of the Decade of Disabled Persons, the General Assembly proclaimed 3 December as the “International Day of Disabled Persons”. The Day was initially established to commemorate the Anniversary of the General Assembly’s adoption of the “World Programme of Action”.

Standard Rules on the Equalization of Opportunities for Persons with Disabilities: Among the major outcomes of the Decade of Disabled Persons was the adoption, by the General Assembly, of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities in 1993. The rules serve as an instrument for policy-making and as a basis for technical and economic cooperation. Recent United Nations World Conferences reflect the growing awareness that persons with disabilities have both special concerns and needs that require serious consideration of the international community. All of the recent conferences - United Nations Conference on the Environment (Rio, 3-4 June 1992), the World Conference on Human Rights (Vienna, 14-25 June 1993), the International Conference on Population and Development (Cairo, 5-13 September 1994), the World Summit for Social Development (Copenhagen, 6-12 March 1995), the Fourth World Conference on Women (Beijing, 4-15 September 1995), Habitat II (Istanbul 3-14 June 1996) - have addressed the situation of people with disabilities and made recommendations to rectify past discriminatory practices as well as to protect and promote their rights to participate fully in all aspects of the society as citizens of their countries.

The United Nations and the specialized agencies continue their efforts to assist Member States in attaining the equality of all people, including persons with disabilities, in social life and development. The work of the United Nations concentrates on improving the situation of disabled persons by promotion and monitoring the implementation of the Standard Rules and the World Programme of Action. The United Nations continues to provide on request technical and financial support for national and international projects. The Statistics Division of the Department for Economic and Social Information and Policy Analysis plays an important role in developing statistical concepts and indicators, gathering relevant country information and preparing technical manuals and publications on disability statistics.

The work of the United Nations will increasingly focus on equalization of opportunities for persons with disabilities. One of the most important concerns is accessibility: to new technologies, in particular information and communications technologies, as well as to the physical environment. The notion of "mainstreaming" will also be given prominence, that is, including a disability dimension in policy recommendations covering a wide spectrum of social and economic concerns.

The Special Rapporteur on Disability: In 1994, Mr. Bengt Lindqvist was designated by the Secretary-General of the United Nations as First Special Rapporteur on Disability of the Commission for Social Development. His duties are to assist in the monitoring of the implementation of the Standard Rules and in the discharge of his functions he divides his time between advisory functions and establishing a dialogue with States and local non-governmental organizations to further the implementation of the Standard Rules. The Special Rapporteur works closely with a panel of experts, composed of representatives of international organizations of persons with disabilities, and with the United Nations Secretariat. In June 2003, Secretary-General Kofi Annan appointed Sheikha Hessa Khalifa bin Ahmed al-Thani (Qatar)

as the Special Rapporteur on Disability of the United Nations Commission for Social Development for the period 2003-2005.

Political will can do wonders: As Liz Crow writes, we need to put back the experience of impairment into our politics (1996). We need to write about, research and analyze the personal experience of our bodies and our minds for if we don't impose our own definitions and perspectives then the non-disabled world will continue to do it for us in ways which alienate and disempower us. Some people have reacted to this position by saying that there is nothing political to be said about impairment - impairment belongs to the personal world where everyone is different and there are such variations in individual experiences that there are few generalizations to be made. The problem is that if we don't express the experience of our bodies, others will do it for us. If we don't confront what we need as a result of illness, pain, chronic conditions which inhibit our lives, then health services and support services will continue to be run in ways which disempower us. If we don't engage in the debates about old age then as we age we will find that the battles we thought we had won as younger disabled 21 people are of no use to us whatsoever. Most importantly, if we don't take over the representation of the negative aspects of impairment then its meaning to others will continue to undermine us. Adrienne Rich said it all in her poem:

*The problem, unstated till now, is how to live in a damaged body
in a world where pain is meant to be gagged uncured, un-grieved-over.
The problem is to connect, without hysteria,
the pain of anyone's body with the pain of the body's world.*" (Adrienne Rich 1993)

We need to somehow get to the space where the courage of living with impairment is acknowledged without being accompanied by the unspoken "I would rather be dead"; where sympathy does not mean pity; where an expression of regret for what is lost through impairment does not mean that our lives are not worth living. We are a long way from this way of perceiving impairment.

Whether we talk in terms of "independent living" or "community care", it is important to separate means and ends. Social policy debates often focus on the means without paying enough attention to the ends. So we argue about cash payments versus services, mainstream versus special schools, formal (i.e. paid helpers) versus informal (ie unpaid, based on relationships of blood and/or affection) care. The real point is whether these means deliver the ends – which is the protection and promotion of human rights. It is of course not an entirely simple question what we mean by human rights but the key point is that they are universal, they are what we have because of our commonality, what we share with all human beings throughout the world. The human rights which are written down in the Universal Declaration of Human Rights (United Nations 1948) were articulated in order to prevent a situation ever again occurring where a State designated groups of people as sub-human and aimed to obliterate them.

When disabled people in Britain first started to come together to challenge the prejudice they experienced, they drew on this human rights perspective for their starting point:

All human beings have an equal right to live, to eat adequately, to housing, to clean water, to a basic standard of health and hygiene, to privacy, to education, to work, to marry (or not), have children (or not), to determine their own sexuality, to state an opinion, to participate in decisions which affect their lives, to share fully in the social life of their community and to contribute to the well-being of others to the full extent of their capabilities (In from the Cold, June 1981, pp 19-20).

Whatever 'care' is - whether it is in the form of formal services, cash payments, or personal relationships – if it does not enable someone "to state an opinion", "to fully participate in decisions which affect their lives", and "to share fully in the social life of their community", then it will be unethical. We need an ethics of care which is based on the principle that to deny the human rights of our fellow human beings is to undermine our own humanity. We need an ethics of care which recognizes that anyone – whatever their level of communication or cognitive impairment – can express preferences. We need an ethics of care which aims to enable people to participate in decisions which affect them, and to be involved in the life of their community.

Most importantly, we need an ethics of care which, while starting from the position that everyone has the same human rights, yet recognizes the additional requirements that some people have in order to access those human rights. The recognition of our difference (including our dependence), because of our impairments, can thus become a passport to the recognition of our common humanity.

Duties of the Society: The society should learn a lesson from the nature and try to understand that a person with disability is a human being too. Skill development is one of the vital requirements in persons with disabilities in their progress. The tendency that disability is a welfare activity needs to be changed and it should become an integral part of a society's activity.

Two important measures have to be taken to increase their social inclusion: Providing educational, vocational and life experiences to persons with disabilities equal to that of non-disabled persons, and overcoming stereotype responses of the society by demonstrating that persons with disabilities are persons first and disabled next. Children with learning disabilities are those who have problems in processing information. However, these children have to be given educational services when identified. In Model, children with disabilities are enrolled in local general schools. All categories of children with disabilities and all levels are enrolled in schools. All the classroom teachers in the school are oriented to the educational needs of children with disabilities. A special teacher is normally appointed for a block or for a cluster of schools and should pay visits to schools, based on the needs of disabled children.

Frequent in service programs are organized to improve the skills of teachers in teaching children with disabilities. The ideal system of inclusion is that the general education system itself should make education of special needs children as its integral part. This implies that the general classroom teachers should be equipped with skills to address the educational needs of children with special needs with minimum or no assistance of special teachers.

Role of teachers: The teachers should help the parents to observe disabled children in the classroom settings and notice the nature of training he/she needs in language, cognitive, motor, emotional and social developments. The parents should be oriented by the teachers to identify the areas where the child needs maximum assistance. The teacher need not be a resource person, but must have information on supportive services. The teacher should be aware of the legal right protection, schemes and benefits for disabled persons.

Role of parents: Parents are the most important people in the life of the non-disabled people as also that of the children with disability. The parents are generally ignorant or unaware about the implications of disability on the personality development of the child. This is the time for schools and organizations working for persons with disabilities to offer guidance and counseling programs to the families of these children.

It is essential that parents understand the reasons for disability condition in the child and its implications for the present, ways of helping the child at home to develop his skills, the skill areas and limitations of the child, need for cooperation with the early child care and education programs and the teachers for improving skills of the child. The parents need to play a proactive role in the personality development of the child with disabilities.

Role of person with Disabilities: In the personality development, the person with disability also has a vital role. The individual should cultivate the mind to live with disability and overcome the difficulties. As abilities such as understanding the environment, communication, reasoning, access, etc. have direct influence on the personality; a person with disability would certainly experience limitations in these areas, which may cause psychological effect on the personality. Early intervention and remedial activities alone contribute to a balanced personality development in persons with disabilities.

In brief, the personality development of the disabled individual is not only influenced by the external forces but by the determination of the individual too. Therefore, disabled persons should be mainstreamed as early as possible to experience the positive effects of personality development on the individual with disability.

Conclusion

Persons living in Urban Slums need more care on disability management as they are easily prone to disabilities. Hence the authors are working on some case studies which may continue to complement this paper in the next publication. Justice delayed is also justice denied. Hence it is the urgent need of the hour that bioethicists who work on disability care can take the human rights in their hands and fight for the rights of the disabled brothers and sisters. If you and I do

not act who will act? If you and I wait who will do? If you and I do not care who will care? If we do not implement now and when we will we do? Justice should not be denied just because I had been a disabled person. The potential of the disabled persons had not been fully tapped by the society, as they have extraordinary powers because they are also called as “God’s Children” or “Special Children”.

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Comparison of the effects of lectures vs. narratives for teaching ethics on the moral sensitivity and learning satisfaction of Iranian nurses

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Abstract

Ethics education has a crucial role in the development of moral sensitivity in nurses. Meanwhile, curriculum instructors constantly look for new and effective ways for ethics education. The aim of this study was to compare two methods of teaching: narrative ethics and lecturing, on moral sensitivity and learning satisfaction of nurses. Fifty-six nurses from two educational hospitals in Birjand city participated in this randomized field trial research. Data were collected by using Lutzen's Moral Sensitivity Questionnaire before and after intervention. The participants were divided into two groups and four sessions of classes (each 3 hours) with a one week interval for each. A learning satisfaction questionnaire was also completed after the intervention. Both methods, narration and lectures, significantly increased the nurses' moral sensitivity in each group ($p < 0.001$ and $p = 0.01$, respectively). Despite the higher mean score of moral sensitivity in narration group than in the lecture group, moral sensitivity did not show a significant difference ($p = 0.70$) and also there was not a statistically significant difference between learning satisfaction in the two groups ($p = 0.09$), despite the higher mean score of narration group. Concerning the results of this study, since there was no significant difference between two methods, it was concluded that a combination of narration and lecture in development of moral sensitivity can lead to better outcomes.

Introduction

Ethics has a prominent position in nursing education. It is generally acknowledged that nurses face specific nursing ethical problems which arise from their close involvement in patient care (Gastmans 2002). According to Kohlberg's theory of moral development (Kohlberg 1984), moral decision-making has four components including: moral sensitivity, moral judgment, moral motivation, and moral character (Rest and Narvaez 1995, 2000). Therefore moral sensitivity forms the first step of moral decision-making (Comrie 2006). Moral sensitivity may be described as an awareness of and attention to the moral values present in a contradictory situation as well as a self-awareness of one's own role and duty in that particular situation. In some studies, moral sensitivity and conscience are used as synonyms (Lutzen et al. 2006).

Moral sensitivity can help nurses to care more about the ethical considerations involved in their profession and to find creative solutions when required (Ersoy and Goz 2001). And it can be measured as well as enhanced by teaching (Myry 2003, Park et al. 2012). However, there are weaknesses when it comes to enhancing it in nursing programs. Quoting from a number of scholars, Park highlights the necessity of studying the effects of teaching ethics on moral sensitivity and of finding appropriate strategies for teaching ethics, adding that teaching ethics must be oriented towards increasing moral sensitivity. Nonetheless, there are only a limited number of studies on the effects of ethics education on moral sensitivity (Park et al. 2012).

Meanwhile, what is the best method for teaching ethics is a continuing debate (Kyle 2008) because teaching methods are evidently effective in the ethical development of learners. Thus, change is felt necessary concerning the approach to and contents of ethical education.

Generally speaking, teaching methods include formal lectures, seminars, role playing, case analysis, workshops, classroom discussion, or a combination of them (Afandi et al. 2009, Lin et al. 2010). There are studies that have tried to describe the most effective method of teaching ethics, wherein the favorable effects of some methods are stated (Afandi et al. 2009, Lin et al. 2010, Smith et al. 2004, Ales et al. 1992). Among other methods is the application of

narratives for teaching ethics (Jones 1999, Nicholas and Gillet 1997). Wocial (2010) writes that teaching ethics requires a dynamic approach that affects both the mind and the heart of the learner. He adds that conscientiousness plays a highly important role in the development of moral sensitivity. Narrative approach and stories that arise from daily encounters seek in their essence the nurturing of people's conscience.

A narrative is described as a tale or account of events and experiences, be it true or fictitious. Narrative ethics makes use of the notion of a 'story' in order to elevate and facilitate care and empathy in the lives of those in the clinical setting (Raholm 2008).

The narrative approach to teaching ethical principles has been utilized since the past times in Persian literature, for example, in Molavi-Rumi's *Masnavi* and Sa'di's *Gulistan* and *Bustan* (14th century A.D.). In fact, this approach attempts to nurture ethical emotions in individuals, and finally aims to help arise motivations to do good in them. Using the story, the individual comes to a kind of self-awareness, and by putting him/her in place of the main character, attains experiences that are out of his/her normal scope of awareness (Afshar and Bagheri 2012). Woods (2012) puts narratives, stories, and case studies under the term *narratives* and underlines the significance, value, and application of narratives in ethical healthcare practice. He notes that the power of stories concerning moral meaning and ethical actions is not something to be underestimated.

In light of the role that indirect education plays in behavioral sciences, this approach appears to yield fruitful results. Thus, in this study, a comparison is made of the effects of teaching ethical principles using lectures and narrative ethics on the moral sensitivity of nurses in order to evaluate the effectiveness of the narrative approach to teaching ethics.

Methodology

In this randomized field/clinical trial with a control group, 56 nurses from two university affiliated hospitals were selected through purposeful sampling and randomly allocated to case (narrative; n=28) and control (lecture; n=28) groups. The participants were assured that the data would be kept confidential and that it would not affect their work conditions.

The participants completed a "moral sensitivity questionnaire" both before and after the intervention. The questionnaire was developed by Lutzen et al. (1994) and has been frequently used in nursing ever since (Park et al. 2012). In this study, Chronbach's alpha was calculated as 0.76.

The educational content covered ethical theories, patient rights, and the four principles of bioethics including respect to autonomy (informed consent, patient advocacy, confidentiality, and privacy), beneficence (veracity, fidelity, paternalism), nonmaleficence (double effect and due diligence), and the (distributional) justice principle (Beauchamp and Childress 2001). The educational content for the two groups was approved by experts of the field in terms of validity and similarity. The groups went through three-hour sessions of teaching ethics held separately once a week for four successive weeks. Three narratives were used in this study. They were patients' experiences of hospitalization which were narrated upon consent from them. The stories were selected with great care such that they reflected the contents necessitated by the educational program and were in line with the contents of the lectures in the other group.

In the narrative group, first the researcher or one of the volunteers from the participants read out the narrative, and then the situation and its ethical challenges were discussed and participants talked about their own personal experiences in this regard. Finally, the researcher summarized the discussions and made a conclusion. In the lecture group, the contents were presented in lectures. The sessions started with an explicit indication of the objectives of the session and a review of the previous session; then, the contents were presented, and there was a twenty minute time for discussion at the end of each session.

In addition, a researcher-made questionnaire of learning satisfaction prepared on the basis of previous literature (Lin et al. 2010) was completed by the nurses. Its validity was confirmed by experts of the field. Chronbach's alpha was calculated as 0.91 for the questionnaire. The data were analyzed in SPSS (version 16) by descriptive-analytical statistics.

Results

The majority of participants were female and married (n=49, 87.5% and n=48, 85.7%, respectively). Over half of the participants in the narrative group and the majority of the ones in the lecture group had no prior experience of attending ethical teaching programs (n=15, 53.6% and n=22, 78.6%, respectively).

Teaching through narratives was effective in increasing ethical sensitivity of the narrative group where there was a significant difference before and after the education ($P < 0.001$). The intervention was also effective in the lecture group, and the difference was significant ($P = 0.01$) (Table 1). The comparison of moral sensitivity mean scores in the two groups before and after the interventions show no significant difference ($P = 0.46$), nor did it show a significant difference after the interventions ($P = 0.70$). In the end, in this study, no significant difference was observed between the groups ($P = 0.09$) although the mean score of learning satisfaction was more in the narrative group (65.25 ± 6.79) than in the lecture group (60.69 ± 11.30).

Table 1. Total scores of moral sensitivity in the narrative and lecture groups before and after the interventions

Time of intervention The group	Before the intervention (n=28)	After the intervention (n=28)	P _{value} , Pair T-test	Change means before and after the interventions
narrative groups	5/160 \pm 21/12	92/171 \pm 02/10	001/0P <	43/11 \pm 3/14
lecture groups	75/157 \pm 41/15	42/167 \pm 53/13	=0/01P	68/9 \pm 5/19
P _{value} Independent t-test-	=46/0P	=70/0P		=70/0P

Discussion

The results of this study indicate that teaching ethics through narratives and lectures can be effective in elevating moral sensitivity; this is in line with studies by Ersoy and Goz (2001) and Sirin et al. (2003) where teaching ethics was shown to be effective on nurses' moral sensitivity. There is also a review that has indicated a positive relationship between teaching ethics and ethical development, and the effectiveness of teaching ethics on students' ethical decision-making (Numminen and Leino-Kilpi 2007). Park et al. (2012) evaluated the relationship between teaching ethics and ethical sensitivity as positive. In light of the significant role moral sensitivity plays in nurses' clinical practice, it seems necessary to assume a major position for teaching ethics in continued education programs for nurses. Wocial (2010) underlines this and writes that ethics should not be limited to school days, but rather nurses should be taught in practice as well.

Another finding of the current study was that the mean change of moral sensitivity in the groups was not significant despite the higher change of moral sensitivity mean score in the narrative group. Barrett et al. (2007) maintain that although lecture presentation as a traditional teaching method is still used in nursing and is of low efficiency (Kaddoura 2011), it can be useful for nurses who have little information about a certain issue or for those who are new to a topic (Petress 2004).

It is further reported that teaching ethics to those who have not yet passed the ethics course is more useful (Myry 2003). In the current study, the majority of participants in the lecture group (78.6%) had no previous experience of ethical education. This appears to be a probable reason for the insignificant difference of moral sensitivity between the two groups after the intervention. Similar to the narrative approach, therefore, lecturing was effective in increasing moral sensitivity. On the other hand, the last 20 minutes of each session was allocated to the participants' questions which may have affected the effectiveness of the lecture approach. In this regard, Charlton writes that lecturing is of low effectiveness per se; however, it can be of more efficiency when accompanied by other active teaching methods such as question and answer or group discussion (Charlton 2006). All these may have had a part in the effectiveness of the lecture approach. That is possibly why learning satisfaction did not differ significantly in the two groups.

Findings suggest the effectiveness of teaching ethics on moral sensitivity. Given the importance of ethics in the nursing profession and the fact that ethical sensitivity forms the first step in ethical decision-making (Comrie 2006), the researchers suggest that ethical teaching sessions for nurses as part of in-service educational programs be held in a combination of narrative and lecture. Also, performing of similar studies can help develop theoretical knowledge about the narrative approach, and confirm or modify the present findings.

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Nurturing medical ethics and professionalism through experience of ‘A day in a doctor’s life’

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Abstract

The teaching and learning of medical ethics and related professionalism have been discussed as a process beyond the boundaries of lecture halls. This component of medical education should not be focused on theory alone but be inculcated as a work culture in future career of medical graduates. In Universiti Sains Malaysia (USM), the basic theory and principles have been well scheduled as part of the curriculum activities, but additional non-lecture activities are also arranged to emphasize the application of it. ‘A day in a doctor’s life’ program is a program where a group of first year medical students were assigned to a volunteer medical lecturer. They follow all the lecturer’s clinical duties such as ward round, clinic, operations and patient education session. This paper describes the qualitative findings from the students’ reflection diaries. The students wrote their observations on how the doctors communicate differently in different situations and with different types of patients, how they realize that a doctor may not always cure but provide the comfort that the patients need, and how a doctor’s job must be carried out with caring, determination and dedication to overcome the challenges in medical profession. These observations were more meaningful for them in pursuing their medical profession dream.

Introduction

Medical ethics teaching has always been emphasized in medical curriculum. The teaching is spread continually throughout the five year study period. There are always debates on whether professionalism and ethics can be taught, who is the best person to teach, how best to teach and how to assess the learning outcome. We believe that we can nurture professional behavior by blending the theory with application of it in real life events by making the future professionals aware of the ethical culture in the field of medicine. Prober and Heath, 2012, had proposed way of changes in teaching future doctors such as simulation and case based exercises. These activities do not replace lectures but enable teachers to actually teach rather than giving speeches. These multidimensional methods will allow lecturers to perform other role of teachers i.e. role model and learning facilitators (Harden and Crosby, 2000).

The first year of medical degree program in Universiti Sains Malaysia begins with bioethics and social health. Lectures on professionalism, principles of medical ethics, good communication skills are among the lectures scheduled. Apart from these academic activities, the students’ personal and professional development program has arranged a program called “hospital attachment: A day in doctor’s life”. This program aims to provide the first exposure to new students on the routine work of a doctor, the variability of tasks and the importance of professional behavior in medical practice.

Methodology

This paper describes the reflection by the year 1 medical students from three academic sessions from 2011 to 2014 who were involved in the hospital attachment program. Students are divided into small groups of ten and assigned to a clinical lecturer who volunteered to participate. The students will follow all activities that the lecturer is involved from morning to evening and even night call. Clinical departments involved are internal medicine, pediatric, general surgery, otorhinolaryngology, ophthalmology, orthopedic, neuroscience, plastic and reconstructive surgery, obstetrics and

gynecology and emergency medicine. The students are asked to observe and later report their observations in a group reflective diary. They are asked to describe what they observed and what they learned from the observation. Thirty-eight reflective diaries were reviewed for the underlying themes by three coordinators.

Findings

Four themes were found from the content analysis. These are professional behavior; empathy, caring and humanity; teamwork and communication skills. The physician professional behavior that was observed is adherence to ethical and moral standards, accountability and commitment (Table 1).

Humanistic values are well observed by the students who reflected the observation of honesty, integrity, empathy, caring (Table 2). The students also reported observation of teamwork in the daily work of a doctor. They observed how doctors work together between specialist and other health care personnel in making decisions for the best care of patient. They also noted a shared mental model on teamwork blended with mutual trust (Table 3).

Students also observed the doctors and team members communicate with patients and the care givers. They observed from the process of developing rapport, gathering and sharing information to establish a shared understanding between the physician and the patients on the management (Table 4).

Table 1: Physician professional behavior observed

Professional Behavior	Students' reflection [Example]
Adhering to high ethical & moral standard	Dr R reminded us to treat every patients equally regardless of status, race and religion "everyone has the right to receive a treatment, no one should be discriminated"
Exercising accountability for oneself and for colleagues	Although the staffs were busy, they still put on the sweetest and welcoming smile. Dr I stressed that sometimes we have to work with people from other department so it is crucial for us to build a good rapport with them. I learned a lot – punctuality, dedication, patience and emotionally strong.
Demonstrating a continuing commitment to excellence	They portray love and passion in what they do, which is an example of proving that they have a career, not a job. Dr N told us - 'we can only try our best to save people, but whether the person can survive, it is not in our control'.
Exhibiting a commitment to scholarship and advancing the field	It is not as easy as ABC to indicate the real disease. From time to time a doctor had to recall and update their knowledge. For us, it is really cool!
Dealing with high level of complexity and uncertainties	The doctors and the health care team work very hard to approach the problem faced by every patients, with efficient communication, discussion of diagnosis and development of thoroughly thought management plans

Discussion

Good professionals not only learn during the students years in classroom but continues to learn when they start working through years of experience in managing patients and following examples from the more experienced ones. It took years of life experience to mould a physician into a professional; a doctor who does not only have knowledge and skill but who will behave professionally.

A physician behavior such as adherence to ethical and moral values, humanistic values, accountability, and commitment defines medical professionalism (Walsh and Abelson, 2008). Humanistic values include honesty and integrity, caring and compassion, altruism and empathy, respect towards others and trustworthiness are values to learn through life experience rather than just theory supplementation.

Table 2: Humanistic values observed by students

Humanistic values	Students' reflection [Example]
Honesty & integrity	Finally we realized the reality of being a doctor – full of tiredness, irregular working hours and continuous learning but when you do your job properly and sincerely you will get all the satisfaction Their concern towards their patients show how strongly sincere and committed they are towards what they do for a living.
Caring & compassion	I was amazed with their (doctors and staffs) knowledge and the way they treat their patients. They show respect, love and commitment at the same time Dr S treats patients friendly. The old medical record was reviewed even though it is thick as the Guyton book Dr R was really patience and nice to her patient and even though I've met unfriendly doctors before this, her attitude completely change my perspective and I made myself a promise that I would treat my patients just the same way when I become a doctor in future
Altruism & empathy	Dr A showed us to an old man with prostate cancer. It a sad case and at the end we felt empathy towards the old man and his family The patient is a type 2 diabetes patient who had undergoes left leg amputation. She doesn't want to get treatment and gave up her life. Dr A being so understanding and calm. Poor she couldn't even move her legs. We give her motivation to move on There was a man being catheterized as he had difficulties going to the bathroom. "ouch!" I flinched at the thought of experiencing it myself. Guess that's what they call empathy, no? We noticed the elderly woman in the bed looking rather more ill than the others. A woman in her twenties was at the bedside, tears gleaming in her eyes. Further at the foot of the bed, a young man was having serious discussion with a doctor. Dr Y whispered to us that the old woman had a terminal illness and was in critical stage. But despite all that was going around her, the elderly woman exudes strength and courage that seems to infect us all

Table 3: Teamwork skill and attitude observed by students

Teamwork skill and attitude	Students' reflection [Example]
Adaptability	I had the opportunity to observe how the specialists discussed and exchange views in trying to diagnose a patient. It needs not only wide knowledge and experience but also need cooperation and compensatory behavior with respect to each other
Team/collective orientation	"Doctors' don't work alone" – work hand in hand with nurses and other personnel
Shared mental models	we learned that an organized environment and teamwork is strongly required – every team members had to play their role well to ensure task is done well
Mutual trust	In order to solve the patients cases, doctors need to cooperate with each other as a team and discuss among themselves to figure out the best solution and medication for the patients. It showed us the importance of teamwork and cooperation among colleagues

Health care workers perform interdependence tasks in achieving the common goal for the best care of patients. They have to work together even though they may not undergo the training together (Baker et al, 2005). Students communicate with each other and with their teachers on medical problem, but they have to learn how to communicate the medical knowledge and information to their main client which are the patient and the care givers. These include the essential of communication tasks i.e building the doctor-patient relationship, opening discussion, gathering information, understanding patients' perspective, share information, reach agreement on problem and plans and provide closure (Kalamozoo consencus, 2001). Team work and communication skill needs more than just theory. Other mode of teaching such as problem based learning and formal curriculum have the limitation of giving the practical part of this. It was observed in this program that students are able to observe and absorbed the values. Thus, we teachers have to provide the life experience and be the role model to our students. These observations were more meaningful for them in pursuing their medical profession dream.

Table 4: Elements of communication observed by the students

Elements of communication	Students' reflection [Example]
Developing rapport	Conversation may begins with a simple “how are you?” to make patient feel at ease. It’s funny to see the doctor interact with the granny; she really is good at winning his heart so that it is easier to treat him later. I was so excited to see Dr R communication skill to persuade the patient to cooperate for the physical examination
Gather, share information	The patient asks many questions and the doctor answer them all. That’s how to get a cooperation from a patient, by responding to them and praise for the good attitude they showed
Establishing shared understanding	We watched how she (the doctor) communicated with the patient and her subordinates and how she handled the patient. It is not easy to communicate with a patient especially if we don’t understand what they said as it could lead to misunderstanding. So we learn here that we need to understand and clarify what the patients are saying to avoid misunderstanding
Provide closure	We observed how Dr I communicated, gave conscience information on the medications to his patients. He patiently explained the procedures which started with greetings and self introduction

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Challenging learning across generations with reference to bioethics education

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Abstract

There is an urgent need to reduce the gap in translating newly acquired knowledge from the bench to the classroom. With no secure, long-term solutions towards protecting our 'global' natural and cultural heritages, we must empower future generations to become sufficiently knowledgeable to best provide them with a safety net for survival. This proposal depicts a workable framework incorporating more ethical elements into existing educational programs as taught in science, medicine, law and economics. To facilitate reform, a commitment to update education and to expand the pool of individuals concerned about 'Global' ethics would, of necessity, facilitate path-breaking discoveries and creative opportunities for social advancement. I am convinced that newly created Education Departments will enhance the pleasure of learning whilst increasing community accessibility to much needed ethics education. By working together to improve the available resources for learning, we will promote understanding and further endorse relevant themes crucial to modern bioethics. UNESCO can be a powerful and neutral platform where stakeholders with diverse backgrounds from all over the world get together to incorporate updated education materials and create adaptive change.

Introduction

One of the activities undertaken to disseminate information concerning the Universal Declaration on Bioethics and Human Rights, adopted in 2005 by UNESCO, is the Ethics Education Program. This program maps existing teaching material in the area of ethics in the Member States of UNESCO. Different programs are described, discussed in expert meetings, and made available on the Global Ethics Observatory website <http://www.unesco.org/shs/ethics/geobs>. Experiences concerning the contents, passion, methods and materials of existing programs are therefore publicly accessible and can be exchanged among experts. Teachers who want to research and initiate ethics teaching can find suggestions and ideas in the database.

The quality of ethics teaching programs, however, depends substantially on the quality of the teachers. Ethics teaching can be made much more influential and attractive for students if it is presented by a highly qualified, stimulating and inspiring teacher. The present proposal is an all-purpose guide highlighting possible ethical dimensions of science and is divided into two parts – general background and specifics identifying skills where I may possibly be useful in facilitating a flexible series of interconnected workshops and educational tools in bioscience ethics. The specific themes, as identified in Part II, can readily be up-graded or adapted for team teaching and integrated as required within the overall curriculum of our fledgling UNESCO Education and Research Departments. Bioscience ethics facilitates free and accurate information transfer from applied science to applied bioethics. Its major elements are increased understanding of biological systems, responsible use of technology, and curtailment of ethnocentric debates to be more in tune with new scientific insights. Pioneered by me in 1994, bioscience ethics has become an internationally recognized discipline interfacing science and bioethics within professional perspectives such as medicine, law, bioengineering and economics. The fundamental feature of the discipline is its breadth; thus, facilitating streamlining of significant aspects across future learning/teaching requirements while, at the same time, provide individual student/teacher choice of topic or field of endeavour.

Validating science into the teaching and practice of ethics is important because science plays a crucial role in the learning of ethical behaviour. Overlooking such critical aspects of learning must, inevitably, diminish a student's comprehension of the true natures of science and of ethics. Scientists and the population at large are frequently forced to make difficult value-laden ethical choices which may include choices between pure and often more lucrative applied research projects. Critical choices such as whether to work on military or non-military projects, whether to generate power from depleting energy sources or from renewable energy, by what means should climate change be managed are crucial to our future wellbeing. Increasingly, potential conflict between industrial developments and the ecological

health needs of the planet force us to select from a variety of possible alternatives – especially since a sizable fraction of current scientific research is funded by big business or the military which, predictably, imposes restricted information access on corporate, security or other grounds. Scientists, because of their specialized training, have distinct social responsibilities to ensure that society is sufficiently knowledgeable to assist their communities make informed choices about the uses and potential abuses of science. The introduction of bioscience-bioethical themes in all education curricula should be a definite requirement since all students will need to participate, as future citizens, in making ethically informed choices about the ‘doing’ of science.

General Background: Active Approach to Learning and Teaching: The delivery of effective education can be through face-to-face delivery, multimedia, video and online conferencing tools, podcasting lectures and 'online only' courses. When designed effectively, e-Learning has been recognised for its potential to enhance learning and to increase student accessibility to higher education. Online-based teaching programs, at their best, promote flexibility in which students listen to their i-Lectures in private and do their 'homework' in the classroom with their educators and colleagues. Typically, the focus is on the topic's most difficult aspects or on widening the concept through deliberating broader implications – all promoting valuable learning interactions.

Active learning is about learning by doing – it involves a student-focused approach and requires students to research meaningful learning activities and think about what they are doing. Active learning demands that students become co-creators of their learning; that is, teaching and learning activities and the assessment tasks require students to participate in their learning. This challenges the more passive forms of direct instruction since active learning techniques are far-reaching and may well require students to design their own activities and assessments, team learn or use group design. For example, students may choose to modify or up-grade a task, set new standards for the outcomes of the task, or mark each other's work, give feedback, and reflect on the learning research that was developed. In essence, group work provides a thought-provoking range of opportunities to engage in a wide variety of skills such as resourcefulness, critical thinking, group interaction and communication, time management, logical and succinct delivery of outcomes, leadership negotiation, conflict management and much more.

The main principle behind active learning is to directly engage and to challenge students in activities that activate both mental and physical skills and to question their own level of understanding.

Traditional Teaching

Instructor is a knowledge transmitter.
Students are passive learners.
Students apply acquired knowledge in tests.
Learning is content-based, subject focused.

Active Learning

Instructor is a problem setter and coach.
Students actively formulate their own learning.
Students develop cognitive learning strategies.
Learning focus is on problem solving.

Active learning techniques are designed to harness the power of collective intelligence and network effects:

- 1:** Ask your students to choose one slide from a particular PowerPoint lecture presentation which piqued their interest and then expand on the content by providing a couple of extra slides. In this way students are actively engaged in research and acquire practical experience in delivering course materials.
- 2:** Ask your students to write a newsprint article, or produce a video or audio news report, based on published bio-scientific research, or having the students re-write or edit a problematic newspaper article to be more accurate, more ethically balanced. This could include reference to additional media resources that clarify science-based and ethical perspectives or clarify the original data where it is available to the public.
- 3:** Group work is where the group is responsible for delivery of a project outcome or analysis of real-world case studies and dilemmas. Specifics might be to critically appraise the ethics of a science-based article. Students gain experience in active rather than passive reading and the critical evaluation of possible biases, or prejudices, of scientific material as presented to the general public. Another related technique is to directly engage students in the design and execution of original research, in this case both as researchers and subjects. This advanced scheme allows the educators to work alongside the students as peers rather than sitting above them as judges. A good idea is to ask each student to take on a rotating role of Presenter, Manager and Recorder in addition to a Reflector role. Leadership roles are then experienced by all members of a particular group.

We may well remind ourselves that the word ‘assess’ is derived from the Latin word *assidere* which means ‘to sit beside’ emphasizing that teachers and students sit beside each other as partners with common educational objectives. In this sense, assessment is not simply a testing and judging (ranking) instrument, but also a nurturing and mentoring tool in the learning and teaching processes.

4: Problem-based learning (PBL) is a popular technique in medical schools where rather than presenting content as in traditional classroom teaching, the teacher poses a problem for the students to solve, usually in groups. The main characteristics of PBL are:

1. Students explore real world, open-ended problems.
2. Learning is largely self-directed, including planning, implementation and evaluation.
3. The activities are usually conducted in small groups.
4. Teachers take the role of facilitators.
5. Learning outcomes emphasize not only content knowledge but also process and learning attitudes.

5: Discovery-based learning (DBL) is similar in concept to problem-based learning. The main difference is that DBL is structured around practical learning environments such as science labs. Students are required to design and construct their own investigations in order to discover fundamental principles within a particular domain; i.e., putting theory into practice.

6: Concept Maps are instructional rubrics that show students how to make a map with clear routes to their destination – they provide information and direction within the whole picture (see selected example on page 6). Using concept rubrics in education is far beyond routine learning as it is about engaging students in collaborative, active learning within a framework of social evaluation.

Existing Skills and Materials Available to the Education or Research Departments: During the last two decades there has been a considerable increase in science information followed by rapid development of new techniques and varied applications. Applying new knowledge raises new challenges – not least the challenge of interpreting the ethical significance of any new scientific application. Despite this, and at a time when student demand for ethics education is increasing, ethics is not currently a significant part of the senior high school or university curriculum. Thus it is clear that a greater focus on science-ethics education is essential. We need to examine in greater detail the ethical questions arising out of simple everyday life events, discuss ethical dilemmas and interrogate and explore new ways of being.

It must be emphasized that children begin to develop enduring ethical standards at an early age and that these standards are realized through experiences of early childhood. The junior and senior high school years are crucial transitional years where students are most susceptible to both negative and positive experiences. Consequently, there is a need for targeted educational programs dealing with lifestyle choices, health and wellbeing ratings, sexual experience, fertility and responsible reproduction. Long before young adults consider parenthood a desirable option, they need the opportunity to acquire adaptive biological, technological and ethical knowledge. Contemporary subjects dealing with issues as identified above should be incorporated into the school curriculum at an appropriate time that correlates with the students’ biological age rather than with their chronological age.

There are many reasons for my proposal to review existing high school curricula. For instance, statistics from differing international sources (Australia, Canada and the United Kingdom, among others) have shown that girls reach puberty at a younger age and undergo menarche (first menstruation) years earlier than did girls in the middle of the last Century. This accelerated development is thought to be predominantly due to improvements in nutrition and socio-environmental change while other theories range from rising rates of obesity to endocrine-disrupting chemical ubiquitously present in our environment. The onset of puberty signals, in both sexes, a complex period of development experienced as a changing kaleidoscope of physical, cognitive, emotional and social capacities that climax in sexual maturity and full reproductive potential. Indeed, adolescence ushers in profound changes in patterns of risk taking relating to health.

Reports originating from many countries have established that adolescent sexual experience and heightened substance use are significantly interrelated. Notably, high school students are well acquainted with sexuality and have, on the whole, had experience with one or more partners before age 17. They also have ready access to tobacco, alcohol and a variety of other recreational substances. Girls, who have gone through puberty early, are twice as likely to have

been pregnant or aborted a pregnancy at the age of eighteen, compared with their peers – a serious statistic impacting on the health of the present and subsequent generations. Whether the fall in the age of puberty is based on our evolutionary response to improved health and nutrition or not, we still have an ethical obligation to see that communities focus on preparing young kids for sexual maturity with all its attendant vulnerabilities whenever it might arrive. Educational guidelines for teaching sexuality should promote that all children need to know about puberty before it happens but for a growing number of primary schoolers this is not the case.

In summary, the above demographics highlight the necessity for the introduction of a coordinated course, or series of team taught programs, made available and implemented by UNESCO's Education Program, aimed at increasing reproductive understanding at a stage when the emotional ability to make serious, informed decisions is not yet fully developed. Across Australian public schools, for instance, education regarding safe sex practices is not taught in the classroom until students reach the senior years and, for early maturing girls, this may not be in time for their first sexual experience. Even lessons on reproductive biology, minus sexuality, are generally not taught until later years, making holistic understanding fragmented and uncoordinated. Conceiving and bringing up a child is the most important responsibility any adult can have and there is much to learn about interacting genetic and epigenetic variables affecting biological systems and behavioural consequences. Learning needs to be in tune with present-day reality and insights.

The present proposal aims to build a secular multifaceted course, or series of programs, informing students and their educators about important physiological changes that go on in young bodies and which may, depending on circumstance, have positive or negative effects across societies and generations. The proposed programs will not follow or impose a particular model or specific view of ethics. Rather they will articulate a series of transdisciplinary topics that reflect and integrate current bioscience-bioethical theories and principles as they relate to human reproduction.

Access to additional potential projects can be found in my student text book 'Bioscience Ethics' CUP, 2009 or from my education web portal freely accessible at <http://www.bioscience-bioethics.org/>. However, in order to incorporate effective tools and innovative ideas into the classroom teacher guidance has to be provided to ensure that learning sessions are culturally appropriate. A related issue concerns assistance provided in the translation of workshop subject matters and their realization within individual schools i.e. ethics from workshop to classroom. Importantly, educational realizations need to appropriately respect adaptive local norms and diversity while also protecting secular stewardship and international rights. The UNESCO community is well covered by its stewardship of secular ethics as expressed in its charter.

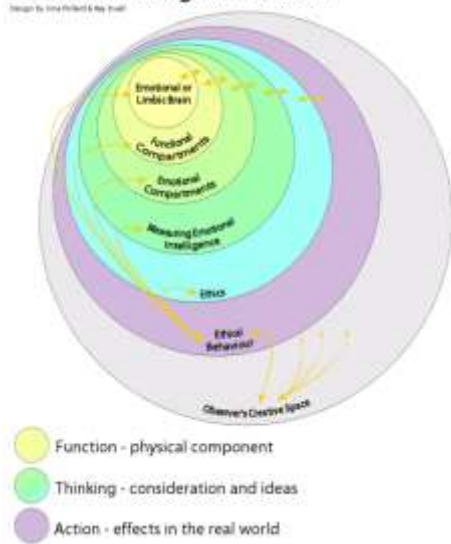
Bioscience Ethics Education: Existing Notes and Teaching Materials: The following tools maybe used to initiate faculty undergraduate/postgraduate discussion workshops relating to possible ways of incorporating within their institutions formal bioscience-bioethics programs that supplement the mandatory curriculum.

Concept Map: A concept map is a diagram, or graphical tool, showing possible relationships and is useful in the organization of particular ideas and knowledge. For example, the concept map depicted here refers to the plasticity of the human mind. The central theme or focus of this diagram is education. To this end the map provides a set of interconnecting relationships, ideas, and terms where each layer (ranging from the innermost to the outermost) can be readily linked back to its original focus. Students are invited to respond in three parts by providing links between EQ and ethics according to individual choice:

- a) Consider the list of facets provided with each layer. These are suggestions rather than exhaustive lists, and you are welcome to use any of these in any combination in your essay, or devise your own (based on these examples).
- b) State in your essay what you would title your outer ring (where it currently says "Observer's Creative Space"). This should be at least referred to in the title of your essay or it may even be used as your essay title. Make a number of connections between your new outer layer and the other layers, based on how you consider they interact.
- c) Write an essay on how your chosen topic (the new title of your outermost ring) interacts through the connection(s) you have chosen from the Map (making sure to state what the connections are in the introduction of your essay).

Figure 1: Emotional Intelligence & Ethics – facets

Emotional Intelligence & Ethics



Emotional or Limbic Brain – interconnects with all outer rings and also connects exclusively with the sub-compartments via Functional Compartments (i.e. connected to = thalamus, hippocampus, amygdala, hypothalamus, pituitary gland).

Functional Compartments – connected to = thalamus, hippocampus, amygdala, hypothalamus, pituitary gland.

Emotional Compartments – connected to = perceiving emotions, reasoning with emotions, understanding emotions, managing emotions.

Measuring Emotional Intelligence – connect to = self-awareness, assertiveness, independence.

Ethics – connected to = innate, self-taught, learned, improved.

Ethical Behaviour – connected to = social awareness, self-management, relationships management.

Observer's Creative Space – connected to = newly built construction.

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Incorporating higher learning skills into bioethics education of multicultural students of science in Malaysia

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Abstract

An overview of bioethics courses offered to pure science undergraduates from the University of Malaya is presented. Students come from three ethnic groups affiliated with three major religions with diverse values and belief systems. It was therefore important to incorporate a bioethics curriculum where the youths could identify with and relate to their intrinsic beliefs and moral discernment. For example, the concept of non-violence is an important ethical rule for the Hindus and Buddhists affecting their stand related to embryonic stem cell research. Likewise the concept of charity in Islam and Christianity would be important virtues to consider in regards to organ transplant issues. Two overriding concerns when designing the bioethics curriculum are therefore discussed in this paper: (1) the rationale for a course structure that accommodates varying ethical values on issues of scientific research and innovation, and (2) a suitable course design should incorporate and induce critical thinking and problem-solving skills. Positive feedback was received from students through a course evaluation survey and most students reported having fun while tackling ethical problems collectively in a peer group.

Introduction

This paper discusses the introduction of a set of courses on ethics for science students based on grounded theories in bioethics applied with epistemological foundation. There were two overriding concerns when designing the ethics curriculum for science undergraduates of the University of Malaya, (1) the rationale for a course structure that accommodates varying ethical values on issues arising from scientific research and innovation, and (2) the deployment of a suitable course design which would incorporate and induce critical thinking and problem-solving skills.

Methodology

A conceptual approach is taken following the framework set out by two thematic objectives to guide the development of the courses – the ethical and the educational. The objectives shared in this paper unfold the development of bioethics teaching for science undergraduates. Bioethics instruction was first introduced in 2001 and incorporated three courses: *Professional Ethics and Morals*, *Ethics of Knowledge and the Profession* and *Issues in Bioethics*. The curriculum content was achieved through the diffusion of Western bioethics in religious ethics. While content on Western ethics is delivered through lectures based on notable resources in bioethics, religious content is independently derived by the students themselves through problem-based learning sessions.

The Ethical approach: Bioethics as a discipline has without doubt its own merits. It represents a useful didactic tool that would make science students start thinking responsibly of the importance of science as in the phrase ‘Science for Better Living’. Learning science is about processing facts, theories, making assumptions, deriving and making inferences. While science education may enhance the socio-economic status of a nation, for instance by provision of innovative solutions to problems of food and energy resources, the practice of science and the prioritization of particular disciplines of science must be aligned to national policy directions, and also be responsive to safety and ethical considerations.

Students must be aware that individual researchers, science societies, and industries involved in big science collaborations do occasionally become tangled with incidents of scientific misconduct. Science may seem self-correcting with its rigorous methodology and peer review systems, however there is a need to be 'proactive' rather than 'reactive' (Kim & Park 2013) and to attempt to combat scientific fraud may be a little too late. It is with this realization ethics courses were decided to be taught as stand-alone courses and not 'inserted' or 'embedded into technical science courses as has been done elsewhere (Davis, 2006).

It is only through a formal course on ethics in science that students are compelled to think of science as having direct implications to the society. Such thinking guarantees responsible behavior as they go about conducting experiments or investigating an animal or plant specimen in their laboratories. Hence, bioethics is 'a study of ethical issues and decision-making associated with the use of living organisms' which involves the learning of 'how to balance different benefits, risks and duties' (Macer, 2008). Bioethics thus seems to be the best tool of instruction of ethics education for future scientists, as a valuable tool to enhance critical decision-making skills for students with diverse beliefs and value-systems (Nor, 2009).

Hence, the learning outcomes expected of the student include: To understand some ethical theories and methods in problem-solving; to develop analytical skills when deliberating selected problems in bioethics; and to acquire an awareness of cross-cultural differences in value assumption.

The Educational approach: Problem-based learning (PBL) is adopted as a useful way to develop critical thinking (Card, 2002). PBL provides independent learning opportunities for students, and important skills such as team-work learning skills and managerial skills are enhanced. Students are given problem-based cases right from the start of their first class. Two hour lectures are given over a 12 week period each followed by a one hour PBL class. In week-13 the students are required to present their selected case in a class seminar.

The challenge in developing the ethics curriculum, however, lies in projecting a suitable teaching module on bioethics. How a subject must be delivered based on a discipline of study which is predominantly Western in origin but yet is appealing for a diverse and multicultural group of students? The majority of students are Malay-Muslims, followed by Chinese (who may be Taoist, Buddhist or Confucian), and Indians who are either Hindus or Sikhs. Some Chinese and Indians may also be Christians by conviction.

Perhaps, the quickest way to initiate science students to think about ethical ways of engaging in scientific research is to discuss the meaning of ethics by throwing in three questions as follows:

- What is the right or good thing to do for my society?
- What are my obligations (or duties) to the society?
- What rules or guidelines must I follow to protect and safeguard the society?

To facilitate intense thinking, students are given a set of case studies on bioethical dilemmas. The use of case studies in teaching instructions has been found effective in developing ethical analysis skills (Denni 1995, Coughlin 2008). In a multi-cultural setting, moral deliberations arising from stem cell research or organ transplant technology, for example, is expected to be assessed differently by a Muslim or a Buddhist or a Hindu. The concept of non-violence is an important ethical rule for the Hindus and Buddhists affecting their stand related to embryonic stem cell research. Likewise altruism and the concept of charity in Islam and Christianity would be important virtues to consider in response to organ transplant issues.

Discussion

Students are trained to observe the rule not to express 'gut feelings' (Loike et al. 2013) in their contemplation of the problem but rather to reflect on their own religious beliefs. Here, the novice student would tend to look within him or herself and their value-systems with a given set of teachings as the yardstick from which judgment on an ethical problem may be deliberated and conveyed. However, students are instead instructed to refer, read and cite previous scholarly literature to assist moral reasoning of the given problem. This literacy intervention supports students to develop skills in information retrieval.

Often the students will find an overwhelming amount of literature on religious perspectives of bioethics issues. There are vast number of resources on Islamic bioethics, Buddhist ethics, and Hindu ethics (Aksoy 2005, Nor 2010, Fadel 2012, Trivedi 1990). It is here that the students would have to independently manage and organize these resources and then select and decide the ones most relevant for their learning needs. Because students are made to work in teams, such a situation would propel each student to engage in discussions to argue and defend their choice of religious principles or values from a vast number of resources that best fits the given problem. It is during these collaborative learning sessions that students develop new skills in communication, clear expression and critical thinking skills. Such learning process also provides opportunities and space that help to elevate a student's leadership and managerial skills.

Last and not least, an introductory course on the history and origins in bioethics is presented followed by theories and principles of Western philosophy of ethics, before a student can begin to say "*The right thing to do is firstly, to respect a person's autonomy, secondly, to act with beneficence and finally, ensure justice*".

Bioethics is an interventional learning instrument that is valuable in developing important skills in undergraduate science students. Bioethics instruction as currently practiced in the University of Malaya has been given as a skills-based approach. First of all, the objective of the bioethics course is met when at the end of the course, students report improved attitude and awareness of concerns affecting science researchers. Important ethics knowledge content is also gained such as the scientist duty to respect the autonomy of research participants, maximize benefits and minimize risks.

In addition, just as science learning involves problem-solving and critical thinking skills, the same is applied to learning bioethics with the exception that the use of cases in bioethics dilemma pushes students to not only develop basic information retrieval abilities, it instills in an indirect way an awareness of ethical values not only found from one system of ethics (the western) but a variety of intrinsic and local religious beliefs that are useful for their learning needs. Consequently, students from multi-ethnic and multi-faiths groups begin to learn and understand more about other value-systems and this has emerged from an innovative bioethics lesson plan which has essentially stimulated such awareness through a collaborative learning experience.

Finally, a course evaluation survey conducted at the end of the course reported that students had fun learning bioethics, and no student reported that the class was boring. Students enjoy being 'in charge', having 'decision-making power' and share native notions of what is 'good', 'right', 'responsible' and what is 'bad', 'wrong' and 'forbidden' with their fellow classmates.

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Implementation and evaluation of a ‘seven-step method’ for ethical case discussion

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Abstract

Case discussion is often used in bioethics teaching to practice both knowledge and skills. The ‘seven-step method’ has been developed as a teaching method to discuss ethical cases with students. It was introduced in 2012 during the 11th World Congress of Bioethics in Rotterdam. Previously other methods were used in clinical ethics to discuss clinical cases with ethical issues; they were developed especially for problem solving and to find the best solution for the case. However, ethical issues do not occur in only clinical cases that involve interaction between doctor and patient, but they may also occur in any other cases such as education, environment, public health, etc. Therefore, in bioethics teaching, cases might also include ethical issues in a broader sense. Furthermore, emphasis should be put more on the learning process rather than on the output or solution. This paper introduces a simple structured approach or method in ethical case discussion for students. The method is intended to be used for ethical cases in general, not necessarily clinical cases. Furthermore, it focuses more on the learning process and is not necessarily intended to find one single solution as in clinical ethics consultation or deliberation. The ‘seven-step method’ has been tested (pilot study) for undergraduate students in the School of Medicine, Universitas Jenderal Soedirman. The piloting was then evaluated through focus group discussions with both students and tutors (facilitators). This paper first explains the background in developing this method from a particular context, and then will briefly elaborate on each step and provide reasons for constructing that particular step. At the end, it will describe the piloting process and the results of the evaluation.

Introduction

Bioethics has been a new emerging field in medical education. The complexity, however, has triggered the need of interactive methods and approaches for its learning process. One of the interactive methods which is often used in medical schools is clinical case discussion. Clinical cases would involve a patient, perhaps also their family, doctors and nurses, and other health workers involved. The clinical case discussion is based on a clinical problem, or more known as the “problem based learning” (PBL) method. This method is now widely used in many countries and has been known as an effective and interactive method for medical students.

Various methods have been used for PBL. One of the most popular PBL methods for medical students is the so called “Seven Jump Method” which was introduced by University of Limburg, Maastricht, in 1995. It is a structured method used for case discussions which is aimed to let students explain the phenomena or events provided in the given problem. Therefore, the Seven Jump method is focused more on the learning process of understanding each phenomena, rather than problem solving. This is especially crucial for students in the undergraduate, to help them understand the basic medical sciences before entering the next phase of problem solving in clinical setting.

Apart from the PBL method which is used for learning and understanding clinical problems, other structured methods have been used to discuss clinical problems arising with ethical issues. Various methods have been used in different countries to assist physicians, nurses, and healthcare workers to solve ethical issues or dilemmas which arise in their daily practice. One of the most popular methods for resolving these ethical dilemmas in the clinic (also called “clinical ethics”) is the so called “Four-box method” which was introduced by Jonssen and Siegler in the United States. Other methods used in clinical ethics or “ethical case deliberation” in European countries, are the Nijmegen Method, Clinical Pragmatism, the Hermeneutic method, and the Socratic Dialogue. (Steinkamp & Gordijn 2003). The Padova Method in Italy has also been continuously improved and used for ethical case deliberations at the University of Padova, Italy. These methods are used to discuss ethical issues or ethical problems in clinical cases. The aim for these

methods is to find a best solution to solve an ethical problem or ethical dilemma. Unlike the PBL methods, it is aimed and more focused in the problem solving aspect.(Birnbacher 1999)

In bioethics teaching, the learning process should be emphasized more than the end process or result. Ethics should be assessed by evaluating the process of listening and analyzing a problem, and furthermore the process of expressing ideas and logic argumentations relevant to a particular ethical problem.(Robb et al. 2005) The final solution itself might not be as important as the process of finding that solution. Furthermore, ethical problems do not only occur in medicine, but also other fields. For this reason, we have come up with a new method which is aimed to provide a structured guidance for students to understand and practice the basic knowledge and skills in discussing ethical cases and emphasize on the process of critical thinking and analyzing a problem from different perspectives.

Methodology

The method has been introduced in the School of Medicine, Universitas Jenderal Soedirman. It has been implemented in Bioethics teaching for third year medical students. After the first implementation in 2012, it has been evaluated through Focused Group Discussions (FGD) with both students and facilitators. After the first evaluation, it had been modified and implemented again in 2013. A second evaluation was then conducted through FGDs and once again modified. The current version of the Seven Step Method which is practiced is still open for evaluation and feedback.

The Seven-Step Method consists of seven steps which functions as guidance for both students and facilitators. The second version of the method are as follows:

1. ***Clarification of terms and context related to case (clarification)***: Before starting the discussion, students will have the chance to clarify terms which are not clear to their understanding or field, such as medical terms or new technology. They can also ask additional information related to the case, such as certain belief or culture related to the context or setting. This step can also include additional epidemiological data about a certain case or disease.
2. ***What is (are) the ethical problem(s) in this case? (brainstorming)***: Students will start by freely giving opinions and ideas (brainstorming) on what ethical issues might arise in this case. Any ideas or opinions should count and should be written or recorded for further discussion and clarification on the next step. Ethical issues perceived by students may be multiple, not necessarily one ethical issue.
3. ***Why are they considered as ethical problems? What values/norms/principles are at stake? (moral reasoning)***: This third step focuses on the reasoning. An ethical issue or problem will be related with different values, norms, or principles. Students are expected to be able to logically reason on their previous ideas or opinions, on why the issue they pointed out is an ethical issue. This step should be able to eliminate problems which are not ethical problems, such as medical problems, and also eliminate similar ethical problems which have been explained differently, but in fact are essentially the same ethical issue.
4. ***How do you see the problems from different perspectives (from different persons and different aspects)? (different viewpoints, reflection, empathy)***: This step will focus on each ethical issue which have been stated and agreed from the previous step. Each issue will be discussed more deeply and thoroughly. Students will practice viewing each problem from different persons and perspectives, in order to understand better their feelings being in other people's shoes. In a clinical case, students may try playing a role as the doctor, nurse, patient, or patient's family. Students are also asked to see the problem from different aspects, to reflect deeper on psychological and socio-cultural contexts which may be related to the case, and important in discussing ethical problems.
5. ***Are there any legal aspects to consider in this case? (legal aspects)***: This particular step is to identify certain legal aspects related to the problem. This is not only important for students to know and understand the legal aspect, but also important to realize the solution or problem solving for this particular case. The solution may not be possible due to legal aspects in a particular setting or context in the case.
6. ***What are the alternatives in problem solving for these problems?(problem solving)***: The sixth step is to find the alternatives for problem solving. Students will need to discuss what alternatives are possible for the case and their reasoning behind that suggestion. If possible, students can come to one single best solution.

7. **What is (are) the lesson learned from this case?(lesson learned):** The last step and most important is to reflect on what lessons the students have learnt from the particular case. Lessons learned may involve multiple and various lessons from the student's perspective. Tutors are asked to give ample time for this step and give each student the opportunity to reflect on at least one lesson he/she think is important from their own perspective.

Discussion

Results from the first evaluation showed that both students and facilitators are in favor of using a certain structured method for discussing ethical cases. Facilitators, who are mostly faculty members with a medical background, are not yet familiar with bioethics and ethical case discussions. Therefore, they feel more confident facilitating students with a clear guidance. However, both students and facilitator felt that there were some overlapping between step 3 (viewing from different persons and role play) and step 4 (viewing from different aspects) from the original version of the seven-step method. Facilitators also felt that since the discussion emphasizes on the learning process, there should be a resume at the end of the discussion about what lessons have the students learned from the discussion. The method was then revised; one step was deleted (merged) and another step was added at the end (step 7: lesson learned).

The second evaluation (evaluating the revised version) shows that students and facilitators were still a little confused about the second and third step, on identifying and reasoning ethical problems. Some students still feel difficult to directly point out an ethical problem. They are often uncertain whether or not the problem is indeed an ethical problem. They also feel that identifying an ethical problem is often followed directly by moral reasoning, on why they consider the problem as an ethical problem. They also feel that viewing from different perspectives can actually help them identify the problems.

After seeing the case from different perspectives, they realize that there are potential problems. Therefore, they suggest that the fourth step of viewing from different perspectives be replaced on the second step. Based on the second evaluation, the method was then revised to the third version, which will be implemented and evaluated.

Conclusion

This paper introduces a simple seven-step structured approach for ethical case discussion for students. It is intended to be used for ethical cases in general, not necessarily clinical cases. The method is aimed to provide a structured guidance for students to understand and practice the basic knowledge and skills in bioethics. It focuses more on the learning process and not necessarily to find one single solution as such in clinical ethics consultation or deliberation. This method is in its process of evaluation and still open for discussion and feedback.

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Visiting the principle of “vulnerability” in the context of bioethics education

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Abstract

Historically, Bioethics has steadily evolved over the past four decades, since the early 1970s, from theology to philosophy, the secular and the rational, at times verging on a discourse between “moral strangers”. However, from the earliest time when the principles were accepted, there was a move to integrate experience (“narrative ethics”) and also “virtue ethics” (McIntyre and Pellegrino). Van Potter extended the term to include “global ethics” and “ethics of the environment”. At the start of the new millennium, Warren Reich (editor of the Encyclopedia of Bioethics) said: “One can see that there is a new understanding opening up in the 21st century where rationality alone is not the basis for philosophical and ethical dialogue, but where the individual, especially the one with no voice is given importance”. In contrast to the four American principles of biomedical ethics, the four principles of European bioethics include vulnerability along with autonomy, dignity, and integrity. Quoted from Rendtorff and Kemp, “Basic Ethical Principles of Bioethics and Biolaw” (Vol. I, 2000), “The principle of vulnerability is ontologically prior to the other [European] principles, as it expresses better than all of the other ethical principles the finitude of the human condition and therefore it might be the real bridging idea between moral strangers in a pluralistic society”. This paper reflects on the importance of inculcating in students today the importance and appreciation of the principle of ‘Vulnerability’, linking it with the response of the “Ethics of Care”, the principle of “Justice” and the concept of “Global Ethics” in the context of vulnerable populations as well as of the environment.

Introduction

Usually bioethicists think of the four ‘Georgetown’ principles of beneficence, non-maleficence, autonomy and justice, when referring to ‘principles of bioethics’. However, the so-called ‘European’ principles of vulnerability, integrity and dignity, inspired by the philosophy of ‘personalism’ and ‘phenomenology’ are less referred to in the Asian context.

The word ‘vulnerability’ stems from the Latin word *vulnerare* which means ‘to wound’ and certain groups – children, pregnant women, the elderly, differently abled, educationally or economically disadvantaged – have traditionally been considered to be vulnerable populations as they are unable to give informed consent in settings of clinical research.

In an insightful study, Michael Kottow, of the Faculties of Medicine, Philosophy and the Humanities, Public Health School, University of Chile, explains that vulnerability is a feature of all humanity, and so it is improperly extended to designate these groups which are already vulnerated and are better referred to as ‘susceptible’. Examining the European principles more closely, Kottow further explains that while they are a “welcome enrichment of principlist bioethics, they can perhaps be more accurately understood as anthropological descriptions of the human condition.” However, he adds, they are “fundamental enough to inspire bioethical requirements of protection and respect for human rights in the wake of social justice”

Evert van Leeuwen, Professor and Head of the Ethics division at the Radboud University, Nijmegen, Netherlands, takes the thought a little deeper. “All living beings are vulnerable” he says, “unlike stones, and share finitude and the need of a balance with their environment. So vulnerability is more the *characteristic* of human beings as living beings than a description. Morally, vulnerability asks for support and help when there is no safe environment.”

Another response to vulnerability is an attitude of care addressed by the philosopher-educationist Nel Noddings - a relational ethical caring, which is dependent on and superior to natural caring and can be learned in the educational setting through example and modeling.

Incorporating the European principles, especially that of Vulnerability, into Bioethics Education in the Asian context may provide greater inspiration towards bioethical maturity, in our young people today, than theoretical and philosophical principles. It will help to develop attitudes of attentiveness, responsibility and professionalism, whether in the medical/nursing fields or in our schools /colleges.

Methodology

This is a philosophical study based on review of the works of philosophers of ethics, which needs a long-term follow-up by empirical data.

Discussion

Bioethics education began in the early seventies with 'Medical' Ethics in American medical schools so as to give a human face to medical sciences. Evaluating the effort after four decades, Cooper and Tauber found that this objective did not seem to have been achieved. Bertolami, likewise, realized that students did not seem to be able to translate knowledge into action. They learn the jargon and may be able to pass the written examination. But the litmus test of bioethics lies on the battleground of real life.

It would seem that the methodology used for imparting bioethics education led to an overemphasis on rationality while what is needed for true bioethical maturity is, as Coulehan says, an intuitive *intelligence of the heart*. Bioethics education does not seem to help in developing moral sensitivity; medical students lack empathy and moral perception and are unable to respond to morally demanding situations with compassion and understanding. There is an important lesson to be learned from this analysis by Medical ethics educators.

Bioethics is a wider, umbrella subject which can be incorporated into classroom teaching from the very early stages of primary education. A study done in Scotland in 2007 revealed that "philosophical concepts explored by four-year old nursery school children through the 'thinking through philosophy' program is a good long term investment for their future." Professor Keith Topping and Dr Steve Trickey said that the self-esteem of pupils and confidence rose. Pupils were *more* aware of their own and the feelings of others and classroom behavior improved. The children were tracked into secondary school and it was observed that the program had a long-term impact.

If Bioethics educators started with the relational rather than the rational, with descriptions of the human condition that are universal and foster intelligence of the heart, rather than principles to be learned by heart, there would be greater hope for bioethical maturity and moral agency in the citizens of tomorrow's world. The Scottish experience proves that we can start much earlier than we do just now. Further, in the Asian context, the European principles are not just anthropological, but have a cosmic dimension as well. Sridevi Seetharaman, commenting specifically on the principle of human dignity from an Indic perspective, underscores that a concept common to Hinduism, Jainism and Buddhism is that all living forms are objects of respect which emanates from the recognition that the same divine spirit is inherent in all. This reflection is also applicable to the principle of vulnerability, which calls for a moral response in terms of support, protection and care.

The venue of the 15th Asian Bioethics Conference is Japan, and the organizers have given much time and thought in arranging visits to sites which lend themselves to appropriate discussions on geoethics, environmental ethics and nuclear ethics. There could be no better opportunity to reflect on vulnerability in the face of the challenges our world faces today from both nature and technology.

In the classroom Bioethics educators face two other challenges. The first is to impress upon students that respect for human beings and other creatures implies recognition and articulation of their vulnerability, in all aspects – social, psychological and biological. In human beings it is the social dimension that is of great importance. Paying respect and listening to the wounded vulnerability requires personal understanding of what it is to be human with human relationships. In the case of nursing and medical practice those relationships need qualification. They do not have to do with power struggles or showing excellence (platonic virtues) but rather with sharing the same kind of vulnerability and the moral call to support.

The second is that educators must realize the superiority of students making a well-considered response because they understand the moral meaning of vulnerability rather than just because they are modeling themselves on the example of a well-loved and caring teacher.

Let the last word rest with Professor Reich:

“The moral idea of vulnerability – to be gleaned from many contemporary sources and newly retrieved from pre-Enlightenment sources – would require a major re-thinking of every principle of bioethics and every area in which bioethics functions. For example, a desiccated principle of beneficence would have to be replaced with a more richly responsive virtue of concerned care. If a major, worldwide re-thinking of bioethics is carried out under the banner of vulnerability, bioethics will be capable of fostering a major impact on society in the next generation and will, at the same time, become more credible as an academic and public enterprise.”

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Academic integrity perception, intentions, and attitudes among medical students in Jakarta, Indonesia

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Abstract

Educational institutions must promote the learning of professional behavior and conduct as early as possible and evaluate its implementation, including the evaluation of academic integrity. Academic integrity regarding the students' professional behavior should receive serious attention in the field of medicine. In this study, we aimed to know the perceptions of academic integrity, as well as attitudes and intentions among medical students in Jakarta, Indonesia. This study provides a descriptive analysis and a quantitative survey (non-experimental research) on a private medical school in Indonesia by using a questionnaire about academic integrity. The sample population was 209 students from the levels 1, 2 and 3. This study obtained a picture of perceptions, attitudes and intentions of academic integrity, as well as the relationship between perceptions, attitudes and intentions of academic integrity. Details of the results will be presented and discussed.

Introduction

Doctors are required of capable professional functioning, capable and qualified prevention service and capable therapeutic service. These has to start at educational stage. Petersdorf and Swick stated that medical education is not only preparing student to become practitioner by developing knowledge and skills, but also high ethics standard and moral integrity (Petersdorf 1989, Swick 2000). Van Luijk (2005) stated that ethical attitude and behavior were part of professionalism.

Some of attitude expected from medical students are *honesty, respect, fairness, responsibility, trust*. (General Medical Council & Medical Schools Council 2007). These attitudes correspond to attitude expected by *The Center of Academic Integrity (1999)* who defined academic integrity as commitment, even when facing difficulty, based on 5 basic values: honesty, trust, fairness, respect, and responsibility.

Based on that, it is important for an educational institution to know about student academic integrity. Academic integrity needs to be treated with serious concern. Concern on academic integrity behaviour should be done seriously, because academic integrity corresponds with validity of graduates qualification (Rennie & Crosby 2001). The objective of this study was knowing perception, behavior and intention of student academic integrity and linkages between perception, behavior and intention of academic integrity.

Methodology

This study was done by descriptive analysis of a non-experimental survey at a medical faculty in Indonesia, in June to November 2011. The population study included 209 students from first, second and third levels.

The tool used to study academic integrity was academic integrity questionnaire from Roff⁽⁷⁾ in which validity and reliability tests have been done. Inclusion criteria on this study were being registered as active student of medical faculty and willingness to respond. Exclusion criteria were: a) academic integrity questionnaire is not completed and or;

b) resign from study. This study got approval from students through informed consent before collecting data and had been approved by Ethics Committee of Medical Faculty (*ethical clearance*).

Results and Discussion

To facilitate observation on perception, behavior and intention of student academic integrity, in this study the largest percentage tables of answers related to perception, behavior and intention on every questionnaire item was made. This included: 1) The largest percentage of items considered as breaking academic integrity; 2) The largest percentage of items which respondents were not sure if it was an item of breaking academic integrity; 3) The largest percentage of items considered not an item of breaking academic integrity; 4) The largest percentage of perception to academic integrity of fellow students; 5) The largest percentage of items in which respondents ever broke academic integrity; 6) The largest percentage of items in which respondents intended to break academic integrity; 7) The largest percentage of items in which respondents were not sure that he or she would break academic integrity.

For example, the largest percentage of items in which respondents were not sure it was breaking academic integrity was “*Assesing old paper or coursework, which is not published for the whole class, to help study*” (item 8). About 37.8% (79 people from 209 respondents) had perception that this item was breaking academic integrity. “*Getting or giving help on courework, violate teacher’s rule, for example by lending his or her work to another student*” was on the first rank of doubt in intending to break academic integrity by students (51.7%).

The items which the students were not sure if it was breaking academic integrity, included 1) behavior which is mostly done by fellow students; 2) behaviour that has been done by student; 3) behaviour which is intended to be done by student; 4) behaviour which student is not sure whether it breaks academic integrity.

The item which got the highest percentage as not breaking academic integrity was “*accessing old paper or coursework, which is not published for the whole class, to help study*” which is 31,1% (65 person from 209 respondents). As for “*Falsifying health workers signature on work result, patient graph, ranking sheet or arrival sheet*”, whole respondents (100%) stated that this attitude was the wrong attitude.

Discussion

Pattern of association found on these items on perception, behavior and intention of academic integrity, was a vigilance alarm to education and development of professional behavior. Evidence of varied perceptions, behaviors and intentions of academic integrity by students showed the need of study to coaching, increasing and developing the concept of academic integrity among student. This concept is expected to increase commitment or enlightenment for motivation and raise awareness that: 1) The creation and implementation of academic integrity is part of dynamic educational institution culture; 2) Educational institutions integrity, teacher integrity and employees’ integrity caan be reflected on institusional policy, teacher and employees professional behavior is a hidden curriculum for the development of student academic integrity; and 3) Educational institution and institutional policy and teacher and employees professional behavior are a role model for student.

Pattern of associations found on perception, behaviour and intention of academic integrity in this study is in line with previous studies about planned behaviour theory by Azwar (2010). It is also in line with Nimran (2009) opinion which stated that human behaviour is often guided by his or her perception on reality. Jordan and Lim and See cited by Hrabak et al. (2004) state that academic integrity behavior is affected by academic integrity perception. Furthermore Musharyanti (2012) found that behaviour considered not breaking academic integrity was behaviour mostly done by student nor by fellow etudent.

Based on our data, non-ethical educational practices such as plagiarism are seen as less serious compared with other aspects about educational misconduct, such as abuse of power. This finding is in line with Elzubair & Rizk (2003) findings. In this study it was found that non-ethical educational practices such as plagiarism were seen as less serious compared with other aspects of educational misconduct, such as abuse of power. This serious issue is not surprising, because Ryan et al. have stated that a lot of pharmaceutical students showed ignorance about behavior including plagiarism and academic dishonesty, even though the institution had applied rules related to academic dishonesty.

They consider behavior such as plagiarism as a problem which is not important and not common. A method to break the chain of academic integrity violations, is rules enforcement and sanction to offenders of academic integrity.

Conclusion

A lot of academic integrity violations are considered not a violation by students. Non-ethical educational practices such as plagiarism are seen as less serious compared with other aspects of educational misconduct, such as abuse of power. Behavior such as plagiarism is seen as a problem which is not important and not common. It is also found that a few behaviors were perceived as breaking academic integrity, but still had a confession that it was a violation by fellow students and there was intention to do the behavior perceived as breaking academic integrity.

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Teaching the Islamic worldview of environmental ethics to students of science in Malaysia

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Abstract

Religion is an important cultural resource in Malaysia particularly for environmentalists who are engaged in creating new paradigms of thinking about managing the current ecological or environmental crisis. This paper presents the course content of an undergraduate course for science students entitled '*Philosophy of Islamic Science and Technology*' of which a component on the '*Islamic Philosophy of Environment*' is emphasized. The course is designed to particularly groom students who recognize the importance of environmental conservation and hence would act ethically towards nature. The Islamic view of nature perceives the environment in a rather different way from the modern view of nature. While the modern view of earth systems and humans may be divided into human-centric views or anthropocentrism, and nature-oriented ones, or eco-centrism, Islamic environmental ethics encourages humans to see the interconnection and interdependence of all elements in the universe. It emphasizes and expounds the harmonious relationship between humankind and nature in concordance with Islamic teachings. This course also highlights an Islamic epistemology of the environment as practiced in Malaysia that has been translated in many institutions, as presented by the term "Islam *Hadhari*". Islam *Hadhari* calls for Muslims to be progressive, modern and dynamic, and yet moderate in behavior and attitude.

Introduction

This paper presents the course content of an undergraduate course for Malaysian science students entitled '*Philosophy of Islamic Science and Technology*' of which the component on the '*Islamic Philosophy of Environment*' is emphasized. In discussing global environmental issues and the future of our world, the aspect of ecological and environmental thinking from Islamic perspective is often overlooked. While the modern view of earth systems and humans may be divided into human-centric views or anthropocentrism, and nature-oriented ones, or eco-centrism, Islamic environmental ethics encourages humans to see the interconnection and interdependence of all elements in the universe. It emphasizes and expounds the harmonious relationship between humankind and nature in concordance with Islamic teachings.

Syed Hossein Nasr (1977) and Osman Bakar (2007) suggest that the environmental crisis is due partly to an intrinsic spiritual crisis in modern man and partly humankind's neglect of the spiritual feature of modern science and technology. An understanding of spiritual foundations of the environment as that of Islamic philosophy may be a way out of the current ecological crisis as a total reliance on science and technological applications will not necessarily overcome the effects of global warming and other associated changes for which human beings have been claimed as being responsible.

This paper shares the lecture contents of the topic '*Islamic Philosophy of Environment*' which has been developed from a systematic literature review on Islamic perspectives and values related to environmental protection which were adapted to suit the needs of local Malaysian undergraduate science students. An understanding of Islamic philosophy on nature is believed to create some awareness in these future scientists who will then ultimately tread cautiously in their scientific activities and endeavours related to policy making on research in S&T. The paper ends by highlighting an Islamic epistemology of the environment as practiced in Malaysia that has been translated into a form of corporate policy and practices in many institutions, as presented by the term "Islam *Hadhari*".

Islamic philosophy on Nature and the Environment:

A historical overview of current environment crisis and the impacts from developments which are onsets of contemporary science and technology is first presented. In the West, the development of society's ecological and environmental concern is the result of a systematic culture of awareness that has been ingrained in modern man; that pollution is the direct cause of modern man's impact on the environment. On the other hand, Islamic philosophy makes no division between man and nature but rather emphasizes the interconnectedness of the relationship between humans and nature.

The infusion of Islamic values and environmental ethics can reshape the orientation of development in science and technology. The need to balance between spiritual and material worldview can be seen in organic farming. The idea of unity and interdependent between all entities in the universe are the ecological principles in Islam. The Islamic worldview of environmental ethics emphasizes on the following concepts:

(i) Tawhid (Oneness of Allah or 'unity of existence')

This emphasizes a science of ecology which encourages humans to see interconnection and interdependence of forms of life in the universe. Nature is a sign of God creation and it has element of symbolism, i.e. sun symbolising divine intelligence. Ocean, mountain, air and many more are the creation of God and symbolise the greatness of the Creator. This understanding can bring us closer to God, and this world could not exist without its Creator. Therefore, the existence of nature can remind us of His existence and His greatness and God is the Creator and the owner. Nature is sacred and implies the attributes of God. *tawhidic* science also implies the sacredness of nature inclusive in relatedness with God.

(ii) *Khalifah* (Vicerent or Trustee).

Man as *khalifah* (vicegerent) does not have an absolute right to dominate over nature. Man as a vicegerent of Allah has responsibility and trusteeship according to Allah's command. Man also as representative and servant of Allah has to obey the command of Allah. Man carries certain responsibilities and does not have absolute ownership of nature with Al-Quran and *Hadith* as the guidance.

Islamic Approach to Environmental Issues:

In Malaysia, the concept of "Islam Hadhari" underlies many governmental efforts to instil good governance based on the values of the Quran and Hadith. In fact, the activities and programmes initiated by the Department of Islamic Development of Malaysia (JAKIM) together with the Economic Planning Unit (EPU) emphasize a rediscovery of the spiritual values of nature which establishes ten core values (Table 1), including safeguarding the environment.

Table 1: Ten Principles underlying the Philosophy of Islam Hadhari

Faith in and piety towards Allah
A just and trustworthy government
Free and liberated people
Rigorous pursuit and mastery of knowledge
Balanced and holistic approach towards economic development
Quality of life for the people
Protection of the rights of minority groups and women
Cultural and moral integrity
Safeguarding the environment
Strong defence capabilities

In brief, efforts in 'safeguarding the environment' are centralized around (i) an awareness and responsibility of man as "*khalifah*" and servant, (ii) effective conservation of natural environment, (iii) avoiding wastage of natural resources, (iv) preserving water and air quality, and (v) protecting flora and fauna.

The concept of Islam *Hadhari* is consistent with sustainable development philosophy as stated in *Our Common Future* in Brundland Report in 1987 that highlighted social, economic, cultural and environmental issues and global solutions. Several department courses have been formulated to address concerns surrounding sustaining the humankind, nature and its future sustenance:

Science, Technology and Sustainable Development (SFES1151)

In this course, the student is exposed to the concept and philosophy of development in several dimensions – economy, human-nature relationship, social justice, human development, community and society.

Science, Technology and Religion (SFES2134)

The application of universal value of religion in life is introduced defining the role of religion within the philosophy of science.

Philosophy and Environmental Ethics (SFES1335)

Discussion on the environmental crisis is studied from a philosophical and ethical perspective.

Policy and Management of Environment (SFES3363)

Concepts associated with the idea of sustainable development as a model in solving the environment crisis/problems is delivered. The role of ethics and cultural worldviews, politics and economy will also be discussed creating an avenue for ideal and practical solutions to address sustainable development and environmental concerns.

Conclusion

Islamic countries through the process of modernization have inherited problems created by Western empires; global warming and climate change which are effects of industrial pollution are notable examples (Nasr, 1994). Muslims must not adopt science and technology uncritically, and they can do this by revisiting the essence of the Islamic philosophy of science.

Religion is an important cultural resource. In Malaysia, in particular, the Islamic philosophy of nature has become one of the important sources for environmental protection. The value is widely adopted by environmentalists who are engaged in creating new paradigms of thinking about managing the current ecological or environmental crisis. The teaching of the course on an *Islamic Philosophy of the Environment* is aimed at producing students who will not only tread cautiously in scientific activities and endeavours and who will reflect on sustainable policies on research in S&T but it will a Muslim generation that is progressive, modern and dynamic, and yet moderate in behavior and attitude as envisioned by Islam *Hadhari*.

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***Ethics of Disaster,
Peace and Conflict,
Conflict Resolution,
Peace and Democracy***

The true cost of conflict and its implications for future generations

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Abstract

Issues such as equity, peaceful conflict resolution within and between nations, environmental protection and sustainable development, are matters of ethical concern and collective responsibility. Increasingly insights gained from the Human Genome Project are highlighting mechanisms whereby social trauma can influence health parameters across the generations. Yet despite our inferred ethical obligation to leave a healthy and fruitful planet for generations to come, the world's military are responsible for 8% of global air pollution, 6% of raw energy use and almost all high-low nuclear energy waste. Essentially, the Global costs of conflict are multifaceted and far-reaching and cannot be quantified by means of financial, injury or casualty burdens. For instance, epigenetic influences (that is, all the external environmental variables which regulate gene activity) modulate normal developmental processes; and normal development maybe disrupted by harmful epigenetic variables that (1) disrupt DNA forming deleterious mutations; (2) change gene imprinting processes and their consequent expressions; and (3) activate 'fetal programming' strategies that trigger changed endocrine indices that modulate normal growth and personal development. A major concern has thus been to understand the unique long-term physiological configurations of stress responses as experienced by traumatized children in nations caught up in institutionalized violence – whether declared or undeclared war-zones. This presentation develops from a bioscience ethical standpoint and focuses on how exposure to traumatic events; such as experienced at times of conflict, impact upon the health of future generations and future societies which, in turn, have bearings upon economic status, political activities and cultural conditions as created by circumstance and choice. Bioscience ethics (<http://www.bioscience-bioethics.org/>) facilitates free and accurate information transfer from applied science to applied bioethics which, in turn, provides unique educational opportunities for advancing biological understanding within the scaffolding of ethics.

Introduction

On Maintaining Health and Wellbeing, whose Responsibility is it?

We live in a world in which technology plays a significant role in all aspects of living; a world where older technologies are constantly being improved or replaced with modern and more sophisticated ones. Furthermore, technology may be adapted for unintended purposes where its altered application may have unintended adverse consequences. Specific issues of concern about the development and application of high-tech innovation include damage to the environment, injury to human health, furthering socioeconomic inequality and infringement on secular and/or religious beliefs. In each case, there is the need to consider both the benefits and the risks of technology to be ethically determined.

The problem is that in many cases, the public is limited in the knowledge about the full benefits and risks and are, consequently, in danger of either underestimation or overestimating the potential of a particular technology for good or evil – or even to guestimate possible applications other than the ones intended during its development. In addition, the acquisition of new high-tech technologies typically tend to favor societies rich in resources to sustain development or procurement compared with limited-resource producers; thus, further marginalizing those societies by lack of new technologies which may, in turn, generate, or further accentuate pre-existing conflict and population displacement. These serious ramifications maybe reflected across the generations and further promote inequalities.

Discussion

Under optimal developmental conditions that form and provide children with comfort, ease and happiness, it is critical that the progress of adaptive social bonding (such as personal character development and ethical discrimination), is in sync with developing intellectual / emotional neural networks (Pollard 2013). Since some epigenetic marks remain in place across the generations, this implies that a parent's experiences encoded in the form of epigenetic tags can be passed down to future offspring – a process called epigenetic inheritance. Consequently, a parent's epigenetic experiences may enhance, or impede, the toddler's early innate but still dormant genetic potential (Rincon-Cortés & Sullivan 2014).

Since harmful disturbances in one generation maybe perpetuated across future generations, the Global costs of modern conflict are multifaceted, far-reaching and cannot be adequately quantified by means of financial, injury or casualty burdens. Significantly, conspecific conflict, as opposed to environmental selection, may have been useful in shaping our intellectual intelligence (IQ) in the past; in the modern context, however, war's truest costs may possibly be thwarting children's ability to develop a sense of ethics across the generations. If we are to survive as a species we can no longer argue that conflict is an adaptive evolutionary strategy so we must begin to skilfully manoeuvre our innate cooperative behaviour towards peaceful co-existence. Put simply warfare, our primitive brain's laboratory for trauma research, is no longer a survival strategy and must be regarded as an evolutionary failure.

Science *per se* is ethically free where scientist, traditionally, generate value-free information that enhances knowledge. However, science's technological implementation impacts on ethical choices and decisions about the technology or expertise in question. In general, the main ethical issues that impact on conflict resolution relate to human health and safety, environmental pollutants, invasion of privacy, and lifestyle issues of privilege, justice and economics (Al-Gubory, 2014) all of which influence conflict engagement and commitment resolution (Pollard, 2009). It is important that both benefit and risks of technology be considered in making ethical decision about application choices. It's time that we realistically engage in holistic ethics directed more closely towards understanding and learning about the realities of marginal existence, health and socioeconomic disparities and environmental violation.

Risk Management and the Precautionary Principle: Since genetic damage is cumulative and maybe permanent – across the generations even – it becomes crucial that the precautionary principle be considered especially crucial when it comes to R&D directed towards conflict resolution technology. Regardless of the political pros and cons of each initiative, the consuming public ought to ultimately be the final arbiter of its application. Ideally, public understanding, attitude, and acceptance of an identified technology should be of increasing strategic significance for the further progress of said technology. For that the public has an ethical responsibility to be informed. It follows, therefore, that scientist and technologists need to aggressively pursue public education to avoid consequences from uninformed judgments and misconceptions.

The 'precautionary principle' or 'precautionary approach' is a response to uncertainty when faced with risks to human health or the environment. The idea behind the principle is that appropriate action should be taken to avoid the risk of any serious and irreversible damage to the environment. The principle, however, does not imply that if there is risk then that activity should not go ahead. The precautionary principle is an established principle that can be used in environmental management, law and even policy making for any area such as pollution, toxic chemicals, food standards, fisheries management, species introductions and wildlife trade. In essence, the major aim for which the principle is deployed is to support ecologically sustainable development, to manage natural resources and to conserve biodiversity while continuing economic development. In summary, sustainable peace initiatives support:

- a) The eradication of disease and poverty;
- b) Spending funds on education;
- c) Spending funds on living and occupational needs;
- d) Environmental preservation.

Emphasis 'Not' on militarism and violence because reaching across generations, across species is the most effective biological survival strategy.

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Breaking the vicious cycle of hate and revenge: the true life story of ‘Wounded Tiger’, a lesson from history

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Abstract

Achieving peace between warring factions is almost always an exceedingly difficult task, and unless there is a way for enemies becoming reconciled through mutual forgiveness and acceptance, the vicious cycle of hate and revenge will continue to rear its ugly head. ‘Wounded Tiger’ is a recently released historical novel, soon to be made into a movie, that is based on the true story of two soldiers from opposite sides who thoroughly hated the other side, but who later became close friends and associates. Mitsuo Fuchida was the commander and lead pilot of the Japanese bombing of Pearl Harbor, while Jake DeShazer was a bombardier on the Doolittle Raid that was the initial American response. DeShazer was captured and spent over three years as a prisoner of war, enduring torture and deprivation. The kindness of a young American girl who had been raised in Japan and whose parents had been executed by the Japanese military was instrumental in bringing these two together. It is a fascinating, real-life story that makes a powerful plea to our world today to become peacemakers and to bring reconciliation where there is hatred.

Introduction

Ever since humans began walking on this planet, human history has been one of strife and conflict. Peace has always been an elusive goal, and even during times of relative peace, that ‘peace’ was imposed by force or the threat of force. The “Pax Romana” of ancient times was simply a ‘lack of war,’ because few were willing and able to challenge the overwhelming Roman power. The same could be said about periods of relative peace ever since, including in our present day. Whatever peace the world has been able to temporarily enjoy, it’s been this kind of ‘negative peace’, i.e. a lack of war, rather than ‘positive peace’ built on mutual trust and concern for the other. Now, that kind of ‘negative peace’ is usually much preferable to war, but of course, that depends on how such ‘peace’ is being enforced and what’s being sacrificed in the process, i.e. things as freedom and human dignity.

I believe that such ‘positive peace’ will always be beyond human effort alone, as we are ‘fallen creatures’ with self-interests that will always be in conflict with the self-interests of at least some other people in a world of limited resources we are forced to compete for. Nevertheless, we are called to work for at least a ‘semi-positive’ peace in which all have a place at the table and mutual understanding and respect is sought after. We are called to be ‘peacemakers’ and not simply ‘peace-keepers, and we need to listen to each other and support each other in finding the best ways of accomplishing that lofty goal.

What I’d like to do in this brief presentation is to present a model that is based on a true story of reconciliation and forgiveness between avowed enemies. I have lived and worked in Japan for most of my adult life, first coming to Japan in 1968 as a student as part of a program with the East-West Center in Hawaii, and I later returned as a short-term missionary from 1971-74. After going to seminary to get a masters and doctorate in theology, I returned to Japan in 1982, where I’ve been ever since. I’ve been studying the language and culture of this nation for 47 years and have developed a particular interest in the history of the people of Japan, where they came from and how their culture developed through interactions with other cultures. It is interesting to note that a great deal of evidence points to strong influences from even the biblical lands of ancient Israel being transferred along the ‘Silk Road’ to ancient Japan to become integral parts of its native culture and religious worldview. As with all nations, that cultural worldview has played a primary role in the historical outworking of the struggle between war and peace, justice and mercy.

Sixty-nine years ago, the world was just emerging from WWII, and Japan was a devastated country trying to get back on its feet under the occupying Allied Forces led by the United States. How it got into that state of affairs is the theme of this novel called “Wounded Tiger,” the story of two soldiers from opposing sides finally realizing that there

must be a better way and then dedicating their lives in a joint effort to pursue peace and reconciliation. They were Mitsuo Fuchida, who was the commander and lead pilot of the attack on Pearl Harbor, and Jacob DeShazer, who was a bombardier on the Doolittle Raid a few months later to bomb Japan in response to that attack. The title of the novel, “Wounded Tiger,” refers to Fuchida and the code he used to signal to the Japanese fleet that had been successful in initiating the surprise attack on Pearl Harbor, “Tora, Tora, Tora!” or “Tiger, Tiger, Tiger!” Indeed, Fuchida would become that “Wounded Tiger.”

I have a personal interest in this project, as I am part of a team translating this fascinating novel into Japanese for release within the next few months, and we are just now finishing up the first draft of the Japanese version. My main task is checking to see that the translation is faithful to the original, and I am also advising the author, Martin Bennett, concerning the fine points of Japanese culture to make sure the novel is true to the cultural and historical facts. While the author has done an admirable job in creating dialogs and filling in details of the story that are not recorded in the existent records, a few ‘Americanisms’ and other minor errors did find their way into the original book, and these are also being corrected.

The book begins by giving some of the background that led up to Japan’s aggressive expansionism that brought on the war. After Japan opened up to the outside world after some 250 years of self-imposed isolation, it embarked on a path of trying to technologically catch up with the West. The slogan of the day was “*wakon yōsai*” or “Japanese spirit.” Not only did Japan feel the urgent need to adopt western technology, they also felt they had a right to emulate western colonialism as well. One has to admit that they were amazingly successful at both of these endeavors. Within a generation of emerging from the dark ages of feudalism, they were building an empire, which they euphemistically called the “Greater East Asia Co-Prosperty Sphere.”

Viewed from our present vantage point, we are naturally quite critical of the ethnocentric assumptions and rationalizations that lay behind these actions, but the author takes pains to understand the Japanese mindset of that day within their own context. This, of course, in no way justifies what they did, but recognizing and addressing legitimate aspirations and grievances are integral to the peace-making process.

When it comes to the story of “Wounded Tiger,” there are two aspects of this clash of cultures that play particularly prominent roles. The first involves that of national pride. While Japan had gained considerable prestige by defeating Russia in a short war in 1905, she still was not considered an equal player on the world stage by the western powers. One of the early scenes in the book takes place in San Francisco Harbor in 1925, where Fuchida and his fellow Japanese soldiers feel humiliated by the Americans. At that time, Japan and the US were still allies from WWI, and so the Japanese were on a training mission to the US. The storyline includes an episode where US sailors make fun of the Japanese and their older ship, which was dwarfed by the new American battleships.

Feelings of superiority of one people over another has historically been a major cause of strife between nations, and Japan was both on the receiving end and the giving end during this period leading up to WWII. The Western powers clearly perceived themselves as superior to Japan (not to mention a whole host of other countries), and they clearly showed it by the way they treated Japan. But, Japan did the same thing in its treatment of other Asian countries, and even today, this issue is not just something out of ancient history. It’s still very much a live issue in our world today as well.

The second aspect brought out in the book is the concept of revenge. Seeking revenge against someone you feel has wronged you is as old as human history and is something you will find in all cultures. However, the various cultural worldviews that exist in our world today have different ways of viewing and trying to control this universal urge. The cultural and religious worldview dominant in Japan during this period was one in which revenge was glorified and thought of as a virtue rather than a vice. The famous story of the 47 “Rōnin” Warriors perhaps exemplifies this more than anything else. While this tale of revenge was no doubt embellished over the years, it is nevertheless based in true historical events. The actual events took place between 1701 and 1703 in the Western calendar, and the story developed into what became in effect a ‘national legend’. It was taught in schools in a way designed to instill in the Japanese the concepts of absolute loyalty and honor.

To give you a brief outline of what the story is about, the 47 *samurai* warriors were the loyal servants of their ‘*daimyō*’ lord in the Akō fiefdom, which is an area not far to the west of Kōbe, where I happen to live today. Their *daimyō*, Asano, had been forced to commit ritual suicide by the leaders in Edo for attacking another *daimyō*, Kira, due to being insulted so badly by him. Asano and his clan were thus disgraced, and his loyal retainers were forbidden by

the shogunate to take revenge. However, the *samurai* code of honor required them to avenge the death of the master, and thus they were in a fundamental conflict of values. Forty-seven of Asano's retainers made a pact among themselves to conspire in an elaborate plot to take revenge on Kira. It involved pretending to live a life of profligate abandonment designed to convince Kira and his spies that they were dishonorable former *samurai* who were no longer a threat, and when the time was right, well over a year later, they launched a surprise attack and killed Kira, even though they knew they would be sentenced to death for doing so. Their bravery and dedication to honor became the stuff of legend, and their example was touted as the ideal for all Japanese to aspire to. Needless to say, Fuchida and his colleagues were raised on this stuff, and so it was certainly in the background leading up to their surprise attack at Pearl Harbor.

In addition to the intertwined threads of the lives of Fuchida and DeShazer, there is also one other strand that involves a third subplot that is integral to the story of how these two wounded warriors came together with a shared purpose and vision for peace and reconciliation. James and Charma Covell had arrived in Japan as missionaries in 1920, and they appear in the novel in the aftermath of the 1923 Great Kanto Earthquake that devastated Tokyo and Yokohama. These three strands of the story alternate with key episodes leading up to what happened during and immediately following the war. The Covells do their best to lobby for the cause of peace, but are forced by circumstances to evacuate to the Philippines, where they thought they could safely wait out the war and return to Japan to help rebuild.

The Japanese, however, were intent on expanding their empire and procuring the natural resources they felt they were being denied by the Western powers, and so they soon overwhelmed the defenses of the Philippines and began a brutal occupation that caught the Covells in a bind. Their children had already gone to the US for schooling, but Jimmy and Charma had decided to serve the Filipino people while they waited for the war to end. With their routes of escape cut off, they had no choice but to flee into the interior mountains with a small group of other foreigners. They were cared for by the locals, and they founded a small community they called "Hopevale," hoping to merely stay out of sight and harm's way. The Japanese military, however, was intent on rooting out the remaining guerilla fighters, and the residents of Hopevale were caught by the relentless search. Even though it was clear that these people were no threat, the order came down for them to be killed, and so they were executed in what became known as the "Hopevale massacre."

This is where their daughter, Peggy, comes into the picture. She had just graduated from college when she learned of her parents' death. While that was understandably a huge shock, she nevertheless decided to go to work at a prison camp where Japanese prisoners-or-war were being held. Having been born and raised in Japan, she was fluent in the language, and so she was like an angel to those Japanese prisoners, as she did everything she could to help them. Their treatment in these holding camps in America was vastly different from what they thought American and other Allied prisoners must be receiving in Japanese prisons, and when they found out what had happened to Peggy's parents at the hands of their fellow soldiers, her kindness seemed all the more incomprehensible to them.

Among those prisoners in Japanese prisons were the eight Doolittle Raiders that had been captured by Japanese soldiers in China. All of them received severe treatment and even torture, with four of them eventually being executed. DeShazer himself came close to death from the poor treatment, but his life was spared, and he eventually returned to a hero's welcome in the US. His life, however, had already been transformed by his experience in a most unexpected way. You would think that he would have been bitter against his captors, wishing to see them brought to justice and sentenced to severe punishment and even execution. But that is not what happened.

When the Japanese leadership realized that it was important to keep the remaining Doolittle Raiders alive, the prison guards were ordered to improve their treatment, which included providing some reading materials for the prisoners. Among those English books that became available was a Bible, something that DeShazer had only a superficial knowledge of. He read it with a skeptical eye, thinking that talk of forgiving your enemies and the like was just a pipedream. But the more he interacted with the person of Jesus of Nazareth, the more the message of the Bible began to sink in and speak to him in his desperate situation. As he prayed to God, the hatred he felt for his captors began to melt away, and he began to realize that his guards were every bit as much in prison as he was. He began to take an interest in their lives, learning what Japanese phrases he could and greeting them with a smile. Needless to say, this change in attitude took them by surprise, and they began to treat the prisoners less harshly. It seemed to DeShazer that he had found a new way, and after gaining his freedom again, he began training to come back to Japan to live among the Japanese and promote reconciliation.

Meanwhile, as the war ended, Fuchida felt lost and empty. He was mystified as to why his life had been spared numerous times when, like most everyone else he had been with, he should have been killed. He then met the Japanese soldiers who had been in the American prison camp and had been befriended by Peggy Covell. Their testimony in itself seemed so incomprehensible to him, but then as he was confronted with the witness of DeShazer, something began to click. He finally realized that the cycle of revenge and hatred was what had led his country to destruction and that the only way to peace was to break that cycle through forgiveness and reconciliation.

This is still a lesson that our world so desperately needs to hear and take to heart. I am reminded of the famous quote by Mahatma Gandhi, *“An eye for an eye only ends up making the whole world blind.”* Gandhi, of course, was referring to a particular code of conduct that was given to the people of Israel by God speaking through Moses. That code of conduct that included *“an eye for an eye and a tooth for a tooth”* was meant as fair and just punishment for crimes and was certainly a significant leap forward from the kind of exaggerated revenge that was the norm of the societies around them. But, of course, Gandhi was emulating Jesus in his ‘Sermon on the Mount,’ where Jesus said, *“You have heard that it was said, ‘An eye for an eye and a tooth for a tooth, but I say to you...’* and then he lists several examples of actions that go against our desire to take revenge. He continued right after that by saying, *“You have heard that it was said, ‘You shall love your neighbor and hate your enemy.’ But I say to you, love your enemy and pray for those who persecute you ...”*

As I bring my presentation to a conclusion, I want to read for you a brief excerpt from the book. It is of Jake DeShazer talking to a group of people in Nagoya, the city near where he had dropped his plane’s bombs to destroy an oil refinery. Among the crowd was a woman named Amayo Fujimoto. Her fiancé, Kenji Saito, worked at that refinery and was one of those killed, and she felt that Jake was the murderer. She had come there for revenge and was hiding a knife she intended to stab him with when the chance came. Reading from the book:

“Amayo had no concern or interest in what Jake had to say. His Japanese wasn’t very good, but she could understand what he was saying. “In one of the jail cells, we were packed in like animals and I remember watching the guards beat a Chinese woman. She hadn’t done anything wrong. They beat her badly and I had to ask myself, why were the Japanese so full of evil and hatred?” Of all the people in the world to say such a thing, Amayo thought. Who was he to judge others, after what he’d done? He was a murderer. She tried to hide her scowl as she squeezed the knife tightly in her fist inside her purse. Jake put his hand onto the microphone stand. “I attacked Japan for revenge. That’s what I wanted. That’s what every American wanted. I hated the Japanese for what they did at Pearl Harbor. And when I was tortured and when one of my best friends died because of the Japanese, I was filled with hatred, crazy with hatred. All I wanted was the chance to kill. I wanted revenge.”

“Amayo looked down at the floor, somewhat shocked. She didn’t like the idea of being anything like this disgusting man. “But as I thought, I faced a harder question: why was I so full of evil and hatred? Even when I made up my mind not to shoot at civilians from my plane, I was so angry – I did it anyway. I knew right from wrong; I just didn’t have the power to do it. As I sat in prison, I knew there had to be more to life than hatred and revenge and killing. Where does it end? Where?!” He finished his sentence looking straight at Amayo. Fear shot through her as she averted her eyes. Did he know why she was there? How could he? Tense, she was curiously captivated. They passed around books to read in prison. One day a guard gave me a Bible. I read and read, looking for some answers from God. I read about another man who was insulted and tortured and no one cared. People thought he was getting what he deserved. They didn’t realize who he really was. But it turned out that he chose to be tortured and killed so we could have a chance to be free from the power of hatred. I wanted that. I knew I needed that. It wasn’t the evil around me I needed to be rescued from; it was from the evil inside me.”

“Amayo’s face softened as her eyes looked past Jake to the bolts of fabric on the racks behind him. “He made this great sacrifice because of a great love – for me, for you.” She glanced up at Jake as his eyes scanned the audience. “In that dark jail cell, I was set free from the prison of hatred, and a deep love for the Japanese people began to grow in my heart. I found that with my new heart, God was giving me new eyes. I looked at the guards who had treated my friends and me with such cruelty, and I found my hatred for them had turned into love ... a real love that brings me here to you today. That’s why I’ve come to Japan and have

chosen to live here with my family. I come in the name of peace and in the name of love.” Tears formed in Amayo’s eyes as she stared at the floor.”

Amayo had come there for revenge, but Jake’s testimony as to how his own hatred and desire for revenge had been taken away by God and replaced with love and a desire for reconciliation moved her so that she too eventually became free. They even became close friends. And as the book portrays, Jake DeShazer and Mitsuo Fuchida — two sworn enemies whose own actions led to the deaths of hundreds and maybe even thousands of people, including civilians — became colleagues in promoting peace and reconciliation not only between their respective countries but also, to all who would listen, reconciliation with God. While they have both gone to their eternal reward long ago, their witness speaks to our world today and challenges us all to become peace-makers in whatever context we find ourselves in. They exemplified the well-known prayer of St. Francis of Assisi, with which I would like to close:

*Lord, make me an instrument of your peace.
Where there is hatred, let me sow love.
Where there is injury, pardon. Where there is doubt, faith.
Where there is despair, hope. Where there is darkness, light.
And where there is sadness, joy.
O Divine Master, grant that I may not so much seek to be consoled as to console;
To be understood, as to understand; to be loved, as to love.
For it is in giving that we receive.
It is in pardoning that we are pardoned.
And it is in dying that we are born to eternal life.*

The impact of the withdrawal of international forces on investment in Herat, Afghanistan

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Abstract

In the past decade, Afghanistan got a chance to enhance investment and economic development around the country with the influx of international aid. The Government of Afghanistan and the international communities have been striving for a prosperous and free country. Specially, the attention of the international communities brought hopes to the people of Afghanistan and attracted domestic and foreign investment. Many investors were encouraged to establish factories in different parts of the county. During the first 6 years, all their activities were progressing smoothly with almost high productivity. Unfortunately, rumors of the withdrawal of the international forces from Afghanistan in 2014 have negatively impacted on the mood and behavior of all segments of society, especially on investors. Recently, all the mass media are broadcasting the news regarding the withdrawal of the international forces from Afghanistan. Withdrawal of the international forces as well as decreasing of the international aid causes Afghanistan to face a severe economic crisis and it is feared that it can be lead to starvation in the country. Therefore, withdrawal of the international forces as well as declining of international aid will bring new challenges to the country. For instance, the motivation of man-power is declining as well as investment, and the rate of unemployment has increased and capital flight has developed. The entire view of the people of Afghanistan is that after the 2014, collapse and instability will prevail in Afghanistan. In order to present the real situation in the country this paper demonstrates the impact of the withdrawal of international forces on investment in Herat province. The issues discussed in this paper are based on the viewpoints of different respondents such as professors, investors, and governmental employees.

Introduction

Over the past decade, foreign and domestic investments has emerged as salient in the economic sphere of Afghanistan. Capital mobility in society has contributed to other factors such as labor and natural resources both in the production and distribution of goods and services. In general, investment improves economic growth, employment creation, technology transfer, competitiveness, financial and human resources and has a variety of other benefits. However, the beginning of the withdrawal of international forces from Afghanistan has declined the investment in the country.

The declining of investment in Afghanistan is mostly due to “negative propaganda” about the future. Although currently the Government of Afghanistan and the United States of America are discussing about signing a security agreement between the two countries, stressing on the permanent presence of United States (U.S.) troops in Afghanistan has not prevented the loss of investor confidence in the future of this country. For this reason, some traders shied away from investing in Afghanistan or have reduced their business activities.

From 2003 to 2010, investment had been growing in Afghanistan and the largest investment was in the telecommunications sector. Moreover, investment in other sectors such as mining was also started, but unfortunately it requires a long time and investment in the mining sector as well as other sectors has not had significant improvement. The declining trend of investment in the country started in 2011 and is still continuing. The main reasons of declining the investment are insecurity, lack of adequate infrastructure, lack of government support for the private sector according to market mechanisms, lack of facilities necessary to encourage investment, kidnapping and ultimately the negative publicity of the process. The reduction of international aid to Afghanistan has also reduced the amount of investment in the country.

The Government of Afghanistan is trying to support the private sector (domestic investment). To support domestic investors, tariffs increased for some imported goods while exports tariffs decreased. In addition, land has been distributed to a large number of domestic investors to establish factories.

With the handover of security responsibilities to Afghan forces in 2014, Afghanistan's economy has been faced with a great challenge. Resources that support relative stability in the financial sector are largely dependent on external resources and assistance, and no internal source, literally has not been established in the country. Given this situation, the economic situation has crucial importance for the future. For many Afghans, there is the question that if international aid to Afghanistan continues and the country is relatively safe, motivating the private sector to invest in this country is possible; otherwise there will be no one who would jeopardize their physical and financial resources.

It is expected that the withdrawal of the international forces from Afghanistan will decrease the international assistance in the future. Reducing international attention and assistance not only will harm the reconstruction and development of Afghanistan but also the government and administrative expenses, particularly salaries of employees will also face difficulties. So now that the whispers of withdrawal of international forces have intensified, clear effects are seen on markets and the economy. The currency of Afghanistan is decreasing in value which has negatively impacted on housing and property. Cash flow and earnings in the labor market have also suffered and have dropped dramatically.

The main purpose of this paper is to investigate the impact of the withdrawal of international forces on investment in Herat province, especially, on security, domestic investment, domestic products, and foreign direct investment.

Methodology

As a whole, this research paper relies on discussing the viewpoints of people regarding the impact of the withdrawal of international forces on investment in Herat province. The data is analyzed according to the descriptive method. The degree of agreement of the respondents is described in statistical terms. In this research paper, two types of data including primary and secondary data have been gathered. Primary data has been collected based on questionnaire from university professors, private investors in Herat, employees of Afghanistan Investment Support Agency (AISA), and the employees of Afghanistan Chamber of Commerce and Industry (ACCI). Secondary data has been collected according with the review of published reports, websites, and documents.

Findings and Discussion

Impact of Security on Investment: Security is the key element for attracting investment in any country or region. It is quite clear that investors are not interested to invest in insecure countries. It means that insecurity is a big challenge and threat to investment. *“Most economists argue that free and unimpeded international flows of capital, such as direct investment, positively affect both the domestic (home) and foreign (host) economies.”* The essence of this argument is that for the home country, direct investment abroad benefits individual firms, because firms that invest abroad are better able to exploit their existing competitive advantages and to acquire additional skills and advantages. This tends to further enhance the competitive position of these firms both at home and abroad and shift the composition and distribution of employment within the economy toward the most productive and efficient firms and away from the less productive firms (Jackson 2010, p. 12).

In a post-conflict environment, attracting new foreign and domestic firms is central to private sector development. Existing firms at the end of conflict are typically state-owned, are highly undercapitalized, have weak or nonexistent management, have a deskilled and underemployed labor force, and are in need of significant new capital investment. As is the case in any business environment, particularly in post-conflict countries, new investment decisions (into existing or new firms) usually depend on the availability of five basic factors: political and economic stability and security, clear unambiguous regulations, reasonable tax rates that are equitably enforced, access to finance and infrastructure, and an appropriately skilled workforce. In Afghanistan, these conditions are lacking (World Bank 2005, p. 1).

The end of major conflict and the fall of the Taliban regime led to an increase in private investment. But despite several high-profile investments by such companies as Coca-Cola, Baghlan Sugar, and the mobile telecom firms, investment has been limited relative to Afghanistan's potential. Overall, new entry and expansion has been far less than policymakers had hoped for.

One of the common ways for new investors, especially foreign investors to enter a market is by purchasing firms in the government's privatization program (World Bank 2005, p. 7). Investment in terms of its ability to combine with other factors in the production process plays a crucial role in economic activity. Investing itself, as a legitimate organized human endeavor, does not have a long history. Investing is an outgrowth of economic development and the maturation of modern capitalism. About three centuries ago, the world economy featured no stock exchanges or bond markets to speak of and only a handful of banks (Hearth & Zaima 2004, p. 7).

Security in all parts of the county is essential for effective governance, private sector development, economic growth, poverty reduction and the safeguarding of individual liberty. Afghanistan still faces a number of serious challenges before it can assume full responsibility for its own security. Terrorism, foreign interference, instability and weak capacity in governance are preventing the Government from establishing effective control in some areas, particularly in the south and southeast International Monetary Fund (IMF 2008).

A secure economic environment is arguably a key factor for promoting private investment and growth in developing countries. Improvements in economic security contribute to the rise of private investment by decreasing downside uncertainty on the return to investment. Security analysis, or fundamental analysis, can be thought of as a three-step process described as an inverted triangle, with the analyst moving from the general to the specific. Economic analysis tries to determine where the domestic and international economics appear to be headed for expansion or recession, as well as the outlook for important economic variables such as inflation and interest rates. Among other things, the analyst considers whether the overall economic outlook appears favorable or unfavorable for stocks (Hearth & Zaima 2004, p. 278).

Investment in Afghanistan: The three decades of war and instability within Afghanistan have deeply affected the economic growth. For example, there was no place for public and private sectors to invest. Fortunately, the situation changed in late 2001. Firstly, the Government of Afghanistan with the support of international communities paid attention to human well-being. Secondly, there were many hopes and opportunities for individual investors. While, there were many investment opportunities in Afghanistan such as agriculture sector, mining sector, energy and power, transport and logistics, housing, hotels, communication, and construction materials. Furthermore, *“the government has taken a number of steps to foster private sector investment. There has been significant progress in developing the financial sector”* (World Bank 2005, p. 4).

Afghanistan Investment Support Agency (AISA) which acts as a public investment promotion agency (IPA) in Afghanistan delivers investment licenses to local and foreign businesses. Minimum capital requirement to start a business in Afghanistan is AFN 260,000 (or USD 5,000). However, this is not paid-in capital requirement that a business has to deposit in a bank account in Afghanistan (Research & Statistics Department 2012, p. 2). The key challenge is to broaden participation in the market by removing barriers to new entry and creating conditions that will encourage those already in the market to invest more. The present investment climate challenges are not insurmountable. Many factors stand Afghanistan in good state. Afghanistan has a long entrepreneurial tradition of SME industries and services on which an active market-oriented private sector can be built (World Bank 2005, P. ix).

It is important to note that beginning the withdrawal of international forces from Afghanistan has negatively impacted on investment. The main reason for the decline of investments is “negative propaganda” about the future of Afghanistan. Afghan officials stressed the commitment of the international community towards the signing of a strategic agreement between Kabul and Western countries and the possibility of U.S. troops staying in Afghanistan; none has been able to prevent the loss of investor confidence in the future of this country. For this reason, some investors shied away from investing in Afghanistan or have reduced their business activities. Some domestic investors have moved their capital abroad.

It is worth noting that since late 2011, investment has been declining in Afghanistan. So Afghanistan is faced with many problems economically. Now the greater part of the Afghan capital is invested to the abroad such as *Dubai* or *deposited* in the domestic and foreigner banks.

Investment in Herat Province: Herat as one of Afghanistan's most important industrial hubs is losing its advantage because of security challenges and concerns of international forces withdrawal. Over concerns of poor security and lack of hope for a more stable future, investors are eventually escaping from Herat. Many investors due to lack of security and instability are trying to transfer their capital outside the country to protect or invest abroad. Concerns

about capital flight were not widespread few years ago. But today, most traders and investors in Herat are concerned about the withdrawal of international forces from Afghanistan in 2014, so they transfer their investments abroad.

Steady security and international military forces in Afghanistan from 2003 to 2010 brought many hopes and dreams for people, especially, to investors in Herat province. A number of local investors who had fled abroad during the crisis, returned again to the country and their home town to get involved in investment. Unfortunately, after four or five years of activities, many of investors due to insecurity and instability challenges have stopped their business activities.

Although the security situation is not good, but still many investors are hoping to change the situation in an ideal way. But if the security situation does not get better the capital flight will continue and Herat province will experience a deep economic crisis in the future. When the security situation is not good, investors will search suitable investment place for themselves elsewhere to be more efficient.

Herat Industrial Park and AISA: Herat Industrial Park was established in 2003. At the beginning, about 400 factories area were distributed to investors to start their manufacturing activities. Herat Industrial Park is one of the largest industrial parks in the country. The biggest sectors in industry include plastics, processors of simple packaged foods, construction materials, and soft drinking companies.

Moreover, Afghanistan Investment Support Agency (AISA) began operations in Herat in 2006 and until the end of 2012 the total number of 1,636 companies including construction, manufacturing, services and agriculture are registered and obtained a license to operate. Unfortunately, the registration of companies has decreased in 2012 and is continuing till now. The main reason of decreasing the registration of the companies is the withdrawal of international forces from Afghanistan.

The impact of the withdrawal of international forces in Herat investment: Recently, everywhere in political circles the main discussion is regarding the withdrawal of international forces which has negatively impacted on the social and economic activities. AISA, the majority of investors, politicians, economists, and social analysts, and most citizens argued that withdrawal of international forces from Afghanistan declines investment and is a big threat on investment.

Previous investors are trying to reduce their investment in Herat and are looking to other opportunities abroad. Moreover, new initiatives are also confused whether to invest in such situation with a high risk. Additionally, the investors think that the withdrawal of international forces is a very big challenge and threat on investment in Herat. Security is an essential factor for the stability of political, social and economic situation in the country. If security is not provided, all activities are suffering and the economic and political objectives can be disrupted. Although Herat province compared to other provinces of Afghanistan is relatively safe, but insecurity in this province affects economic activity and has reduced the investment process. Security challenges and problems in the Herat province have affected foreign investments greatly. Moreover, due to security concerns many domestic and foreign investors have stopped their investments.

Recently, kidnapping and armed robbery rates have risen substantially and many investors in the province are suffering from this disorder. The number of kidnappings in the province of Herat is on the rise and is affecting investment in a negative way. Some investors believe that the withdrawal of international forces will increase insecurity in the province and investors will face more problems in the future. The respondents argued that the withdrawal of international forces might impact on three key indicators such as security, kidnapping, and armed robbery. Prevention of kidnapping and armed robbery needs more attention to security and a struggle with these big challenges in order to provide investors with confidence for their activities.

The impact of the withdrawal of international forces on capital flight and brain drain in Herat: Although Herat province is a suitable place to attract investment but the current situation forces investors to flee and seek any other location overseas to transfer their capital. It is quite clear that even many domestic investors have stopped their investment in Herat province. They are actively involved in business activities overseas and transferred their capital to countries such as in *Europe, United Arab Emirates, Canada*, and so forth. In addition, most of the educated persons and the elite of society are trying to flee the country and immigrate to Europe, United States of America, and Canada as well.

In the past 12 years, many young *Doctors, Engineers, Economists, Lawyers*, and etc. have been killed by unknown armed forces in different parts of the country. The insecurity does not allow them to stay in Afghanistan and work for their people so they are forced to leave the country and immigrate to other countries.

Conclusion

Currently, unemployment is one of the main issues of the Afghan economy. Rising unemployment rate in the country is partly due to the declining of investment in infrastructure and so on. Moreover, in the past 12 years, the Afghan economy has not been able to create opportunities for job seekers. Thus, the number of active people which do not have jobs has increased.

Private capital formation and economic growth requires the creation of a favorable atmosphere for investment. Procedures and policies should be adjusted so that an appropriate incentive exists for private sector to participate in investment. Moreover, development of private enterprise is impossible without political stability and economic reform. Political stability is affected by the domestic and foreign policies.

Preventing internal and external capital flight from the country needs that people are assured that there will not be problems in the future. Ease of trade and credit, guaranteed income and safety and security and the prevention of bureaucratic problems in Afghanistan can help attract domestic and foreign investment.

The research results indicate that the economy of Afghanistan may be hurt after international forces withdraw in 2015. According to the concerns of some investors and investment professionals, the presence of international forces is the major factor which gives confidence to investors and traders. They say that Afghanistan still faces a lack of stable economic infrastructure and suffers from insecurity, severe corruption, and the waste of billions of dollars which has been pouring into the country.

As a whole, announcing the withdrawal of international forces from Afghanistan has left a bad effect on the economy. Investors and traders are worried about the security and political stability after the withdrawal of international forces. In recent years, a high percentage of gross domestic products in Afghanistan are somehow associated with the presence of international forces. The presence of international forces had a positive impact on the sectors of telecommunication, construction, transport and services. After withdrawal, these areas will also be affected. Based on studies conducted over many years the current Afghan Government has failed to create a coherent strategy and did not support the development of agriculture, investment, mining, and industrial factories.

Investors believe that investment in the manufacturing sector in Afghanistan can provide job opportunities to literate and illiterate people to work. The investors are interested to invest in a country with support of government in terms of providing security and support policies. After the rise of a new Government of Afghanistan a large number of investors came home to invest in the country, but each day they face the security challenges.

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The success and challenges of Indonesia's democratic system in the 21st century

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Abstract

The objectives of the paper are to investigate the political, economic and governance achievements of Indonesia under a presidency system directly elected by the citizens rather than appointed by a political party (or parties) forming the majority of the elected parliament. There are three major sections including a background to the study and a summary and direction of the trends of the process and the impact of an elected presidency. It is found that under Yudhoyono's presidency over two terms, Indonesia achieved an extraordinary stability in both political and economic dimensions which continues to improve its economic performance over the medium to long term. It maintained economic growth at the highest level in the Association of Southeast Asian Nations (ASEAN) during 2006 and 2007. The 2008 global financial crisis affected Indonesia's economy less than other Southeast Asian countries, because it was more dependent on domestic demand rather than the global market and trade. The government was facing extremist threats by terrorist groups bombing in different places of the country, including two luxury hotels in Jakarta. This created insecurity to domestic investment and economic growth, and limited poverty reduction and employment generation in the country. There were also major corruption scandals in the government for which the president created a stronger corruption eradication commission to investigate the cases.

Introduction

Indonesia is an archipelago, located in Southeast Asia. During the two successful terms of democratic presidency of Susilo Bambang Yudhoyono (SBY), the political, economy and governance dimension of Indonesia was growing and controlled very well, and experienced many achievements in different aspects. For instance, its economic growth had more stability than other Southeast Asian countries and reached 5.5 percent during 2006-07 (Ramage 2007). Therefore it had less fluctuation during the global financial crisis, which hit the region in 2008, but recovered dramatically.

The objective of this study is to investigate the political, economic and governance achievements of Indonesia's government under democratic presidency. Despite some visible achievements and successes, there are many challenges hindering Indonesia's economic development and good governance. To achieve the mentioned objective, this paper raises the following question: What are the key success and challenges of Indonesia's democratic presidency? To find the answer, this paper is discussing both terms in political, economic and achievements of democratic presidency of Indonesia.

Methodology

The research study is discussing the success and challenges of the democratic system in Indonesia. A qualitative method using secondary sources is used for this study. The author collected the data from articles regarding the democratic government system of Indonesia in the 21st century, which were published in the form of annual reports on Southeast Asian Affairs.

Findings and Discussion

The success and challenges of democratic system in the first term: In the history of Indonesia, it was the first time that the people directly elected their democratic president through casting votes in 2004; unlike previous times when the presidents were elected through People's Consultative Assembly (MPR). On the other hand, the parliamentary

election was to be held on 5 April 2004 before starting of the presidential election, though the presidential election was going to be held in two rounds, first in 5 July 2004 and second on 20 September 2004 (Suryadinata 2005).

For Parliamentary elections in 2004, more than 200 political parties registered, but only 24 parties were qualified to contest. As a result of the parliamentary election, two parties were leading, Golkar gained 21.6% of the vote and the PDI-P party secured 18.5% and occupied the second position (Suryadinata 2005).

In the first round of the presidential election that only five candidates had been qualified for election, candidates with the support of their parties obtained votes in a way that SBY was in the top with 33.57%, Megawati in second place with 26.61%, Wiranto in third place with 22.15%, Amien in fourth place with 14.66% and Hamzah at fifth place (3.01%). However, none of the candidates obtained 50% of the votes; therefore, the two leading candidates contested in the second round and SBY achieved the victory and became the president.

He brought changes in the government and achieved success in both political and security issues, as well as improving and stabilizing the economy, which reached to its highest growth rate at 5.5% in 2006-2007 as compared with other ASEAN nations (Ramage 2007). But when Indonesia faced the natural disaster of tsunami, which hit strongly the Aceh province, more than 100,000 casualties happened (Suryadinata 2005). The most significant achievement was in foreign policy, through the signing of strategic partnership with China and India in order to double the trade volume in the next five years. And as for stabilizing the economy, the global financial crisis in 2008 didn't much hit this country compared with other ASEAN countries, due to its less dependence on international trade and more dependence and focus on domestic demand (Table 1).

Table 1: Economic Growth during the Global Financial Crisis

GDP growth y/y %	2008	4Q, 2008	1Q, 2009	2Q, 2009	3Q, 2009
Indonesia	6.3	5.1	4.5	4.0	4.2
Malaysia	6.3	0.1	-6.3	-3.9	-1.2
Philippines	3.9	2.8	0.6	1.5	0.8
Singapore	1.2	-4.2	-9.5	-3.5	0.6
Thailand	2.5	-4.2	-7.1	-4.9	-2.8
Vietnam	6.2	5.5	3.1	4.4	5.8

Source: Bhaskaran (2010: p. 24)

Despite the progress, Indonesia faced the high rise of oil price, as it changed from oil exporting to a net importer of oil (Lanti 2006). Other challenges that the government couldn't control enough were high corruption, bureaucracy, unemployment and poverty issues.

The success and challenges of democratic system in the second term: SBY's first term presidency ended in 2009 and the election started on 8 July; although the second round of the election was scheduled for September, it was not needed due to the dominant victory of SBY in the first round with over 60 percent of the votes (Aspinali 2010). SBY become the first president of Indonesia, who served two terms as an Indonesian democratic president and his political party came in first in the parliamentary election as well. His government had significant achievements till the year 2009, such as continuing positive economic performance which spared Indonesia from global financial crisis, and killing the key leader of terrorists who were responsible for two bomb blasts in Jakarta (Aspinali 2010).

The economy improved in 2010, which had never looked better than that time and due to his good performance in administration and conflict resolution he received praises. Moreover, unemployment, poverty and inflation decreased to some extent. Despite the success, the key problems remaining included low investment in infrastructure and a small casualty in terrorism violence as well as corruption.

It is found from this study that under the two terms presidency of SBY, a phase of extraordinary stability in economic and political issues was achieved that has been able to prevent significant challenges under his regime, keeping local violence under control and maintaining satisfactory levels of economic growth, but some challenges and threats didn't allow the government to reduce the poverty and unemployment to its target point.

It is also found that the main challenges were corruption, bureaucracy and terrorism, due to which a low investment in the infrastructure and public sectors occurred. Overall, both two terms of presidency of SBY showed

efforts to improve the political and economic growth stability and experienced more success and achievements rather than failures.

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Overcoming ethnic conflicts by the election process in Myanmar

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Abstract

The paper first examines the years 2003-2009 during which Myanmar slowly inched towards holding a democratic election. The ethnic situation in the country and the ceasefire process between the military government and the ethnic groups are discussed. With more than 100 ethnic groups, the continuation of long-standing ethnic conflicts in the post-independence period has affected political and socioeconomic conditions of Myanmar. Between 2003 and 2009, various attempts were made by the military government to construct peace with several ethnic groups. Prior to 2004, Prime Minister Khin Nyunt played a leading role in setting and implementing the seven-step road map for democratic transition and ceasefire agreements in Myanmar. Yet these agreements became fragmented after 2004. Despite the steady political progress, Myanmar produced political refugees who were largely ethnic minorities moving to neighboring Thailand. Sanctions were imposed by the global community and China became an ally to Myanmar. The 2010 election changed the parliamentary structure and had an impact on the ethnic dimension. After accomplishments of the National Convention in 2006, some ethnic political parties were established and planned to take part in 2010 elections. There were events that unfolded in 2010, 2011 and 2012. The paper attempts to develop a theoretic structure to explain the relationship between ethnic conflict and the election process. The National Constitution of Myanmar (2008) includes the establishment of self-administered zones, with a chance to acquire self-administration among some ethnic groups. Yet, the refusal to accommodate federalism and ethnic rights by the government has triggered disagreements among ethnic groups and enhanced continuation of long term conflicts all over the country. The paper explains the imperative reform processes of the new civilian government. Efficient and effective techniques are still in need to achieve social cohesion which in turn can help construct trustworthy political, social and economic conditions in Myanmar. The paper also discusses why Rohingya problem overshadowed all other ethnic conflicts. In conclusion there is an insight into the potential future trends for Myanmar.

Introduction

Myanmar (the name Burma changed to Myanmar in 1989) is an ethnically diverse nation with 135 different ethnic groups officially recognized by the government. Each has its own history, culture, and language. The majority Burman (Bamar/ Burmese) are the dominant ethnic group in Myanmar, forming approximately two-thirds of the population. There are eight major national ethnic groups such as Kachin, Kayah (Karenni), Kayin (Karen), Chin, Mon, Bamar, Rakhine (Araken) and Shan.

After the nationwide political uprising against the one-party socialist government in 1988, the so-called State Law and Order Restoration Council (SLORC) established by the military junta seized national power. The United States and the Western world including Japan withheld official development assistance (ODA) and imposed sanctions on Myanmar due to the military's use of force in breaking up protest and dissent. Only China and Thailand provided aid to Myanmar during the initial period of Western condemnation (Than 2003).

Most ethnic nationality groups adopted armed conflict to protect their cultural identity, natural resources and to seek their needs and interests as groups. They have been fighting against the central government since before independence in 1948; the peace process between the government and the ethnic insurgent groups was not established until late 1989.

Research Questions: What causes the minority ethnic groups to engage in armed struggle? Also, to find ways to persuade the minority ethnic armed groups for ceasefire agreements.

Discussion

Moving towards democratic election (2003-2009): After the military took power in 1988, many student leaders and political activists fled to border areas and formed pro-democracy organizations especially in Thailand. Many of the ethnic minority groups wanted to call for a new Panglong agreement based on federalism; the Panglong Agreement was reached between the Burmese government and the Shan, Kachin and Chin ethnic groups on 12 February 1947. Yet minority rights and regulations were not clearly identified, and the relationship between the various ethnic minority groups and the majority Burmese remained the most fundamental problem over the longer term. In 1989, the military government managed to establish ceasefire with the Kokang and Wa from Shan State; they were once a part of the Burma Communist Party (BCP). Later, seventeen major armed groups entered into ceasefire agreements with the government. Yet, the ability of the ceasefire groups to effect political change in the country is not so significant (Hlaing 2005).

Aung San Suu Kyi, the leader of the opposition National League for Democracy (NLD) as well as the Nobel Peace Prize winner in 1991 stayed under house-arrest for almost 15 out of 21 years from July 1989 until November 2010 (Steinberg 2003). After the dismissal of Prime Minister Khin Nyunt who was also the Intelligence Chief and headed the entire intelligence corps in 2004 and played a leading role in the processes of the seven-step road map for democratic transition in Myanmar and ceasefire agreements with insurgent groups, rumors were spread such as the National Convention would not be convened again and the ceasefire agreements would break down (Hlaing 2005). There have been some internal debates among the military regarding the sharing of power between the central government and the ethnic minority groups, and also for the future roles of the military under new political configuration. The issue has been so critical that it has delayed the National Convention to create a new constitution (Steinberg, 2003); the Constitution that could emerge from the National Convention would set new rules for the governance of the nation.

The National Convention ended in October-December 2006. According to the new constitution, the new system of government will be a multiparty system which allows for regular elections as well as basic human and ethnic rights and more importantly political freedoms. However, the leading role of the military is still maintained in every key institution including the presidency and parliament. Twenty-five percent of the members of parliament will be military personnel (Pedersen 2007).

The 2010 General Elections: Different parties and many ethnic groups began positioning themselves in advance for the 2010 elections. It was obvious that the leading role of Myanmar military in national politics would be maintained, with reserved positions for military personnel in both parliament and government. Nonetheless, all leaders of Myanmar's political parties and ethnic groups recognized the 2010 election as they could not ignore it (Smith 2010). In April 2009, the new Border Guard Force (BGF) plan was announced by the military government based on which the ceasefire groups would have to disintegrate their organizations by transforming into individual BGF divisions.

The 2010 multiparty general election was the fifth and imperative stage of the roadmap of the military government. It was considered as a major achievement of the transition towards a civilian government (Than 2011). The Union Solidarity and Development Party (USDP), a military-sponsored party, has also stepped up its public service activities and recruitment. Although, the 2010 general election may have determined the composition of the new government, but in fact, it was not changed. The distribution of power still rests with the military.

Linking Ethnicity and Election: A civilian government was sworn in on 30th March 2011 led by President Thein Sein who once served as General and Former Prime Minister of the SPDC in the military regime. There have been some progress after six months, including the freedom of movement of Aung San Suu Kyi, the media freedom, a law allowing workers the right to strike, releasing prisoners (including political prisoners), and steps taken towards economic reform. A peaceful resolution of the situation with the ethnic armed groups became a definite priority since Myanmar prepared for ASEAN chairmanship in 2014 (Thuzar 2012).

According to the original ceasefire agreements, the ceasefire groups will have to give up their arms and subject themselves to the electoral process. However, the government refused to accommodate their demands concerning federalism and ethnic rights. Instead, the government has put pressure on all ethnic armed groups, both ceasefire and non-ceasefire to surrender to central government authority. The situation was unlike the process through negotiations to convince the armed groups by former Prime Minister and Intelligence Chief, Khin Nyunt (Pedersen 2007).

One of the major ethnic conflicts broke out in 2012. The Rohingya conflict in Western Myanmar is a conflict between the Myanmar and the Rohingya minority group since 1947. There are around 800,000 Rohingyas living in Myanmar with around 80% living in the western state of Rakhine. Most of them have been denied citizenship by the government. Since 2012, violence has increased between ethnic Rakhine and Rohingya in northern Rakhine State. The government responded by imposing curfews and by deploying troops in the regions. On June 2012, a state of emergency was declared in Rakhine.

Conclusion

The ethnic issues remain serious and pose a challenge to the country's democratization. Recent steps taken by the government have been positive although there has been a continuation of fighting with some armed groups. Since Myanmar is now on the right track to become a democratic nation, this is the perfect time and opportunity to resolve ethnic conflicts in the country. The strategies for building peace in an ethnically diverse country like Myanmar should be an integrated and comprehensive one that meets the social, economic and political needs of the people.

There are some possible solutions that government should implement by giving regional autonomy for minorities; fundamental social reforms; political democracy with a free press, civil and political rights; and federal form of government which recognizes minorities and majority as units of devolution. However, the peace process will not succeed unless the government exercises a commitment to engage in political issues which have long resulted in armed conflicts in Myanmar. Consequently, every individual or groups who are involved or affected by ethnic armed conflicts must change their mindsets and attitudes to be able to deal with multiple challenges.

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Overcoming inequality among the ethnic groups in Malaysia

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Abstract

This paper investigates the inequality existing among ethnic groups in Malaysia. Despite the long-running debate on political, economic and social inequalities in Malaysia, the paper confines itself to observing the outcomes in the 21st century. As many problems have originated from the management of ethnicity in economic distribution, the first section of the paper provides a description of the New Economic Policy (NEP). It shows that positive discrimination policies pushed by NEP to raise the participation of members of an economically disadvantaged group in areas of education, employment and business excluded the poorer sections of minority groups from the economic outcomes. The next section describes the outcomes for the Chinese, Indians and non-Malays as they experienced negative discrimination from the pro-Malay affirmative action policies. As ethnic inequality intensified among ethnic groups, criticism of the government policy also increased, which was accompanied by instability and protest to the government in many parts of the country. The paper suggests that Malaysia is unable to pursue its discriminative policies in a global economy where it needs the talents of its entire people to compete. As the global economy has incorporated Malaysia in a knowledge based economy, ethnic inequality within Malaysia has become detrimental to its attempt to become globally competitive. The transition has thrown up newer challenges as middle-class Malays and disadvantaged Chinese and Indians are not supporting the ruling elites. The final section shows how Malaysia's ruling party is caught in a dilemma of achieving a globally competent economic status while overcoming the ethnic divides it has produced owing to its past development policies.

Introduction

Inequality can be understood in many meanings. It could be social, economic or political inequality. This paper discusses the inequality in Malaysia, because Malaysia is one of the Southeast Asia countries suffering from social, economic and politic inequality for many decades. The country's ethnic composition consists from Bumiputera (Malay Bumiputera and non-Malay Bumiputera), Chinese, Indians and others. In 1996, the Bumiputera accounted for 61.0% of the population, the Chinese 30.0%, the Indians 8.0%, and the remaining 1.0% (Gomez and Jomo, 1997). The creation of a multi-ethnic society in Malaysia deeply rooted in the British colonial period. Since independence, the *bumiputeras* have dominated in the political arena whereas other communities like Chinese and Indians controlled the economic base. The NEP was introduced in 1971 for 20 years with objectives of eradicating poverty and decreasing inter-ethnic inequality. It was successful in strengthening the economy, but it did not alleviate the impact of reducing community disparities. The affirmative action typically involved the introducing of measures in order to increase the participation of economically disadvantaged group in the areas of education, employment and business, where they had been historically excluded (Guan 2005).

Not surprisingly the NEP has been principally associated with restructuring to reduce inter-ethnic economic disparities between the Malays and the Chinese. Hence, restructuring has come to be associated with positive discrimination or affirmative action on behalf of Malay *bumiputeras*. Such state interventions have resulted in significantly greater *bumiputera* wealth ownership, business participation, educational opportunities and public sector employment and promotion. However, these measures have also resulted at various times of emigration of skilled labor force, capital flight and ethnic tension.

Methodology

This study is qualitative and the data were collected from secondary sources. A used source was Southeast Asian Affairs articles, which annually reviews the significant trends and development of the ASEAN countries. All data were collected from 1997 to 2012, a period where Malaysia experienced socio-economic and political instabilities.

Discussion and Findings

Economic imbalances: The debates over the economic backwardness of the Malay community in the economic life of the country already existed in the 1960s. The affirmative action measures introduced in the 1960s were estimated ineffective. They didn't provide economic progress of the Malay community. Hence, the economic restructuring based on the ethnic lines was one of the two objectives of the NEP which was implemented in 1971–90 (Guan 2005).

In 1970, before implementation of the NEP the mean monthly incomes for Malay and Chinese households were RM172 and RM394 respectively, but by 1999 the *bumiputera* mean household income had increased to RM 1,984. On the other hand, the Chinese mean household income also grew but at a slower pace from RM 394 to RM 3,456 in 1999. Consequently, the gap in term of income disparity ratio between the Malay and Chinese household narrowed from 2.29 in 1970 to 1.74 in 1999.

Regarding ownership of share capital of limited companies, Malay and Chinese shares were 4.3% and 38.3%, respectively in 1971. But by 1995, the Malay share increased to 20.6% while the Chinese share reached 40.9% (Guan 2005). The main goal of the NEP was to raise Malay ownership of equity shares from 1.9% in 1970 to 30% in 1990. On 2006 the research data showed that the Malay ownership had already surpassed the target of 30% and reached to 45% at the same year (Beng 2007). The implementation of NEP helped the government to decrease the poverty throughout the country significantly (see Table 1).

Table 1: Incidence of poverty in Malaysia (percent). (Source: Malaysia Plans 1991, 1996, 2001)

	1970	1990	1999
Rural	58.7	21.8	10.0
Urban	21.3	7.5	1.9
Overall	52.4	16.5	5.5
Bumiputera	65.9	20.8	10.2
Chinese	27.5	5.7	2.6
Indians	40.2	8.0	1.9

The success of the ethnic preferential policy resulted in the birth of a Malay middle class within Malay community. The ethnic-based preferential policy was to close the intra-ethnic inequality gap between groups and not between individuals. While poverty continued to decline since 1990, income inequality, in terms of the 'gini coefficient' factor has worsened. Malaysia was considered a country with the worst income disparity in Southeast Asia. According to the United Nations Human Development Report for 2004, the richest 10% in Malaysia controlled 38.4% of the country's economic income as compared to the poorest 10% controlling 1.7%. Malaysia's top 10% of the population is 22.1 times richer than the poorest 10% (Martinez, 2005).

Political imbalance: The most powerful political party in Malaysia is the United Malays National Organisation (UMNO) which is the longest continuing ruling party with 3.4 million Malay members in Barison National (BN) in 2005. The Malaysian Chinese Association (MCA) and the Malaysian Indian Congress (MIC) represent numerically significant minorities in the country after UMNO (Nathan, 2006). In the beginning of the 21st century every new elected prime minister before coming to the office, declared equal protection of each ethnic group in Malaysia, but later during running the office became clear that high preferential was paid to the special groups like Malays.

The Prime Minister Abdullah as his predecessor Mahathir Mohamad also supported the interests of Malay community in business, education and even religion. After resignation of Mahathir Mohamad as a Prime Minister (PM) of Malaysia in 2003, the ethnic minority groups expected changes in affirmative action policies, but unfortunately it did not happen. Of course Abdullah Badawi achieved economic growth of Malaysia but despite the economic growth, the preferential policies in terms of education, business and religion remained one of the main reasons of tension among the societies.

In 2009, Najib Tun Razak, became Malaysia's sixth PM. Najib came with slogan of "1 Malaysia: People First, Performance Now". To the people of Malaysia, "One Malaysia" seemed political equality, inclusiveness, and an end to institutional racism since the introduction of the NEP in 1971 (Chin 2010). The new government in order to decrease the ethnic inequality announced the liberalization of NEP rules by which the long-standing 30% compulsory *bumiputera* shareholding would be reduced to 12.5% for companies listed on the stock exchange, and the abolition of the Foreign Investment Committee (FIC) which had forced foreign investors to take *bumiputera* shareholders. The new category of government scholarships would be given to the minority ethnic groups. He also visited Chinese Independent High School. This was the first time a PM had visited a Chinese school which was very well received by the Chinese community (Chin 2010).

Education: The Government of Malaysia has always insisted that the Malay participation through the preferential policy in the economy and higher education would help to ensure stability and foster national integration (Guan 2005). Indeed the preferential policies had raised the representation of Malays in almost all the economic sectors and higher education by the 1990s. According to Ratnam Committee investigation the alleged practice of ethnic segregation by race streaming in national primary schools found that of the 2.2 million students enrolled in the national primary school in 2002, only 2.1% and 4.3% were Chinese and Indians, respectively. Introduced affirmative action policies created largely Malay-only education enclaves within the national education system. Additionally, ethnic quota admission policies made it much more difficult for the Chinese and Indian students to get a place in the local public universities. Due to it, Chinese and Indian students had to look for other avenues like overseas in order to pursue their higher education ambitions (Guan 2005).

Religion: Malaysia is a state with the majority population confessing Islam, then Buddhism, Hinduism, Christianity and other religions. The affirmative action policies even had an influence on religion. In many situations more preference was given to Muslim community, which later increased the anxiety of non-Muslim community. There were many situations where the religion became a very serious and dangerous source of instability within community and country as well.

It is found that not only Malaysia implemented affirmative action policies but many countries in the world had implemented such policies. Many of them succeeded but others just failed. In case of Malaysia the affirmative action helped for development of the country in a global world. Government decreased the ethnic inequality and improved the quality life of economic disadvantage groups. However, the existing ethnic preferential policy has been found clearly inadequate in addressing the rising new phenomenon of intra-ethnic inequality for all ethnic groups, especially in the Malay community.

The preferential policies helped the Malay *bumiputera* to be prosperous in business, education and public sector. But Malaysia is a multi-ethnic country; it is not that only the Malay individual or community has to become more competitive — but the entire Malaysian nation has to become more competitive in the new neo-liberal dominated world economy. The competition is so high among countries, that for countries with discriminative policies it is hard to survive. If you want to prosperity, you need to have a society, where people are living in harmony and mutual understanding. Everybody in this society has equal rights and opportunities for education, religion, business and etc.

In case of Malaysia the government admitted that, the ethnic preferential policies are not relevant in today's neo-liberal dominated world economy. Due to this, Najib's Government with his 1Malaysia program put all their efforts in order to adjust the affirmative action policies based on the interests of Bumiputeras, Chinese, Indians and other ethnic groups.

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Legal pluralism for land administration in West Sumatra with the implementation of local communal land tenure (*Nagari*) regulations

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Abstract

Land administration has always been a delicate issue in the history of nations, and Indonesia, a country where a significant number of the population lives a pastoral life is not exempt from this reality. This paper discusses land tenure issues in West Sumatra, an Indonesian province which is home to the *Minangkabau* people with their long existing village management system known as *Nagari*, established to settle disputes based on *adat* (custom) principles as well as to protect the rights of the community members. These rights include communal land (referred to as *tanah ulayat* hereafter). Long before the Dutch occupation of Indonesian archipelago, the *nagari* government was vested with powers to regulate communal land in West Sumatra. However, this authority was constantly overlooked by the then Dutch colonial administration as well as the post independence governments (both central and regional). To reinforce the *Nagari* government as the guardian of the customary law (*hukum adat*) and to specify its jurisdiction, the Regional Government of West Sumatra enacted two laws between 2000 and 2008: Law No. 9/2000 repealed by Law No. 2/2007 and Law No. 6/2008 on communal land tenure. Although these two laws provide legal grounds to address land issues across the region, land conflicts still prevail among West Sumatran populations due to unsynchronized and contradictory regulations. The protests against the army (*Korem*) in *Nagari Kapalo Hilalang*, against the oil palm company in *Nagari Kinali*, and against a cement factory in *Nagari Lubuk Kilangan* are cited in this paper as case references.

Introduction

The legal system in Indonesia did not change very much after the country proclaimed its independence on August 17 1945 as many believe it did. The newly born republic operated on the same legal and political logic as its colonial predecessor, handing out titles as it deemed fit (Franz and Beckmann 2001). Before the arrival of Dutch traders and colonists in the late 16th century and early 17th century, indigenous kingdoms prevailed and applied a system of *adat* (Marzuki 2011). In contemporary Indonesia, as in many other post-colonial countries, three strands of laws prevail namely: *Rechtsstaat* or State Law, *transnational law* (imposed by international organizations), and *adat* law (comprising religious and traditional laws) as the government struggles to incorporate the rights of indigenous people within the state legal system. However, the recognition of these rights either by the colonial administration or the political regimes that ensued was the starting point of a ‘weak legal pluralism’ as Griffiths put it, for it was done “rather in an ambiguous way and subject to the state’s regulatory control” (Franz and Beckmann 2001).

The political concept known as the ‘New Order’ (*Orde Baru*) ensuing the fall of the Suharto’s regime in May 1998 is regarded as the Indonesian government’s attempt to bring about political, legal and social changes in respond to the people’s need for greater individual freedom, democracy, equality and justice for everyone. But more importantly it was a call for more regional autonomy and a greater recognition of *adat* rights to village resources (Warman 2010, p. 213-70). As a consequence, government power and authority were decentralized with more rights and obligations for districts and villages across Indonesia. In West Sumatra this prompted the resurgence of the *Nagari Government* that was dormant (from 1979-1983) under Suharto’s regime. This article explains what the *nagari* concept and *tanah ulayat* refer to. It discusses the relationship between both state and *Nagari* Governments in dealing with communal land registration in West Sumatra, especially the difficulties involved and how to cope with them.

Methodology

The empirical research analyzed in this paper was conducted in four *Nagari* between April and September 2013. It aims at investigating the issue of hybrid justice systems, therefore, the use of empirical data was required— that is ‘a people-based approach’ consisting of gathering information through direct interaction with people and processes, such as questionnaires and surveys as well as interviewing *adat* and religious leaders, legal institutions, *nagari* authorities, members of parliament, academics, law activists, and law enforcement agencies.

The research also used the ‘text-based approach’ which is based on acquiring information through texts, including statutes, books, articles, newspapers, and reports. The use of empirical method as data collection technique was essential and efficient in my research for it aims at taking a closer look at the phenomenon being studied.

Findings and Discussion

What does Nagari government refer to? As stated earlier *nagari* is a traditional organization considered as the smallest unit of local government in the province of West Sumatra. The number of *nagari* is estimate to 543 (Benda-Beckmann 1979). The existence of this traditional form of government dates as far back as the mid 14th century after the establishment of *Pagaruyung* Kingdom, a Melayu Kingdom consisting of the province of West Sumatra and its surrounding villages. A *nagari* consists of several subdivisions called *Jorong* (subdivisions) and is governed by a *Wali Nagari* (representative) who is both a political and cultural leader, and a Nagari Council (Dewan Nagari) as the village legislative body. But this does not mean that the Nagari Council equalizes or replaces the West Sumatran Regional People’s Representative Council (Dewan Perwakilan Rakyat Daerah). Each *Jorong* is led by a *Wakil Jorong*.

The legislative body (the Nagari Council) consists of representatives of kinship group leaders within the *nagari* (Afrizal, 2007, p. 35). However, from the *Pagaruyung Kingdom* to this day, *nagari* underwent several developments. In fact, after the independence a new regulation called *Makloemat* was passed in 1946 by the West Sumatran Local Government that split the leadership of *nagari* into three bodies: *Dewan Perwakilan Nagari* (Nagari Representative Council DPN) replacing *Dewan Nagari*, *Dewan Harian Nagari* (Nagari Daily Boards, DHN) and the *Wakil Nagari* who is the head of both the DPN and the DHN.

Furthermore, *Nagari* Government was again restructured in 1963 by another provincial regulation that set up three new bodies: *Kepala Nagari* (Nagari Heads), *Badan Musyawarah Nagari* (the Nagari Discussion Boards, BMN) and the *Badan Musyawarah Gabungan* (the Combined Discussion Boards, BMG) whose membership was open to all *nagari* community members. However, 1974 both the BMN and the BMG were replaced by another body called *Kerapantan Nagari* as the only *nagari* instrument having both judicial and legislative powers (Taufik, 2000, pp.2-6). KN’s members consist of kinship group leaders, Islam experts (ulama) and *nagari* intellectuals (*cadiak pandai*) (Taufik 2000, pp.6-7).

The *nagari* system had long been West Sumatran people’s way of self-governance until it was dismissed by the national Law No. 5/1979 and replaced with a new system of governance called *desa* (village). In West Sumatra this meant the retirement of *nagari* leaders as the concept itself was dismissed. All the existing 543 *nagari* in West Sumatra (including the islands of Mentawai) were spilt into 3516 *desa*, but only approximately 1700 of them remained active. In 1983 however, the *desa* government system was terminated by the Law No. 13/1983 which put in place a ‘new-style of *nagari*’ with a new council called *Kerapatan Adat Nagari* (KAN) whose leaders are elected by its members and approved by the Head of the district (Bupati) (Afrizal 2007, pp. 36-37).

This law has not only reintroduced *Nagari* Government into the political arena but it has also helped *nagari* recover its legitimacy in West Sumatra. The reason for returning to the *nagari* system of governance is that many local politicians and traditional village leaders (*Panghulu*) claimed that the *desa* system had not functioned well, that it had destroyed *adat*, the unity of the *nagari* population and eroded the authority of the elders over the young (Franz and Beckmann 2001).

The understanding of tanah ulayat and its registration: On July 22, 2008 West Sumatra provincial government enacted the Regulation No. 16/2008 on communal land tenure as mentioned in the outset of this paper. Explicitly, this regulation states that *tanah ulayat* management is aimed to protect the existence of *tanah ulayat* under the

Minangkabau's customary law and ensure benefits of land resources including natural resources for the survival and life of all *anak nagari* (nagari community members). *Tanah ulayat* refers to all land within the jurisdiction of a *nagari*, the *Minangkabau* lower unit of government and is managed according to *adat* (customary) law. *Tanah ulayat* consists of three types: *ulayat nagari* (nagari communal land) land that belongs to the community as a whole, *ulayat suku* (clan communal land) which consists of sub-clans and its size depends on the number of its members, and *ulayat kaum* (sub-clan communal land) (Warman 2010, p.33-50). *Ulayat* land is under the authority of either clan leaders or the kinship group leaders.

Tanah ulayat is to be differentiated from *adat* land. The former refers to land that belong to a kinship group or the *nagari* community while the latter implies land unregistered and that can be owned by individuals. *Tanah Ulayat* designates village land or territory and includes land, forest, water and minerals. Village land was mostly under the socio-political control of the village government, but it could also be distributed among the founding clans of the villages, and then administered by the heads of the clans (van Vollenhoven in Holleman 1981: 137). A *tanah ulayat* is usually freely accessible to the members of the village or clan respectively. It cannot be alienated. Temporary access and withdrawal rights could be given to nonresidents against a fee of recognition. The Dutch called this right of socio-political control *beschikkingsrecht*, right of disposition or right of avail (Holleman 1981: 287, 431).

A *tanah ulayat* can be registered at the District Land Administration Board (Badan Pertanahan Kabupaten/Kota), only if all members of the matrilineage (*kaum*), or clan (*suku*), or the heads of all clans agree (*atas kesepakatan*). Such titles can only be used as security for loans with the consent of all members of the respective communities. From what precedes it is clear that power administrate *tanah ulayat* is vested in the hands of the clan leaders or kinship group leaders as they can levy taxes on those willing to use land, forest, rivers. 'They may negotiate the pawning or sale of communal land, block transactions or take the land for themselves (Kahn 1980, p. 55). But despite government intention to regulate land tenure in west Sumatra by reviving the *Nagari* Government, lots of difficulties remain in *tanah ulayat* registration in the Province of West Sumatra.

Obstacles to tanah ulayat registration: Before we get to discuss the obstacles in communal land registration in the province of West Sumatra, it is important to remind what the Indonesian Government Regulation No. 24/1997 in its Article 9 Section 1 says about the types of lands that can be registered throughout Indonesia. This law says only the following properties can be registered:

1. Land property, the right to cultivate, the rights to build, and the rights to use.
2. land management rights;
3. Property for religious and social purposes;
4. apartment ownership;
5. mortgage;
6. State land

From the above provision it's clear that the Indonesian government did not include *tanah ulayat* within land registration objects within its agrarian law. Did the government do so on purpose or by omission? Or for fear that registering communal land would stir up tensions among the *nagari* community? Boedi Harsono, an Agrarian Law professor gives an account to this question:

Communal rights will not be registered. Basic Agrarian Law does not rule its registration, and the Government Regulation No. 24/1997 on land registration, communal land is intentionally not included in the registration objects. Technically, this is impossible because the boundaries of the land may not be delimited without the occurrence of legal dispute among the community.

The complexity of *tanah ulayat* makes it harder even impossible to put in place satisfactory policies for everyone. Yet there is a crucial and constantly growing need for its registration as everyone wants to do business: on the one hand you have the local government willing to use the land for community development as well as some *nagari* community members claiming land certificates so they can rent out their land to pay off a debt or send their children to school (Afrizal 2007), and you have on the other hand *nagari* heads, torn between doing business and upholding *adat* principles. Can this condition generate immense economic activities for the wellbeing of West Sumatran population? Brian Z. Tamanaha has this to say:

A great deal of land in development contexts is not officially titled, especially where registering title is a lengthy and costly process. In the absence of legal recognition, ... property cannot be used as collateral to secure loans, people are less inclined to improve the property (fearing they will lose it), and the market for real property is artificially constrained. As a result, much of the potential wealth and capital in developing societies is locked up unproductively.

Tanah ulayat as was stated earlier belongs to the *nagari* community as a whole. This implicitly means that such a land cannot be registered because doing so would mean private ownership which is contrary to *Minangkabau* tradition. There is a saying in *Minangkabau* tradition that goes: “dijua indak dimana bali, digadai indak dimana sando” meaning: if it is to be sold, it may not be eaten up by the buyer, if it is to be pawned, it cannot be eaten up by the pawner. Kurnia Warman, an Agraria Law professor with whom I had an interview has a view pretty similar to what precedes. He thinks that it is not that communal land cannot be registered, but problems rise because the land certificate cannot bear the name of a single person according to *adat*. He thinks that many of land related conflicts would be prevented was a solution to this issue found. This state of unclear ownership over *tanah ulayat* has pushed land predators to rush in and create chaos. In fact, from 2004 to 2008 there were 116 cases of conflict over 125.924 hectares of *tanah ulayat* in West Sumatra. Of these 116 cases three are worth mentioning due to their intensity:

Conflict 1: community protest against the Army over a rubber plantation located on a *tanah ulayat* annexed by Korem (the Army) in *Nagari Kapalo Hilalang*. In fact, in 1998, the community of *nagari hilalang* rose against their local Army demanding the return of Tandikat Lama Baru, a rubber plantation located on a their *tanah ulayat* controlled by the local Army (Korem) since the 1950s.

Conflict 2: the protests against the oil palm plantation in *Nagari Kinali*. From 1993 up to 2002, indigenous people of *nagari kinali* protested against Oil Palm Companies asking them for compensations, the transfer of smallholder plantations, and the return of the annexed *tanah ulayat* to the community.

Conflict 3: the clash between indigenous people, the local government and *PT Semen Padang*, a cement company in *Nagari Kilangan*. In fact, between 1998 and 1999, the community stood up against their local government as well *PT Semen Padang* demanding decent treatment of the people by the company exploiting their land as well as a fair share in the revenue of the cement business. All these three protests along with many others are the results of a lack of clear and sound regulations and procedure on land acquisition in the concerned regions. This is again pointed out by Brian Z. Tamahana in the following:

Property in many societies is conceived of and controlled in a variety of ways that do not match freehold ownership by individuals. In such societies, family and clan members possess various capacities to use land—to cross it, graze their animals on it, collect its fruits, till it—and others must be consulted about uses of the land. The process of titling extinguishes much of this because use and access rights are not recognized by standard legal titles... When property is titled in situations like this, individuals are confronted with conflicting rule systems.

Even though the Indonesian 1960 Basis Agrarian Law remains silent or ambiguous vis-à-vis the registration of *tanah ulayat*, the west Sumatra local government enacted Law No. 6/2008 which, unlike the Basic Agrarian Law, instructs on how *tanah ulayat* can be registered provided that all members of the matrilineage (*kaum*), or clan (*suku*), or the heads of all clans agree. In fact, the Article 5 of this local regulation classifies *ulayat* land in four categories of lands that can be registered at the District Land Office: *tanah ulayat nagari* (Nagari communal land), *tanah ulayat suku* (clan communal land), *tanah ulayat kaum* (sub-clan communal land) and *tanah ulayat rajo* (State land).

But what seems ambiguous is the fact that the four categories of *ulaya lands* change their statuses once registered at the District Land Office. Thus, according to the regulation a *ulayat land* once registered becomes: *Hak Guna Usaha* (Commercial Use Leases, HGU), *Hak Pakai* (use rights, HP), and *Hak Milik* (property ownership). This means that if registered, a *ulayat nagari* becomes State land which also means the rights owner cannot fully use his property. He can only use the land for agriculture, fishing, farming and livestock for a maximum time period of 30 years extendable up to 25 years and he's required to pay revenue to the state.

The changing of *ulayat land's* status to HGU (Commercial Use Leases) has raised discontent among the community fearing that this decision might use up all *tanah ulayat* without any guarantee to get them back from the third party at the end of the contract (Kurnia Warman 2010, p. 226). Furthermore, the same law on land registration also recognizes two different types of ownership: *hak milik* (property rights) and *hak menguasai* (right to control). *Hak milik* holders i.e. the local government, State companies (BUMN), government institutions, district government

companies (BUMD) and corporations can own and fully use the object (land) any way that pleases them. *Tanah Ulayat* as a property belonging to the *nagari* community as a whole falls under the *hak menguasai* meaning that the rights holder has control over the object but he/she cannot use it as he/she sees fit. I find this separation of rights ambiguous because the object of *hak milik* is located within the *ulayat nagari*, and therefore it is the domain of the *nagari* just like any other *tanah ulayat*.

With the enactment of the Local Government regulation No. 9/2000, *nagari* government is vested with authority over *tanah ulayat* for the benefit of all community members, yet there is a Presidential Decree that says land administration throughout Indonesia should be centralized. This to my view is a mess as it does not provide a clear authority to turn to when conflicts over land arise. The state of collective land ownership whereby power rests in the hands of some community leaders and government officials strips community members of their autonomy and privacy. In a book entitled *Recrafting the Rule of Law: The Limits of Legal Order*. Hart Publishing edited by David Dyzenhaus, Christine Sypnowich, talking about the importance of the Rule of Law quoted Thomas Scanlon: “ownership is relevant in determining the boundaries of our zone of privacy, but its relevance is determined by norms whose basis lies in our interest in privacy, not in the notion of ownership” “Although ownership per se is not essential to privacy, titles to property are a way of expressing the claim to privacy” as David Dyzenhaus (1997) puts it.

In addition, it is also important to point out that the ambiguity surrounding the registration of *tanah ulayat* in west Sumatra region did not begin in recent years; it dates as far back as during colonial time. When the Dutch occupied the island, they denied local communities’ rights over land as they were based on *adat* law which was not recognized as a proof of ownership in Dutch law. To run its land expropriation agenda the Dutch administration enacted a law called *The Domain Declaration* of Sumatra’s West Coast in 1874 which declared land, for which “ownership” could not be proven, to be the domain of the state. The State could decide that this land be put to economic use, usually in the form of a long lease (*erfpacht*) of 75 years. Since each piece of land needed to have an owner in the colonial legal logic, it was considered inevitable that the state became the owner of that land given the absence of any specific owner (Franz and Keebet Von Benda Beckmann).

Finally, problems in *tanah ulayat* registration are not only caused by regulations competing or contradicting one another but also for lack of clear pretender. In fact, it is not always clear who the legitimate claimant is: the village government, the Nagari Adat Council, the head of a given clan, all lineage heads within the clan, or even one particular lineage. Of the mayor as the head of district and the Nagari Adat Council, who has legitimate control over a *nagari*’s resources and revenues? In some *nagari*, the authority over *nagari* resources has been officially handed over by the head of the Nagari Adat Council to the Local Government. In other *nagari* compromises between the two are negotiated.

Conclusion

Collective land ownership as that of *tanah ulayat* in the province of West Sumatra is meant to prevent clashes among community members on the basis of commonness. It could also be seen as a democratic system for it is oriented toward promoting the general interest of its members. However, as the *Minangkabau* society evolves from an agrarian to an industrial one, conflicts over communal land become more and more inevitable (community protests at Nagari *Kapalo Hilalang*, *Semen Padang*, *Lubuk Kilangan*, and *Kinali*). As pointed out, these protests are the results of ambiguous and unsynchronized regulations over the same legal subject, but also, and more importantly they are caused by lack of clarification as to who the legal claimant of a given *tanah ulayat* really is.

The presence of contradiction implies not only a flaw in reasoning process, or lack understanding of the issue at play, but it also shows distinct institutions fighting for legitimacy (Jon D. Unruh 2003). Throughout the years, the structure of the *Nagari* Government in charge of regulating *tanah ulayat* had been reorganized and manipulated several times for political goals that one can hardly tell if it really has any authority. It is important to note that though both West Sumatran Regional Government and *nagari* authorities show congruence in dealing with communal land issues, many of their regulations contradict one another as each of them relies on a system of law that best suits its interest. This situation is not a good legal order, but rather a *forum shopping* as K. von Benda-Beckmann (1984) put it. Brian Z. Tamahana agrees with this when he argues: ‘two coexisting bodies of law, state and customary, are brought into clash

in a manner that unsettles both, allowing competing claimants to point to different legal sources in support of their conflicting positions’.

Not only does the fact that *tanah ulaya* is the property of the *Minangkabau* people as a whole based on their tradition make its registration difficult, but it does also make it vulnerable to predators. Both central and local governments should stop encroaching on *tanah ulayat* and side with the people whenever an intruder invades and seize their land and other land related assets. A government that takes away or can not protect the rights and properties of its people is no government at all (John Locke, 1689). For the sake of transparency, *Nagari* leaders should declare all lands and other assets under their control, make annual land management reports, and be held accountable for every one of their actions by the community. Finally, the government together with the parliament should remove ambiguous and competing agrarian regulations, provide legal training to *nagari* leaders and ensure that land administration policies and legal frameworks are created and implemented with their effective participation and consent.

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China's security priorities under Xi Jinping leading to a political deadlock in the democratization process in Hong Kong

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Abstract

Hong Kong is operated as a 'Special Administrative Region' in China under 'One Country, Two Systems' since 1997. Promised by the Beijing Government, the political system of Hong Kong will be fully democratic by installing universal suffrage in choosing its Chief Executive and the Legislative Council. However, during discussions and consultations in 2013-2014, the Beijing government and pro-Beijing groups reemphasized their position of comprehensive jurisdiction over Hong Kong. They insisted that it must be ensured that only patriotic (pro-Beijing) candidates may be nominated for the universal suffrage in the Chief Executive election held in 2017. This has led to a deadlock between the Beijing government/pro-Beijing groups and pro-democracy forces. Even though it is commonly regarded that the success of Hong Kong model may serve as an exemplar to Taiwan for future reunification, Xi Jinping and his colleagues do not want to take any 'risk' (which is almost impossible) by allowing anti-communist candidates to run in the election. On the other hand, with a potential breakdown of lobbying and discussions, the pro-democracy groups have called for a civil obedience movement, 'Occupy Central', to threaten the central government. So, what has gone wrong? This paper attempts to examine the political deadlock in Hong Kong democratization by addressing how the Chinese government under Xi 'interprets' and prioritizes national security. The paper begins with delineating the national security challenges currently faced by China and examining how and why the Chinese leaders are concerned that Hong Kong democratization may become a national security threat. The paper discusses political tensions throughout the consultation of Hong Kong democratic reform in 2013-2014 by adopting an analytical framework of central-local interaction model. The paper concludes that the security concern of the Chinese leaders is prioritized at the expense of a genuine democratic reform in Hong Kong.

Introduction

Hong Kong is a 'Special Administrative Region' (SAR) in China under 'One Country, Two Systems' since 1997. Promised by the Beijing Government, the political system of Hong Kong SAR will be fully democratic by installing universal suffrage in choosing its Chief Executive and the Legislative Council. The debate of democratic development in Hong Kong has been continuing for more than three decades (Oksanen 2011). Recently, the controversy focused on the nomination process – allowing pro-democracy candidate to run the election. On 31st August 2014, the National People's Congress Standing Committee (NPCSC) however decided the framework of 2017 Hong Kong SAR Chief Executive (CE) election, in which the nomination process almost rules out the possibility of pro-democracy candidates. Such framework demonstrates that Beijing wants to impose tighter control over Hong Kong (South China Morning Post, 24 September 2014).

With the breakdown of lobbying and consultation between the Beijing government/pro-Beijing groups and pro-democracy forces, a civil disobedience and non-cooperation movement including 'Occupy Central' as well as school boycotts (South China Morning Post, 26 September 2014; Apple Daily, 26 August 2014) was scheduled in late September to express the severe dissatisfaction among pro-democracy supporters and continue to fight for full democracy. Persistent confrontation between two sides continues and probably leads to further political and economic instability in Hong Kong (Sing Tao Daily, 5 May 2014).

This paper attempts to examine the political deadlock in Hong Kong democratization by addressing how the Chinese government under Xi 'interprets' and prioritizes political security. The paper begins with delineating the political security challenges currently faced by China and examining how and why the Chinese leaders are concerned that Hong Kong democratization may become a political security threat. The paper discusses political tensions

throughout the consultation of Hong Kong democratic reform in 2013-2014 by adopting an analytical framework of political control approach. The paper concludes that the security concern of the Chinese leaders is prioritized at the expense of a genuine democratic reform in Hong Kong.

Methodology

The paper employs qualitative research methods to uncover how the Chinese leaders look into the security concerns derived from the process of Hong Kong democratization. Instead of emphasizing quantitative data, the author decides to “discover answers to questions through the application of systematic procedures (of documentation analysis)” (Yin 2003:8). Documentation analysis intends to use multiple types of materials such as newspaper clippings and governmental documents issued by the Hong Kong SAR and central governments as evidence to explore the course of interactions among major stakeholders.

From the beginning of public consultation on 2017 CE electoral arrangement to the NPCSC decisions on electoral framework, mass media in both Mainland China and Hong Kong addressed the interactions between pro-Beijing and pro-democracy groups. Pro-Beijing newspapers such as *Wen Wei Po* and *Tai Kung Po* emphasized that Hong Kong universal suffrage should be aligned with the national security concern of central government while pro-democracy media like *Apple Daily* and other internet broadcasts argue that full democracy is promised by the Sino-British Joint Declaration and the Basic Law under the principle of “One Country Two Systems”. An in-depth analysis of published news or articles from both sides would enhance a better understanding of China’s stance on Hong Kong democratic development.

Apart from mass media, government documents issued by Hong Kong SAR and Beijing governments about the Hong Kong democratic development are examined in order to reveal their attitudes. The State Council of central government issued a white paper on ‘the Practice of “One Country, Two Systems” Policy in Hong Kong Special Administrative Region’ (Information Office of the State Council 2014) to reinterpret the role of central-Hong Kong relations. Are the promises about Hong Kong democracy in the Basic Law no longer kept by the central government? (*Apple Daily*, 11 June 2014) Worse still, the Hong Kong SAR government could not comprehensively reflect the popularly supported viewpoints on nomination process in CE election which should ensure the inclusion of candidates from prodemocracy forces (Hong Kong SAR Government, 2014).

Discussion

In this paper, the author suggests that the analysis of current political deadlock in Hong Kong democratization should be focused on how national leaders like Xi Jinping “defines” the concept of political security and “interpret” the potential threats on maintaining it. When Xi Jinping and his generation of leaders came to power in 2012, his power base was not as strong as we expected to handle political succession and territorial disputes (Li, 2013). Any miscalculation might lead to Xi’s downfall and then generated further political instability. Internally, Xi has put his enormous efforts fighting against “tigers” (like Zhou Yongkang – former Politburo Standing Committee members and former Secretary for Party Disciplinary and Inspection Committee in 2007-2012) from various levels (*China Daily*, 29 July 2014).

Externally, the territorial disputes with Japan, the Philippines and Vietnam posed a foreign policy challenge which might jeopardy Xi’s core leadership in Chinese Communist Party (CCP) (Li, 2013). The conservative forces in the United States fear the continued rise of China which may replace US as Number One in the world by 2030. So, Xi has no choice but strictly defines public security as an unchallengeable foundation for power consolidation.

1. Locating potential security challenges in Hong Kong democratization:

In Hong Kong political environment, there are always two competing forces – pro-establishment (Beijing’s agent) and pro-democracy “chasing” the seats in the SAR legislature. Based on the statistics of directly elected legislative council election in 2012, the ratio of votes gained in pro-democracy and pro-establishment (Beijing) is 55:45 (*Ming Pao*, 3 September 2014). So, if implementing universal suffrage in 2017 without any restriction on nomination process, it is very possible to have pro-democracy (or anti-Beijing) candidate to win the election. In fact, it is hardly to accept a

local elected leader who ultimately aims to overthrow the central government. Li Fei, Deputy General Secretary of NPCSC, argues that “any attempts to challenge the sovereignty including a potential anti-Beijing CE are not accepted by the Beijing government” (Hong Kong Economic Journal, 25 August 2014). More importantly, such kind of local leaders probably are supported by foreign powers which are always suspicious of the rising China (Wen Wei Po, 26 August 2014). On the other hand, the Beijing government repeatedly insists that the CE of Hong Kong SAR must be patriotic and loyal to People’s Republic of China in order to defend the national interests (Sing Pao, 20 August 2014). Eventually, the potential security risk for turning Hong Kong as a base for subversion remains exist and certainly negatively affects the governance creditability and effectiveness of new leadership under Xi Jinping (Ibid).

2. Security concerns outweighs public discontent among the majority of Hong Kong people:

In the early period of Hong Kong SAR establishment, it was true to observe that the Beijing government offered free hand to the founding Chief Executive Tung Chee-hwa to implement his governance plans in order to gain the confidence of the general public on “One Country, Two Systems” (Lo, 2008; Siu, 2008). The rating of “trusting central government” has been gradually improved.

But, why Xi Jinping and his colleagues do not care the feeling of Hong Kong people in current occasion of NPCSC ruling. Apart from the consideration of the political survival of his fraction in CCP, Hong Kong’s economic dependency on China has lost its competitiveness and unique advantages of further Mainland economic liberalization. More Chinese cities like Shanghai or Guangzhou will take over Hong Kong position very soon. Such reverse allows the Chinese leaders to place their security above Hong Kong factor.

3. Security concerns outweighs the “exemplar effect” of Hong Kong model to Taiwan:

The original design of “One Country, Two systems” by the late Deng Xiao-ping was to appeal the Taiwan authority to approach “reunification”. So, any potential setback of Hong Kong democratic development caused by the central government demonstrates may produce negative impacts. But, why does the Xi Jinping government continue to do so? It is quite similar to the argument of the previous sub-section – Taiwan’s economic dependency on China provides an alternative for deeper integration. Future economic service and trade agreement, despite arousing severe criticism and debates, becomes the most attractive ways to co-opt Taiwanese government and improve the progress of economic growth.

4. Security concerns avoid potential foreign intervention:

Global political environment undergoes substantial transformation. Seeking cooperation rather than engaging in a military operation is the major trend of global politics. But, the influences of power politics approach should not be underestimated. The China threat remains a concern of the US. Recently, the US and UK governments expressed their concerns over Hong Kong democratic development. On the other hand, Chinese new leadership tries its very efforts to avoid the potential foreign intervention on Hong Kong democratization (Tai Kung Po, 27 June 2014). As mentioned earlier, the only way to “solve the problem” is to restrict any potential candidates with foreign connection to run the CE election in 2017 (Sing Pao, 20 August 2014).

5. Security concerns and public control approach – Reinterpreting “One Country, Two Systems”:

The current Beijing-Hong Kong relationship has been moved away from “free-hand” and tolerance-based approach during the early period of SAR establishment to a more interventionist political control perspective through reinterpreting the concept of “One Country, Two Systems”. Increasing civil disobedient attempts challenged the bottom line of central government on national security and eventually led to further restrictions of nomination process.

Due to the failure of pro-democracy groups in pursuing real universal suffrage last 30 years, a University of Hong Kong Law Professor Benny Tai proposed a civil disobedience movement namely “Occupy Central” (Daily Mail, 11 September 2014). Central district is the CBD of Hong Kong. By paralyzing business activities in Central district or other non-cooperation movements, “Occupy Central” serves as a card to negotiate with (or even force) Beijing. In order to look for a popularly supported electoral arrangement, “Occupy Central” movement held a civil referendum to strengthen its mandate. More than 700 thousand people voted to express their worries of fake democracy in late June 2014 (Reuter, 22 June 2014). On the other hand, pro-establishment/Beijing groups organized an anti-“Occupy Central” movement. Throughout the a month-long campaign including demonstration, the organizer claimed that more than a

million supported them to say “No” to Occupy Central. They feared huge economic consequences onto various sectors (China Times, 26 August 2014). Up to now, the Occupy Central movement was not very successful to initiate an equal footing negotiation with the Beijing government. Rather, it tightened further control by China on Hong Kong by announcing a rigid electoral framework.

In fact, the central government was not only dependent on Hong Kong based supporters to form a grand alliance of anti-Occupy Central but also reshaped the existing policy framework to highlight the prominent as well as constitutional role of the Beijing government into Hong Kong. In June 2014, the White Paper was issued by State Council to examine the implementation of “One Country, Two Systems” since 1997. It highlights that “the central government exercises overall jurisdiction over the Hong Kong SAR....[and] has power of oversight over the exercise of a high degree of autonomy in the Hong Kong SAR” (Information Office the State Council, 2014:9). Furthermore, the remarks made by national leaders like Zhang Dejiang the Chairman of National People’s Congress Standing Committee who are in charge Hong Kong affairs emphasize that it was appropriate and justifiable for the Beijing government to “guide” Hong Kong SAR to implement a democratic framework with full consideration of Hong Kong special political status, economic prosperity and national security (The Standard, 17 September 2014).

Conclusion

Interestingly, in accordance with the Basic Law (the mini constitution of Hong Kong SAR), the 2017 CE electoral framework set by NPCSC should be approved by the Legislative Council with two-third majority. Even though pro-democracy groups were not able to appeal the Chinese government to adopt a more flexible framework, they are already “big” enough (more than one-third of total seats) to veto NPCSC framework next year. Shall they veto the framework and wait for another 5 years to kick off a new round of consultation? Shall they accept the framework despite full of discontent and anger? Any further decisions of pro-democracy groups should not attempt to across the baseline of public/national security set by Xi Jinping and other top officials in CCP and government. Otherwise, the negotiation sphere of two sides will be substantially minimized – full democracy can never be appeared in Hong Kong.

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The conceptualization of government policy/stratagem for political sustainability in China

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Abstract

Unpopular unrest, rioting, protests and breakdown of law and order occur in many nations, challenging the political era of their nation state, as witnessed in the Arab Spring. The people are demanding for people-oriented governments that would serve the core interests of the people. Governments and regimes are saddled with the responsibility of preserving and sustaining their eras either by employing ideologies and policies or adopting a firm stance against such anti-state behaviors or elements. China faces a herculean task in the wake of such uprising; I argue that the government has relied on putting the interests of the people first by ensuring people's need and demands are met within the shortest time frame. The Chinese government has adopted state sponsored doctrines in ensuring that the needs of the people are a core focus of the ruling party. The ability to embrace a people centered approach in its governance relies on "*ren ben*", a people ideology which is centered on "putting the interests of the people first", an aged long tradition of philosophy emanating from the works of Confucius and Mencius to ensure the legitimacy of the current regime and. The adoption of traditional philosophies in governance in China is nothing new; the government has used this approach to preserve its regime over the years. While the adoption of this concept gives it the right to rule, it also empowers the people to rebel against regimes that cannot respond to the yearnings of the people. The "Mandate of Heaven" empowers rulers to rule as "sons of heaven" by engaging in selfless governments for the benefits of the people; simultaneously it also empowers the people to take away the "Mandate of Heaven" from such regimes if they fail to exhibit virtue and reflect the will of the people. China in recent years has seen a flood of protests, some which come in the form of showing dissatisfactions with the instruments of the law, the rights of the people, the welfare of the people and the excessive power and wealth demonstrated by public officials. The government ability to deal and respond to such challenges is a core factor to sustain itself in recent years; its ability to adapt by pursuing policies of concessions, dialogues, tolerant and repressions are fundamental instruments in recent years. This work sets to examine the government institutional approach of ensuring its legitimacy, sustenance of its regime and responding to the demands of the people. It intends to build a framework that regimes can only be preserved only when the government is sensitive, responsive, and attentive to the needs and the aspirations of the people.

Introduction

Rebellion and revolution are not new phenomenon in China, while its size and its longevity are not just a factor, and the core factor rests in the political traditions of the people. Deep rooted in the tradition of the people is the philosophical doctrine of Confucius and Mencius which is based on the notion of the "Mandate of Heaven" (*tianming*) which confers an automatic legality upon rebel leaders who are successful. Intact in Chinese history is the 1911 Revolution of Sun Yat-sen who based his revolution on the "Three principles of the people" which finally led to the demise of the era of imperial rule. The 1949 victory of the Communist cadres led by Mao Zedong hinged on the "Peoples War". The fact lies in that successful revolutions in China rest on mass criticisms and mass campaigns (Perry 2001).

With such political participation by the citizenry, the sustenance of the regime has been a major priority for the ruling party, in China, "Stability supersedes all things else", therefore the government focuses on managing the expansion of political participation and the maintenance of political stability. Despite the use of forceful measures, an institutional shift by government is seen by the establishment of a dynamic mechanism to maintain political stability. This dynamic mechanism comes in the form of integrating and balancing interests, while expanding the orderly

political participation of citizens and providing clear channels whereby citizens may express their interests and demands (Yu 2009). Keping Yu posits government dynamic political stability as one that will replace static political stability; his theory rests on the claim of incremental democracy that states that all political reforms should enhance social and political stability. He sees a diversion of the Chinese government from static stability (*jingtai wending*), which depends on “holding everything in place” (*yi du wei zhu*) to pursue modern dynamic stability (*dongtai wending*), which depends on “channeling everything into its proper place” (*yi shu wei zhu*).

The logic of traditional static stability means everything stays still and order can only be achieved by suppressing the forces of change. By contrast, dynamic stability incorporates changes, maintaining social stability (or balance) through continuous adjustment. This policy shift is seen in the report put forward by the CCP’s Fifteenth National Congress, it states: “to push forward reform and development on the basis of social and political stability, while maintaining social and political stability through reforms and developments” (Li 2009). By building on this institutional policy shift, the Beijing led government aims to tackle the rising tides of mass criticisms and campaigns which are challenging its mandate to rule the largest communist entity in the world, inherent in governments’ action is sustaining its mandate to rule while balancing it with the interests of the people. Despite governments’ actions, mass protests and mass campaigns have evolved in China strategically with people agitating for the basic fundamental rights of live and sustenance.

Methodology

Qualitative research methodology was adopted in this work because it allows one to have access to the vast resource of materials in the view to examine, study and analyze them. Denzin and Lincoln (2000:3) posit that the qualitative research method allows for a methodology to study things in their natural settings, understanding such phenomena and attempting to offer an interpretation to such events (Ritchie et al. 2013). This paper draws on the wealth of vast historical data, research and materials. It focuses on examining contemporary literature works of Scholars as well as ancient works.

The extensive in-depth works of scholars have been a crucial analysis with objectivity towards the completion of this paper. The works of Perry (2001) on “*Challenging the Mandate of Heaven*”, Michelson (2007) on “*Climbing the dispute pagoda: grievances and appeals to the official justice system in rural China*”, Lee (2007) on “*Against the law: labor protests in China’s rustbelt and sunbelt*” along with other published articles and books have been engaged in the course of this research. This work in essence will add to the available literature of Chinese government sustainability of the nation state, its approach, challenges and future dynamic fundamental issues of philosophies.

Findings and Discussion

Protests, Agitations and People’s Struggle in China: A Tale of Dissatisfaction: Since 1949, mass campaigns and mass criticisms have become embedded in the polity. The Hundred Flowers Campaign, the Cultural Revolution and the Tiananmen protests of 1989 exhibits the displeasure of the people as they took to the streets to express themselves in large folds. Fundamental reasons exist to why there has been a surge of such unrest; one inherent cause is job losses and deep discontent of the people about being laid off (*xiagang*).

This deep rooted discontent stems from the fact that majority of the workers face a subsistence crisis in which their incomes are far below the local minimum wages or perhaps they had no income at all for a period of time. James Scott in his discourse of rural-social relations in a pre-capitalist setting posited that such environments are founded on patron-client relations, in which the landlord (patron) trades some of his wealth for the peasants’ recognition of his legitimacy. The peasants’ conception of justice and equity is derived and based on a singular notion that is “the patron class will maintain their well-being”. Invariably, the violation of such least conditions by the patrons will lead to rural rebellions and revolt, their aim according to Scholars is to regain their eroded living standard which has been transformed by economic changes, they attribute a restorative, defensive and egalitarian society.

Andrew Walder in his conception of the term neo traditionalism viewed and examined the excessive dimension of state-labor relations in pre-reform China; he posited an all-encompassing dependency of labor on the state enterprise. The system is characterized by a paternalistic nature of the state which bonded workers to their work units for life and inherently offering and guaranteeing them material resources through the market channel. These formal relationships between the state and the people in recent years have been falling apart, numerous market reforms by the state continues to diminish and degenerate workers' social status and livelihood (Chen 2000). Further threats to the livelihood and status of workers in China are obvious in protests which have arisen due to local development project, land confiscation and environmental degradation. Incessant abuses exist at the local level of the citizenry due to the lack of property rights in China.

As development pressure increases, violent clashes exist between the people and the police to exhibit the dissatisfaction of the people against such changes without the right and adequate compensation (Lum 2006). Other forms of protests comes in the form of "protests of desperation", this act hinges on the claims of moral and legal grounds in which veteran state workers take their grievances and annoyances openly to the street. They engage a strategy of discrediting local officials, disrupting the local traffic and the public order. These workers evoke the political ideologies of Maoism, class, citizenship and legality; these ideologies have their roots deeply in the socialist entitlements which offer the people welfare, housing and employment.

Another kind of protest is exhibited by the migrant workers; "protests against discrimination" is a phenomenon and trend which is displayed against such workers by treating them as second-class citizens either by officials and employers. They often engage in legal activities such as petitions, lawsuits, mediation and litigations, at the failure of such legal activities they use their last resort which comes in form of public disruption of state order. They claim a violation of their rights as citizens, discrimination in labor rights which is displayed by officials and employers and seek state intervention and protection (Lee 2007).

Another popular strategy used by the Chinese citizenry to secure intervention or redress is to make direct appeals to administrative agencies (Michelson 2007) with deep historical roots (Hung 2004; Li 1997). Apart from addressing issues through the official complaints system, known as the "letters and visits" (*xinfang*) system, simple people make direct appeals to the government agencies outside the complaints system. Both strategies fall under the general category of "visiting higher levels" (*shangfang*) in the pursuit of redress (Michelson 2007). The expansion of administrative and legal channels of redress is another increasing official strategy for containing and managing popular contention (Cai 2004; Luehrmann 2003; Minzner 2006).

China's approach to social protest is different from most nations of the world, as most authoritarian regimes are very sensitive to popular resistance, the constant reoccurrence of protests in such regimes signals social control problems or the weakness of the government. The basis is that such protests are not supposed to occur in a regime where the citizens are denied the right to disrupt the system. Authoritarian regimes are highly sensitive and they are more committed to the settlement of collective action than their counterparts in democracies. (Cai 2004). Responding to the needs of the people is a long term ideology of the Chinese government. One of the crucial steps taken by the present communist regime during its early years was to find ways to address the wide disparities that existed among the people of that time. The promise of an egalitarian society is a slogan that has bolstered a bond between the people and the PRC. It is important to understand such historical undertones and how the relationship has grown over the years.

Building on the People: The Chinese Communist Party: Four years after the Bolshevik Revolution of Russia, the Chinese Communist Party (CCP) was founded in 1921. By forging a relationship with Moscow, the new Communist Party worked with the Kuomintang (KMT), led by Chiang Kai-shek who was once trained as a revolutionary in Russia. A dramatic turn of events in 1927 showed that Chiang turned his back on his communist partners, he wiped out their urban base and the rest of the group had to flee into the interior of the country side. The first Chinese Soviet Republic was therefore formed in 1931 in the mountainside by Mao Zedong who joined the CCP in 1923. With Chiang's forces charging at them in the mountains, Mao and a small band of dedicated Communist retreated to Yanan in northwestern China, a journey covering over a thousand of miles became known as the Long March.

This feat became one of the central myths of Chinese communism which rests on the premises of Communist triumph over adversity through the support of the people. Mao's leadership position was established during this era

based on his strategies and tactics which were unique and a diversion from the Bolshevik's strategy which emanated from Marxism-Leninism. His diversion of Marxist orthodoxy to rural and peasant revolution was based on empowering the peasants by overthrowing the ruling landlords in favor of the peasants. The new relationship forged between the party and the peasants was regarded as the mass line. This mass line was based on the ideology in which there existed a dual relationship between the party cadres and the peasants, it was based on educating the peasants on the party's doctrine and proposed policies that were based on the will of the people. It was also a relationship in which party cadres learnt from the peasants. The will of the people became the founding ideology of the CCP. The success of the CCP in 1949 ushered in a new regime who had acquired a new Mandate of Heaven from the people; it was a new government, a people's government (Kornberg & Faust 2005).

The concept of Mandate of Heaven (*tianming or t'ien ming*) is based on the concept that a ruler had the consent of heaven (*tian or t'ien*) as long as he was virtuous and this mandate would be taken away from him once he became unfair or unjust (Perkins 2013). According to the doctrines of Confucius, "*a ruler is like the wind, and the people are like grass. When the wind blows, the grass always bends*", Confucianism laid emphasis on personal cultivation of a moral or virtuous individual at the general level and the self level. He posited that self-cultivation promotes "a government by goodness" and improves human relationships which are well structured and regulated (Guo 2012). Voluntary submission is one key factor that legitimate rulers demand from the people. The Chinese conception of the kind of relationship that exists between the ruler and the people connotes that the rulers should seek the people's approval not by public opinions or through samples but by winning the hearts and the minds of the people. Mencius doctrine of "*min ben*" (regarding the people as the roots of the state) is applicable here. The core aim is to look after the interest of the people. Emphatically Mencius claimed:

"Here is the way to win the empire: win the people and you win the empire. Here is the way to win the people: win their hearts and you win the people. Here is the way to win their hearts: give them and share with them what they like, and do not do to them what they do not like. The people turn to humane ruler as water flows downward and beasts take to wilderness"

"*Min ben*" has two connotations, it implies a great importance of the people's interests, likewise it's based on the premise that rulers adhere to the will of the people and show respect for the needs of the people while acknowledging the fact that people are the principal decision makers of their own lives. The modern rationalist school of thought believes that the people will be happy and supportive of the government only if their needs are satisfied (Dittmer & Liu 2006). Good government is consequently based on benevolence, taking responsibility for the welfare of the people and showing a degree of compassionate care for them. Good government embodies the concept of true knowledge of the universe and characterized by humane benevolence.

The best rulers are those who governed in accord with universal truths and manifested the proper benevolence toward their subjects, which is expected to preside over a stable and harmonious order, and the very florescence of economy, the arts, and of philosophy (Gries & Rosen 2004). In essence, one can observe that enshrined in the historical governance between the people and the ruler is one that is people oriented, humane service, selfless rule and benevolence leadership. It is on these premises that the present communist regime has to act and perform his duties towards the people, engaging in such long philosophical doctrines and notions is a key way the regime has sustained itself in contemporary times.

Conclusion

China's fundamental objective is to prepare the institutional conditions, environment and functions that would ensure good governance, and the ultimate goal of good governance is to maximize state interests and the welfare of the whole people and to ensure the representation and realization of the fundamental interests of the people (Hu 2006). Therefore fundamental issues that arise are how can the Chinese government sustain its governance, what challenges do they face, how effective is the ancient philosophical doctrine of the government in contemporary times? These are the context of discourse around this paper.

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Republic of China's (Taiwan) Control Yuan as a participant in anti-corruption and integrity-building initiatives

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Abstract

Since the latest global crisis unfolded in 2008, with revelations of financial abuses and improper, reckless decision-making, definitions of corrupt behavior have been changing all around the world, and academic and practical discourse on the direction of integrity-building policies has been taken to new heights. These debates are continuing against the backdrop of redefining state-society relations in general in light of modern-day challenges to the legitimacy of institutions. Once again there are calls for transparency and accountability of government, and inclusion and education of citizenry. These demands cross political and geographical borders, prompting policy-makers and concerned citizens to look for new solutions by studying country-specific ways of dealing with governance issues. Integrity-building and anticorruption policies are at center stage: fair and transparent governance today is considered a necessary precondition for human security and successful development. Taiwan possesses vast experience in dealing with the above-mentioned issues against the backdrop of a challenging political history. Its unique five-branch government system was designed by Dr. Sun Yat-sen and has proved viable since its establishment. The Control Yuan, which represents the constitutionally defined fifth - supervisory - power, can and should assume a leading role heading countrywide 'clean governance' efforts. Moreover, the Control Yuan is the constitutional embodiment of a centuries-long tradition of censorship which is widely known and respected by the general population. In modern times, the Control Yuan continues to provide a channel for citizens' grievances and non-judicial control in cases of suspected malfeasance that, apart from being an important preventive mechanism, provides an additional round of investigation before the case is handed over to judicial authorities. Corruption is a very 'media impactful' phenomenon and a wrongfully implicated party may deal with the consequences for years to come; hence, following due procedure and operating independently of partisan divisions – which is stipulated in the Constitution - is of paramount importance.

Introduction

Ever since the latest global financial crisis unfolded in 2008, with revelations of financial abuses, 'improper and reckless decision-making,' and shoddy due diligence work performed by previously reputable financial institutions contributing to its ever-widening repercussions, definitions of corrupt behavior have been again changing all around the world, and academic and practical discourse on direction and efficiency of anti-corruption policies, checks on the market and policy-making institutions' interaction and ways of raising citizens' awareness have been taken to new heights. These debates are continuing against the backdrop of a reconsideration of state-society relations in general. After years of widespread outlook at governments as muddling behemoths highly prone to corruption, almost a relic in a new era of free markets (which are supposed to self-regulate in a fair and transparent way) which triumphed over the centrally planned economic model as witnessed by the disintegration of the Soviet Union and Eastern European bloc, there are again calls to overhaul government systems and for them to be more involved in the protection of their citizens' interests and the oversight of business behavior: more transparency, more inclusion, more accountability. These demands cross political and geographical borders, prompting policy-makers and concerned citizens to look for new solutions by studying various country-specific ways of dealing with governance issues.

The rigid legal and economic-centered definitions of corruption that feature one step corrupt exchanges that benefit their immediate participants—one of whom is usually in the position of formal power (authority)—are gradually being supplemented by definitions that reflect the ever-increasing sophistication of global exchanges in general and their (potentially) corrupt dealings in particular. Nowadays these exchanges are of ever more complex and intractable natures; illegal and/or unethical dealings may consist of multiple steps and participants, and the gains they

pursue are often not immediate, easily quantifiable, or necessarily of a financial nature. One example is the case of JP Morgan Chase's China office's years-long 'hiring program' for relatives of high-ranking officials that resulted in lucrative business opportunities for the bank. Making matters more muddled is the fact that Wall Street firms have long used this way of winning business, and that it does not necessarily violate the law.

The established method of focusing on a single government (civil) servant or a rogue businessman as the lone perpetrator pursuing his/her own personal gain without paying much attention to the environment in which the unethical/illegal exchange is taking place is also changing. Today, gains may be pursued in the course of conducting 'normal' business (as demonstrated by the above example) when the whole entity might be implicated, possibly benefiting from illegal or unethical pursuits of a given employee who in turn may be the representative of a particular group interest. The 'corrupting party' (for lack of the better term) - who ends up accused of corruption often represents organized (in a very wide sense of the word) interests - from a rival or cooperative commercial entity looking to jointly increase profits to non-profit organization seeking registration (which in the end may benefit disadvantaged citizens) to a loosely tied social group without formal organization (i.e., illegal migrants using 'facilitators' in government organs). Thus the research focus further shifts away from the 'a few bad apples' approach: non-transparent interactions between various group interests and government institutions are of particular interest due to their potential to influence the formulation of political and business policies.

Methodology

The present article aims to draw attention to Taiwan's experience in anticorruption and integrity- building with a particular focus on an often overlooked institution of the Control Yuan - the highest organ of supervisory power in Taiwan's five-branch government system. Despite the ongoing debate in the country about the scope of its responsibilities, institutional design, and the very viability of independent supervisory branch, the author maintains that as a constitutionally established collegial organ, the Control Yuan possesses all the necessary features to assume the leading position in the comprehensive (if somewhat dispersed) battle against corruption Taiwan's government has been waging, possibly becoming the coordinating center for top-down and ground-up initiatives.

As is the case with any long-term policy with an ambitious goal - to create corruption intolerable environment in effect amounts to changing political culture - a successful strategy needs to establish both institutional structures and popular authority, the latter usually being far more time- and effort- consuming. While the former is firmly in place in Taiwan as it has largely been following a long-established institutional approach; the latter has a longer way to go. In this regard, the Control Yuan's advantages of being: (i) the heir to a thousand-year tradition of government supervision (in itself a strong corruption deterrent) and (ii) an institution that has proved its viability over years of tumultuous history, should be played up to their full potential. Because of its role as a triage for public grievances and accusations of corruption, the Control Yuan provides the first round of non-judicial investigation before starting formal administrative and/or criminal procedures. Thanks to its position as a non-judicial organ, it does not need to answer the populist call to 'prosecute more' which judicial anti-corruption bodies often face due to variety of factors - from public pressure and high media effect to narrow partisan goals. The years of the KMT's iron-fisted rule caused the image of the Control Yuan as an upright governance body to lose some of its luster, so today restoring public trust is high on its agenda.

For the purposes of this article we'll apply methods of institutional analysis which include a brief overview of the Control Yuan's history and constitutional foundations and its structure, with particular attention paid to its structures and procedures that have a direct relation to the implementation of integrity policies. Primary sources included Organic Laws of Control, the Control Yuan, its committees, etc. and additional provisions, details of ongoing investigations, and minutes of meetings. Content analysis of Taiwan's media publications provided updates on various issues (e.g. nominations and new cases). We'll also touch on arguments about the Control Yuan's present and future role in the concluding chapter.

Discussion

As noted in the Introduction, in recent years the scope of anti-corruption efforts have been continuously widening, reaching far beyond any given country's borders. It has moved away from prosecuting separate offences towards attempting to see the bigger picture behind them and creating an environment intolerable of corruption; this process is generally referred to as "integrity-building." These considerations are prompting government officials, academics, and global financial institutions to pay particular attention to measures of a preventive nature that only a few years ago were given cursory notice. The OECD's 2008 work report 'Specialized Anti-Corruption Institutions: Review of Models', which noted Hong Kong's long-established and widely-respected Independent Commission Against Corruption (ICAC) and Singapore's Corrupt Practices Investigative Bureau (CPIB), details 14 other countries' experiences in establishing 'preventive, policy-developing and coordinating' institutions as an attempt to widen the scope of anti-corruption policies and steer them in an all-encompassing, clean governance direction. The search for solutions is far and wide, with non-Western practices finally getting the attention they deserve.

Current trends are prompting a new wave of creating anti-corruption and integrity-building institutions and expanding their mandates. In July of 2014, the South Korean Prime minister's office launched a task force to uncover and analyze instances of corruption as well as find ways to tackle the entrenched problem. The Central Steering Committee for Anticorruption in Vietnam is establishing four additional working groups to look into 'notorious graft scandals in 8 localities around the country' and also to examine preventative anticorruption measures carried out in various centrally-run agencies, ranging from Ministries of Finance and National Defense to the Tourism and Labor Administrations. Applauding the effort to expand anti-corruption initiatives, we can't help but notice the continuing trend towards organizing them in a 'reactive' way, usually in the wake of public outrage and demands for the prosecution of the accused, as in the case of South Korea's April 2014 ferry disaster, a result of what emerged to be lax government oversight and the questionable decision to outsource shipping industry licensing to private agents. Vietnam's push for more investigations is one result of the case of banking tycoon Nguyen Duc Kien, whose illegal trading activities over the course of five years resulted in a huge shock to Vietnam's fragile financial system and the downgrading of the country's credit ratings. Both cases demonstrate the ever-widening range of corrupt and unethical behavior and its profound repercussions for ordinary citizens. Public demands for investigation and the prevention of repeat offenses require strategic thinking and political will on the part of the establishment, and highly-skilled personnel and sufficient uninterrupted funding which *ad hoc* created bodies often lack.

While measures of a punitive nature remain the central part of the struggle for clean governance everywhere, more thought is being given to 'soft' policies – preventive and educational measures—with a focus on establishing a foundation for civil servants' morale and raising citizens' awareness, thus preventing their engagement in corrupt and unethical activities and strengthening their resolve not to tolerate illicit demands from bureaucrats and politicians. 'Inclusive politics,' with all its connotations for research on deviant political behavior, emerges as a new paradigm in governance studies, with 'responsible management' as its commercial counterpart. Shifts in paradigms are bringing practical changes 'in the field.'

For example, anti-corruption education and awareness-raising is an integral part of China's new all-encompassing anticorruption strategy to be implemented in 2013-17. The strategy, unlike previous variations, almost resembles a political philosophy and utilizes 'interlocked approaches to fighting corruption' (编织制度防腐之笼) where activities with high corruption potential are 'locked up' on all sides by legal provisions, government workers' ethics' requirements, and a civic culture of integrity and intolerance to corruption. The latter is being given center stage: "To achieve these goals, we need attention, supervision and participation by every citizen. The government and the people must concentrate on common goals," states 'People's Daily'.

In order to strengthen civil servants' work ethic, Hong Kong's Independent Commission Against Corruption (ICAC), in its newly published "Ethical Leadership In Action: A Handbook for Senior Managers in Civil Service," introduces the 'Three 'A' Strategy.' Its three parts – Awareness, Assessment and Action – focus on new challenges for civil servants and the implementation of integrity programs to meet them with the help of 'a set of shared core values'. Tony Kwok Man-Wai, former Deputy Commissioner and Head of Operations of ICAC, now Honorary Course Director for the Corruption Studies Center at Hong Kong City University, states that the "ICAC adopts a three-pronged approach: deterrence, prevention and education. [...] the Operations Department to investigate corruption;

the Corruption Prevention Department to examine systems and procedures in the public sector and identify corruption opportunities and make recommendations to plug the loopholes; and the Community Relations Department to educate the public against the evil of corruption and enlist their support and partnership in fighting it.”

The strategy is still enforcement-led, however: over 70% of ICAC resources are allocated to the Operations Department. The Department of Government Employees’ Ethics has long been established under Taiwan’s Ministry of Justice. Its widely defined mandate ranges from supervising the ethics of government employees across the nation to carrying out anti-corruption efforts, protecting official secrets, and preventing the impairment and sabotage of public agencies. Recently, early education efforts focused on a culture of integrity and upright citizenship have been introduced in Taiwan. In his 2008 inaugural address amply titled ‘Taiwan’s Renaissance,’ President Ma Ying-Jeou stressed the need for Taiwan’s youth to “develop character [and] a sense of civic duty.” Since 2009, Taiwan’s city and town governments have been introducing elements of ethics curricula, and holding essay and drawing contests on ethical governance and civic duty themes among middle and high school students.

Government integrity and winning over citizens’ support is high on the political agenda in Taiwan, which has been repeatedly rocked by corruption scandals in recent years. In the address quoted above, the President stressed “*restoring political ethics to regain the people’s trust in government*” as one of the main missions for the new establishment. He pledged “*the new administration will push for clean politics and set strict standards for the integrity and efficiency of officials. It also will provide a code for interaction between the public and private sectors to prevent money politics. ... The government will not stand in the way of social progress, but rather serve as the engine that drives it.*” While stated goals resonate with the absolute majority of voters across political spectrum, the KMT’s complicated political legacy of one-party leadership, the prolonged period of martial law and the resulting disregard for openness in the political process explain the public’s skepticism regarding its commitment to those values, a skepticism that has spread beyond party affiliations in recent years. This presents considerable but not insurmountable obstacles in the way of building clean and transparent government. The institutional foundations for these difficulties were laid long ago.

The Control Yuan was designed by Dr Sun Yat-sen after thorough consideration of the strengths and weaknesses in foreign practices in response to the challenges faced by China after the collapse of its imperial political system in 1911. The Control Yuan was to serve as an independent institution with supervisory and impeachment power, in contrast to the Western practice of giving it to the legislative branch. In Dr. Sun’s opinion, if the two are combined (as they are in the American political system, viewed at the time as an ideal based on their ‘written Constitution’), the government might find itself blocked from fulfilling its constitutionally defined duties by the legislative body which – as it is empowered by popular vote – might fall victim to narrow partisan goals and infighting. This theory bore out in practice, unfortunately, as witnessed by the October 2013 US government shutdown due to partisan disagreements on the budget. Ironically, similar narrow partisan interests blocked the Control Yuan nominations back in 2004 (under the Democratic Progressive Party’s government), rendering it non-functional until 2008.

Beyond its modern function as a safeguard against ‘legislative authoritarianism,’ the Control Yuan is the heir of a long tradition of supervisory power in Chinese political structure. Despite long being seen by Western scholars as rigid and unresponsive, in essence dealing only with immediate threats to its survival, for centuries the Chinese empire utilized fairly effective ways of monitoring the situation in its far-flung corners and providing a safety valve for people’s grievances. The citizenry could plead their cases directly with the highest authorities who were viewed as fair and independent of local power struggles and intrigues. Censors gave hope for redress and discipline of corrupt officials, however sporadic. These often intertwined tasks were accomplished by the institution of imperial censors (御史), which was tasked with the challenge of presenting the truth to the emperor, often dispatched to provinces and counties to monitor and personally intervene in the most serious situations. Taiwan’s legal scholar Herbert Ma details the extensive powers given to supervising officials in old China and notes that it is the sense of duty, of moral uprightness and loyalty that censors generally possessed, that Dr Sun sought to preserve and put to the service of the Republic of China.

The Control Yuan incorporated and expanded on these two traditions. It was established on August 1st, 1925 as a Supervisory Council which was a successor to the Audit Office (later ‘Yuan’) in existence in 1912-14. The turmoil of those years prevented the KMT from setting up its complete government structure, but the Control Yuan was finally established on June 5, 1948 (after the promulgation of the Republic of China’s constitution in December of 1947). The

importance of uninterrupted tradition of supervising branch of government is clear. Article 90 of the Constitution of the Republic of China originally stated that *“the Control Yuan shall be the highest control organ of the State and shall exercise the powers of consent, impeachment, censure and auditing.”*

Changes in the political environment over the years prompted amendments to the Constitution (7 in all) which in turn altered the mandate and composition of the Control Yuan: the highest control body now exercises the powers of impeachment, censure and audit and consists of 29 people, including the President and Vice-President. They are nominated by the President and approved by the Legislative Yuan. Audit power is carried out by the Ministry of Audit (the National Audit Office), which is an integral part of Control Yuan’s structure. The solid institutional foundation allows the supervisory body to timely adapt to the challenges of changing times which further strengthens its legitimacy, as compared to the newer bodies often established in the aftermath of corruption scandals, with general public often perceiving them as created in pursuit of narrow partisan interests. These newer bodies’ impartiality is also questioned by defendants in high-profile political corruption cases. In Taiwan’s lively election campaigns, candidates do not hesitate to accuse each other of various corrupt offenses ranging from ‘unethical behavior’ to embezzlement, as was witnessed recently in Taipei’s mayoral race.

According to Additional Article 7 of the Constitution of Republic of China, members of the Control Yuan ‘shall be beyond party affiliation and independently exercise their powers and discharge their responsibilities in accordance with the law.’ This is the key functional provision of the supervisory body against the backdrop of active party politics in Taiwan. Even with that provision in place, Control Yuan investigations are far from being fully free from being perceived as politically biased, both by members of the establishment and the general public. This was aptly illustrated by the case of Wang Jin-Pyng (王金平) – speaker of the Legislative Yuan – who in 2013 was accused of influence peddling and interference with judicial processes. Far from being regarded as a step in the direction of widening integrity-building efforts, the incident was viewed as yet another political squabble and an attempt to bring down a political rival, which damaged both President’s Ma approval ratings and public perception of the government’s commitment to integrity. *“Starting in September [of 2013], the Ma-Wang rivalry assumed a new urgency; they are now at polar extremes. It destabilizes the political situation in Taiwan. Also, being at the center of a dense network of interests and connections, Wang Jin-Pyng creates a precarious situation... Does this mean that Taiwan’s political reality is still like it was before, when human feelings trumped the rule of law?”* queries Taiwan’s most popular news site.

Article 26 of the ‘Control Act’ stipulates the right of the Control Yuan to request and inspect necessary documents to carry out its power of controllership. The Control Yuan member *“with a control certificate or personnel holding investigation certificates assigned by the Control Yuan... may go to public or private organizations and investigate their files, records and relevant documents. The heads of these organizations and other related personnel shall not refuse, and shall be responsible for making detailed replies if they are interrogated, and shall sign all interrogation records.”* A member of the Control Yuan may also *“inform police authorities to help take necessary measures when s/he encounters resistance or finds it necessary to protect evidence”* (Article 28). These provisions are of vital importance for the efficient investigation of possible corruption, as investigators often suffer from non-cooperation, cover-up and withholding of evidence by the parties involved. As is the power to summon officials for questioning (Article 26) and informing police authorities if there is a danger of a suspect’s flight (Article 29).

This wide authority almost resembles judicial powers, but the Control Yuan is not a semi-judicial organ: if initial investigation reveals acts that involve violations of criminal or military law, *“[the case] shall be turned over to the competent judicial organ or court martial for action”* (Article 19). Nor were there ever plans to widen the Control Yuan’s scope of authority to include judicial responsibilities. Ger Yeong-kuang (a member of the 4th Control Yuan) draws a clear distinction between the Control Yuan and other institutions: *“the Control Yuan is not a quasi-judicial body, but rather operates as one of the five branches... There are in fact quasi-judicial bodies that are independent administrative agencies that have some judicial powers, such as the commissions for tenancy under town or township offices.”* This is an important feature of its position, which is often disregarded in the heat of political arguments and fervent media attention.

Originally, a supervisory body was formed by ‘representatives of the territories and populations, not races or professions,’ but over the years, accompanying the downsizing to reflect present political reality, we see a clear trend towards the professionalization of prospective members so they can better meet modern governance challenges as

reflected in the amendments to the ‘Organic Law of the Control Yuan’ of 2010, which established requirements for prospective Control Yuan members in Article 3: “(1) service in good reputation as a central government representative for at least one term or as a member of a provincial (city) council for at least two terms; (2) service with distinction as a selected appointment judge or prosecutor for at least 10 years and service as a judge or prosecutor in the judiciary at the level of High Court or High Court Prosecutors’ Office or higher; (3) service with distinction as a public functionary at a selected rank for at least ten years; (4) service in good reputation as a university professor for at least 10 years; (5) qualification under the domestic Professional and Technical Senior Examination and at least 15 years of professional practice with good reputation; (6) a person of honesty and integrity with extensive political experience or experience presiding over a journalistic or cultural undertakings with good reputation”.

The 4th Control Yuan’s (2008-2014) President was Wang Jianxuan (王建煊) a graduate of Taiwan’s Chenggong University’s Department of Accounting and Statistics and a PhD holder from National Chengchi University’s Department of Finance. His civil service experience included tenure as member of Legislative Yuan, administrative Deputy Minister and Minister of Finance – ample experience familiarized him with all aspects of government work. Of 29 members of the 4th Yuan, 17 held degrees in law or politics – vitally important fields for Control Yuan work; 13 members received their degrees from universities in the USA and Japan, which attests to their prolonged exposure to different cultures - including political - and their advanced language capabilities. Considering that many countries are now making a concerted effort to participate in various international ‘idea exchanges’ and expose their civil servants to foreign experiences and practices (with varying degrees of success), Control Yuan members are ahead of the game.

After the contentious process of appointment by the President and approval by Legislative Yuan (none of the prospective members received unanimous approval), the new Control Yuan was inaugurated on August 1, 2014. Incumbent President Chang Po-ya – the first woman to lead it - was educated as a physician in Japan, USA and Taiwan. She has extensive political and administrative experience as well, as she served as mayor of Chiayi city in 1983-89, held a number of ministerial level posts and is founder and chairwoman of the Non-Partisan Solidarity Union (2004-07). She hails from a prominent doctor-politicians’ family of Chiayi (her mother and sister also held the post of mayor), a fact that prompted critics to accuse her of influence peddling (an accusation later proved unsubstantiated).

To ensure collegiality and due process, the Control Act stipulates that examination of impeachment cases should be assumed by all members in rotation; impeachment should be proposed by at least two members (Article 6); and before impeachment case is established, it should be examined by nine or more members. There is also a double-check procedure: “if a censure case is considered unwarranted but the initiator thinks otherwise, it shall be reexamined by another three or more members of the Control Yuan for final decision” (Article 20).

The main source of the Control Yuan’s workload is petitions from private individuals, government agencies, the National Audit office, and organizations/groups reporting government wrongdoing they encountered while interacting with officials and even the media. ‘The Law on Handling People’s Petitions’ provides guidelines and timeframes for processing complaints. There is a fairly straightforward procedure for filing a petition, and it can be done in person, via regular mail, and online, and all have the option of anonymity. There is 24/7 access to a member on duty for emergencies, and all petitions are consolidated in statistical reports. Thus, over a course of 6 years (the period of the Control Yuan’s powers), the supervisory branch provides valuable feedback on governance issues and areas of concern in addition to dealing with specific issues. There were 16,946 petitions (13,994 accepted) in 1999. Only 6 were deemed ‘out of jurisdiction’. Year 2009 saw a spike of 29,040 (28,940 accepted, 379 rejected) which can probably be attributed to citizens’ critical responses to the government’s rescue efforts in the aftermath of typhoon ‘Morakot’. 19,758 complaints were filed in 2012.

Initial investigation of public complaints is an important feature of present-day Control Yuan work that has direct positive implications for anti-corruption policies – it provides a non-judicial channel of reporting and investigating offences that can only be considered *potentially* corrupt or unethical (in the view of petitioner). In the absence of a Control Yuan and its established procedure for dealing with public complaints, such incidents might not be reported at all, which would negatively affect both anti-corruption efforts and the public’s perceptions, or dismissed as ‘out of scope’ by specialized agencies (i.e., the Department of Investigation of the Ministry of Justice). Thus the Control Yuan shoulders the burden of initial investigations into possible violations of law and government ethics by providing a ‘one window’ service to citizens of Taiwan, and also a safeguard against false accusations. Because they are hard to prove,

corruption allegations are even more challenging to completely disprove; it might take years for the wrongfully accused to clear his/her name and mitigate long-term reputational damage.

Anti-Corruption structures of the Control Yuan: tasks and challenges

The Anti-Corruption Committee (廉政委員會) of the Control Yuan was established on March 4th of 1997. It is one of five special committees (特種委員會) established in accordance with the Organic Act of the Control Yuan Committees. The provisions for its establishment were amended in 2002 and 2004. Article 1 of the ‘Regulations of Establishing the Control Yuan Anti-Corruption Committee’ states that it “*shall be established by the Control Yuan according to provisions in Paragraph 3, Article 2 of the Organic Act of the Control Yuan to handle and monitor matters related to asset declarations by public functionaries, recusal of public functionaries due to conflicts of interest, political donations and other business ethics are they relate to government.*”

The tasks of the Committee are as follows (Article 2):

1. Matters related to the auditing of asset declaration by public functionaries, examination of reported information and inspection of political donation accounting reports accepted by the Yuan.
2. Deliberation of cases accepted by the Yuan related to asset declaration by public functionaries and which must be transferred to the judicial authorities for investigation and trial under Paragraph 3, Article 11 of the Act on Asset Declaration by Public Functionaries and Article 22 and Article 23 of the Political Donations Act.
3. Deliberation of decisions on matters related to applications accepted by the Yuan from interested parties for recusal of public functionaries.
4. Deliberation of cases involving disciplinary action by the Yuan according to the Act on Asset Declaration by Public Functionaries, Act on Recusal of Public Functionaries Due to Conflicts of Interest and Political Donations Act.
5. Deliberations on the announcement of the names of parties in cases accepted by the Yuan involving confirmed penalties for asset declaration by public functionaries or recusal of public functionaries due to conflicts of interest.
6. Monitoring of the business of agencies (institutions) related to the handling of asset declaration by public functionaries or recusal of public functionaries due to conflicts of interest under the Act on Asset Declaration by Public Functionaries and Act on Recusal of Public Functionaries Due to Conflicts of Interest.
7. Other matters related to asset declaration by public functionaries, recusal of public functionaries due to conflicts of interest, political donations and other business pertaining to government ethics.

The Special Committee convenes once monthly and consists of 7 members, including the Head of the Committee, who is selected from among Control Yuan members for a period of one year (which is non-extendable). The duties of the Anti-Corruption Committee are clearly defined and directly relate to the implementation of the four ‘Sunshine Laws’ (陽光法案) for which the Control Yuan is the designated implementing government body. All four laws are designed to prevent irregularities on the part of government officials in highly corruption-prone areas. The laws are: ‘The act on Asset Declarations by Public Functionaries’ (公職人員財產申報法), ‘The act on the Recusal of Public Functionaries Due to Conflicts of Interest’ (公務人員利益迴避法), ‘Political Donations Law’ (政治現金法) and ‘Law on Lobbying’ (遊說法).

While the ‘Asset Declaration Law’ has been in place since 1993, it took another 11 years for the ‘Political Donations Law’ to be passed – it did so just two days before the presidential elections of 2004. There are now strict limits on the amount and timing of donations and the requirement for candidates to keep donations in a separate bank account. According to the latest data on types of violations of the Law for the period of 2008-13 published by the Control Yuan, the most numerous are violations of Subparagraph 1 of Paragraphs 1 and 2 of Article 18, ‘Limits on yearly donations for prospective candidates’: out of 576 ‘confirmed cases and announced fines,’ 350 were incidents of donations by private individuals and businesses. By law, donations are capped at NT100,000 (about USD3,300) per year for private individuals, NT1,000,000 (about USD33,000) for businesses, and NT500,000 (about USD17,000) for public organizations. The limits are very low considering costs of running for office and elections in general in Taiwan. The sky high costs of elections were the reason they are now held ‘several-in-one’; the closest – ‘seven-in-one’ – is planned for November 29th of 2014. In the period 1993-2014, 2008 saw the largest amount of penalties issued for tardy declarations – NT 5,875,000 (77 cases).

The ‘Law on Lobbying’ was passed on August 8, 2007 with the aim to ‘create open and transparent procedures for lobbying processes to comply, prevent improper transfer of benefits and ensure democratic participation’ (article 1). Lobbying is defined as behavior communicated in oral or written form with which a lobbyist intends to influence the opinion of a lobbied party or its designated agency in regards to the formulation, enactment, modification or annulment of laws, policies or proposals (Article 2). ‘Lobbyist’ (遊說者) is defined as an ‘individual, legal representative or organization that carries out lobbying activities that are by law allowed to file opinions, or representatives of groups formed for these specific purposes. Lobbyists are also individuals or organizations that were designated to carry out lobbying activities (article 2). The ‘lobbied parties’ (被遊說者) are the President and Vice-President, members of representative organs at all levels; and chiefs and deputy chiefs of special municipalities, cities, counties and townships. Specifically mentioned are ‘retired administrative employees in accordance with Article 1 Paragraph 2 of ‘Provisions on Retirement of Administrative Personnel’ (政務人員退職撫卹條例): those appointed by President in accordance with Constitution (特任之人員) and specially dispatched by President (特派之人員). This provision shows foresight, considering the influence highly appointed personnel can exert for a long time after retirement while being beyond the scope of various regulations on civil service ethics, etc.

The Taiwan Provincial Government received a reprimand from the Control Yuan in the case of Kuo Kuan-Ying – a former official with the Government Information Office, fired in 2009 after publishing a slew of derisive comments about the aboriginal population of Taiwan. Mr Kuo was subsequently hired by the Nantou county office of Provincial Government and promptly applied for a pension. Irate media comments point at the minister (without portfolio) Lin Jung-tzer overseeing the Government who, among other things, might have ‘used his undue influence to increase the weight of his opinion on Kuo’s evaluation process’ possibly with ‘someone else hiding in the shadows’ and lobbying on Kuo’s behalf. Speaker of the Parliament Wang Jin-pyng (mentioned earlier) was engaged in a protracted court battle with the President, who accused him of illegal lobbying the judiciary, an accusation widely seen as a result of personal animosity between two politicians. The September 2013 ruling restored Mr Wang to his position and his KMT membership, highlighting once again the difficulties supervisory organs face in restoring truth in cases of an often elusive nature.

Among other examples of disrupting government work and negatively affecting public sentiment is the case of Democratic Progressive Party chairwoman Dr. Tsai Ing-wen (蔡英文), who in October 2013 was charged with dereliction of duty after more than a year-long investigation into her involvement with Yu Chang Biologics Company into which she facilitated government investment in 2007. The case was initiated in the run up to the presidential elections of 2012 when the KMT denounced Dr. Tsai – then the DPP presidential candidate - for improper involvement with Yu Chang (now TaiMed Biologics, Inc). She was accused of corruption after having approved government investments of NTD 875 million (USD 29.6 million) and USD 20 million. Total investments into the biotechnology start-up were approximately NTD1.4 billion, and Dr Tsai allegedly approved them before leaving office as Vice Premier, in violation of due process without consulting with then Prime Minister Su Tseng-chang (蘇貞昌). Later she served as Yu Chang chairperson.

In August 2013 the Supreme Prosecutors’ Office Special Investigation Division closed its investigation, finding no evidence of wrongdoing against Tsai. Earlier, in February of 2013, the Anti-Corruption Committee of the Control Yuan presented the results of its own investigation of possible irregularities in accordance with 1993 ‘Law of Prevention of Public Officials’ Conflicts of Interests’, also clearing Dr Tsai’s name. In October of that same year, however, the Control Yuan sent its own report and passed the decision to censure Tsai in connection with the Yu Chang case. In reaction, DPP Legislator Chen Chi-mai (陳其邁) called the case part of a ‘campaign to discredit’ initiated by the KMT and President Ma personally against Dr Tsai and the DPP as far back as 2011, ‘to achieve his own political goals, which in the end hurt Taiwan’s biotech industry the most.’ Chen voiced ‘suspicions’ that “*the Control Yuan has become a political tool of the Ma administration, which has infringed on the constitutional mechanism and launched a political purge, and tried to portray Tsai and other DPP members as corrupt politicians*”. These allegations of improper dealings did not seem to derail political career of Dr Tsai, who was elected DPP leader in a sweeping victory in May 2014 ahead of the presidential election of 2016, winning 94% of the votes and announcing ‘rebuilding public trust in the party’ as her immediate task. The ‘Tsai case’ once again demonstrates the high degree of politicization of all branches of government in Taiwan, which in turn threatens to undermine public trust in its effective functioning and ability to achieve stated anti-corruption policy goals.

In addition to the Anti-Corruption Special Committee as a designated ‘Sunshine Law’ implementation working group, a consultative Control Yuan Commission on Clean Governance (監察院廉政會報) was established in 2001 in order “to achieve the goals of implementation of high-integrity governance, a positive political climate, improving policy performance, cleaning up and preventing corruption, and promoting efforts in building clean government”. It deals with the wider issues of integrity-building. The Commission’s objectives are:

1. To assist the Control Yuan’s in its anti-corruption initiatives in the areas of program planning, researching and drafting regulations;
2. To provide consultation in matters concerning anti-corruption work;
3. To assist in eradicating and preventing corruption and also on matters of ethics policies and ways to minimize corrupt practices in the framework of ‘clean governance’;
4. Assist with matters of supervision and evaluating in Yuan’s ‘clean governance’ work;
5. Other matters related to ‘clean governance’ and fostering an upright political climate.

The Commission should consist of 7 or more members of the Control Yuan (one as the convener), there should be a permanent secretary and vice-secretary. Among the members, at least two should possess specialized skills in law, finance, public administration or clean governance and should have a background in public activism or research. The Commission members are elected for 2 years and can be reappointed. In case of vacancies, additional appointments should be made. The members’ powers expire with the present Yuan term. The Commission’s secretary should simultaneously serve as a Secretary of the Control Yuan’s Office of Ethics. The Commission serves as a support structure, frequent rotation of its member may present challenges to continuity of its work. A certain degree of overlapping functions can be also be noted.

Conclusion

The effectiveness of the Control Yuan’s involvement in the clean government effort, namely the tasks set forth for its Special Anti-Corruption Committee have been debated recently, as have been the Control Yuan’s viability as an independent branch of government. While the supervisory branch might seem cumbersome, we have to keep in mind the challenging nature of modern day corruption: its elusiveness and frequent lack of paper trails present difficulties for investigation and prosecution; lone perpetrators caught in anti-corruption sweeps are increasingly acting as representatives of larger interests at play (as demonstrated by the recent debates over Service Agreement with the PRC).

Seven revisions to the Republic of China’s Constitution demonstrate the shifting balance of power among the five branches of government, with the scope of the Control Yuan powers seemingly narrowing. Nonetheless, even with that in account, as it is the institutional heir to a thousand-year tradition of censure and supervisory power now combined with an ombudsman’s role, the Control Yuan has all the necessary features to assume a more meaningful role in the countrywide anti-corruption policy which, in turn, is becoming an important part of building a clean and accountable governmental system. Its start may not have been auspicious, considering the baggage brought over from the KMT-instituted period of martial law and the understandable public skepticism about its mandate and the political will required for its work.

As A.Wells points out: “*The Examination Yuan, by ensuring highly qualified government officials and representatives, may have played a part in Taiwan’s economic success. The same cannot be said of the Control Yuan. It used to be part of the long, corrupt dictatorship of the Kuomintang, which would have been against Sun’s wishes.*” A prolonged period of inaction in 2005-08 due to the deadlock over nominations by then President Chen Shui-bian’s government was undoubtedly a setback to its popular legitimacy, as were a series of cases, a few of which were cited earlier, in which questions arose regarding the Control Yuan’s performance and objectivity. However, the author did not discover any evidence of widespread popular support of the idea of abolishing Control Yuan: while complaining about ‘ineffectiveness’ citizens demand its overhaul, further raising the degree of transparency of procedures and public oversight.

Kao Yuang-kuang from National Chengchi University points out that Sun Yat-sen’s plan was for all five branches of government to cooperate, not to compete with each other. Now they are engaged in endless tussles, which leads to

an ‘imbalance’ of the whole governance mechanism. There is certainly a grain of truth in this statement, as witnessed by the intense debates surrounding the selection and approval of the new Control Yuan. Politicization of its work, which violates Taiwan’s constitution, remains so far a persistent threat to its independent function. Outgoing President Wang on numerous occasions has reiterated his stance on abolishing the Control Yuan because ‘the system is fraught with flaws’ and ‘it is not easy to find qualified people of high moral standing and integrity.’ Indeed, it is a challenge, but certainly not an insurmountable one. The former President’s suggestion to roll the power of control into the Legislative Yuan implies its relative unimportance; this runs contrary to trends in clean governance and anticorruption strategies around the world. A lot of thought is currently being given to composing additional provisions for the supervisory procedures of the Control Yuan to minimize undue influences, including on those initiating and voting on cases.

The Control Yuan has never been a judicial organ - this fact gets overlooked in an often emotionally and politically charged quest for clean government. Nor was there ever a plan to turn it into one. Widening the scope of its anticorruption responsibilities would be following an ancient Chinese custom of upright censors, in combination with modern features: collegiality, transparency and public involvement. Following due process is key to investigating cases of possible corruption and/or unethical behavior. Ger Yeong-kuang succinctly states: ‘we are not Judge Bao,’ referring to the widely respected and upright judge from the Song Dynasty, who possessed discretionary powers and authorities which he exercised in disregard of established procedures in the pursuit of justice.

With new challenges constantly presenting themselves in the area of clean governance and integrity-building, the major functions of the Control Yuan as defined in the Constitution and body of applicable laws are undoubtedly important to Taiwan’s anti-corruption policy. Top-down policies of a punitive nature are to be supplemented by grassroots-level educational work in order to create civic intolerance for corrupt and unethical behavior: ‘modern’ corruption, besides inflicting damage measurable in economic terms, negatively affects public sentiment that in turn further impedes responsible governance efforts. The Control Yuan with its tradition-enshrined standing should be at their helm.

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Filipino irregular migration to Japan and the repercussions of immigration control

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Abstract

This study explores the specific phenomenon, outcome, and the consequences of irregular migration in the form of immigration detention and/or deportation of migrants from the Philippines based on the recipient country response which includes immigration enforcement measures such as arrest, detention and deportation (i.e. Japan's migration control). It attempts to further elucidate on the reasons behind the seemingly sustained phenomenon of distressed migrants and their precarious status as the borders of their country of destination are governed by strict immigration policies that may facilitate or hinder their entry. Further, this research focuses on the interplay of the migration industry and the experiences of former undocumented migrants and their family, including their children. The collected data reveals that the state's discretionary or selective application of the law appears to be consistent with the current trend in advanced welfare states, at least in the case of Japan, which is bent on excluding irregular immigrants and not moving forward on extending citizenship rights to the large group of unwanted immigrants. To address this rival explanation, the study also highlights the role of selected non-state entities (NGOs, church-based organizations) and self-help groups in the Philippines and Japan, which becomes a catalyst to ensure protection of migrants' rights, serving as 'watchmen' to ensure that these are constantly upheld through a negotiated status.

Introduction

This study explores the specific phenomenon of the outcome and consequences of irregular migration that is immigration detention and/or deportation. The study aims to shed light on the consequences of irregular migration (i.e. migrants from the Philippines) and the recipient countries' response (i.e. Japan) which include immigration enforcement measures such as arrest, detention and deportation. It attempts to further elucidate on the reasons behind the seemingly sustained phenomenon of migrants-in-distress as the borders of their countries of work destination are governed by strict immigration policies that either seek to facilitate or hinder their entry. Further, this research focuses on the interplay of the migration industry and the experiences of former undocumented migrants and their family, including their children.

As a theoretical contribution, I incorporate a discussion on *transnationalism* and *network theory*, as earlier studies suggest that migrants utilize all possible channels in their plight abroad, which typically begins from their state of origin (i.e. Philippines), working through NGOs and/or advocacy groups, informal connections, and other sympathizers. The study also points out discourses on notable migration theories from law and citizenship, migrants' incorporation, gendered politics and the feminization of migration, class-based/critical-racial theory, and the criminalization and securitization of migration.

For all its intent and purpose, this research attempts to offer an interdisciplinary explanation of the irregular circumstances experienced by some distressed migrants with lenses from the academic field of political economy, sociology and international studies.

Methodology

The study utilizes an exploratory-descriptive case study research design using multiple cross-case analyses. In reference to Yin (2009), the research addresses the question of validity through the three forms of triangulation using varied sources of information: data, methods, and theory. Furthermore, the study was accomplished through a

modified-grounded instrumental approach (research-before-theory model), using replication sampling instead of the typical population sampling (Berg, 2007). Reliability of the data gathered was made certain through a pilot study conducted at the earlier phase of the research process.

Data for the nine (9) case respondents were derived using replication logic. Two levels of abstraction from case phenomena were replicated: 1) Literal Replication: women migrants (mothers) with Japanese-Filipino children, and Theoretical Replication: migrants with Filipino families and children (Normalized Status), and 2) Rival Replication: migrants who were unsuccessful and eventually deported back home. At each level, the role of state and non-state actors is taken into consideration – whether or not, migrants made the most out of the services provided for them by these agencies.

In addition, as a qualitative research employing open-ended in-depth interviews (primarily for case informants), a combination of data collection techniques validated the methodology including key-informant interviews (KIIs), direct and participant observations, and document analysis from secondary sources. Through the use of a case protocol, a semi-structured case informant interview guide was primarily employed for the case-study respondents, while a key-informant interview was also completed for identified individuals, representatives from non-government organizations and migration-related government agencies.

Findings and Discussion

Data findings reveal that the state's discretionary or selective application of the law appears to be consistent with the arguments put forward by Engbersen, Van San, and Leerkes (2006) that the current trend in advanced welfare states, at least in the case of Japan, is bent on excluding irregular immigrants and not moving forward on extending citizenship rights to the large group of unwanted immigrants. To address this rival explanation, the study also highlights the role of non-state entities (NGOs, church-based organizations) and self-help groups in the Philippines and Japan, which becomes a catalyst to ensure protection of migrants' rights serving as "watchmen" to ensure that these are constantly upheld. Indeed, through the validation of case responses and key-informants interview by participation observation, the following major findings are also discussed:

This study subscribes to the explanation brought forward by the world system theory that the migration process (within a single system) is set in motion by the integration of new areas into the capitalist world system creating core-periphery relations between metropolitan and traditional economies. What constitutes as "bridges for migrants" are the material, cultural and ideological links that arise between these countries. This may also encompass historical roots such as earlier background of colonialism (Japan and the Philippines during the Second World War). Castles (2007) explained that colonial states also played a big part in sending potential immigrants for settler colonies. As Sassen (1988, 1996) argued, the core countries, in this case study Japan, along with its economic and technological changes simultaneously creates potential migrants in peripheral areas (Philippines) and generates jobs in core areas that citizens do not want because of the low wages, but potential migrant workers (in the periphery) are willing to accept (So 1990, Debrah 2002).

Such advancements in the core countries create a sort of *whirlpool* which draws migrant from poor families towards it (push and pull factors). I describe this phenomenon as "Whirlpool Effect" in reference to George Orwell (1986) as cited by Dorling (2013) in illustrating the "frightful extent of unemployment" in British society in the 1930s (which made London as the "center" of opportunity for destitute, vagrant and beggars alike). Meanwhile, Filipino migrants do not just set sail through the whirlpool on their own. The migration industry, which could be state-sanctioned or non-state recruitment agencies, facilitates their journey by providing them a "paddle" to supposedly reach the other side conveniently. However, the migration industry is not only composed of legitimate actors in servicing international migration but also a range of formal and informal support systems including criminal gangs of traffickers. It also relies on the billions of dollars remittances send by migrants to their home countries – which made this industry more profitable than the oil industry (Marshall 2006, Kaye 2010).

If there is a sort of controlled-whirlpool effect from the destination countries pulling migrants to their fold, a kind of "Paratrooper Effect" is also simultaneously taking place in origin/source countries deploying them to recipient countries. This metaphor is taken quite significantly in reference to the historical context of paratroopers (also known

as military parachutists of a paratroop regiment or airborne unit) sent by their command post for certain covert operations especially popularly utilized during World War II. Paratroopers are specifically trained for tactical advantage as they can be positioned into the theater of war in areas inaccessible by land or sea – typically state sponsored (state’s armed forces). Hence, if applied in the context of international migration, especially in sending countries like the Philippines, the government is actively sponsoring the “training” of their citizens to become migrants themselves through policies that openly send them abroad – thereby tacitly creating a migration culture among the young people – hailing them as the modern heroes through the remittances they sent from elsewhere. The Philippine government is at war (largely economic) by fighting poverty and widespread unemployment. Thus, it has created institutional mechanism and structures that facilitate migration and the migration industry. In this study, I was able to verify service provision of selected key offices through the informants I have interviewed in the Philippines and in Japan (i.e. POEA, OWWA and PHL Embassy/Consulate in Japan).

At the receiving end, destination countries have the power to get rid of unskilled foreign workers, even though they need them due to the strong demand from firms and employers who are dependent on their labor for the 3D jobs that the local workers shun. Many other scholars contended that the presence of “illegal workers” in Japan is not because they can easily slip through the government’s immigration control enforcement but it is because the latter actually turns a blind eye on them. It is sometimes described as allowing entry through the “back door” to satisfy labor demand from small and medium-size industries. Despite the economic necessity of employing migrant workers, as early as 2004, Japan’s Ministry of Justice (MOJ) through its Immigration Bureau has steadfast implementation of its policies towards immigration control. But past and current administrations have claimed such countermeasures have been enforced in response to Japan’s internationalization program for global interdependence. This means acceptance of foreign nationals who are needed to revitalize Japanese economy and society (mainly highly skilled foreign nationals) but at the same time the government (state) must protect the public security and safety of its citizens against undesirable aliens through smooth but strict implementation of immigration examination (see Yamagami 2010, MOJ 2011).

The study also found out what respondents recounted about “hide and seek” relationship between state and migrants which resembles what migration scholars described as “cat and mouse” struggle in the context of the government’s identification/surveillance strategies. The description fittingly illustrates an important characteristic of everyday resistance that irregular migrants hardly succeeds in permanently turning the tables in negotiating their status – as migrants develop new strategies of resistance, states follow suit in adjusting their identification/detection strategies and in turn, prompts irregular migrants to further modify their actions.

Hence, citing Ellermann (2010), the strategies of resistance of migrants without legal status mirrors Scott’s (1987) “weapons of the weak” were the poor and destitute (irregular migrants in this study) had nothing to lose in defying “social sanctioning because their poverty had already robbed them of their dignity” (for e.g. inability to make any rights claims against the state due to their “illegal” status) (p. 424). At the onset of their journey, in dealing with the migration industry (illegitimate or not), these migrants have already exercised agency upon complying with the conditions provided for them (whether it turn out to be disadvantageous later or not). All the more, they have engaged in resistance, albeit indirect or non-confrontational, as most of the respondents claimed to have “runaway” from their abusive/unscrupulous employers/brokers/managers. Faier (2008) calls this “runaway agency” which is the agency of that “dialogic or in-between space that emerges from a complex calculus of political economic factors, personal histories, and the unequal dynamics of women’s (migrants’) encounters abroad” (p. 650).

As such, when irregular migrants are drawn towards joining organizations they are just exercising what Tocqueville, as cited by Eliasoph (2013), said about participation in associations that offers people of cognitive (knowledge), emotional (solidarity), and political benefits (power) (p. 12-13). Furthermore, the indispensable contribution of the collaborative efforts of local governments and non-state actors in facilitating localized citizenship in Japan when the national government is rather apprehensive on accepting foreigners and migrants is very much alive in the data findings and discussions of this study (see also Douglass & Roberts 2000, Tegtmeier Pak 2001, Tsuda 2006, Nagy 2010, Shipper 2011, Fauser 2013).

Conclusion

Therefore, this study underpins the dual face of international migration and its inevitable outcome which is irregular migration. It further highlighted on the consequences of irregular migration which could be in the form of immigration control and perpetuation of irregularity cycle. The study puts into context the migration stream of irregular migrants from the Philippines to Japan and vice-versa by underscoring the role played by the migration industry and the structures (macro-level actors) in place and how individual migrants subjectively respond through human agency and collective action (micro-level actors).

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Peace and conflict resolution

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Abstract

Since ancient time the world has seen many wars and conflicts, and after the last major wars World War II there has been attempts to keep peace and a balance of power to prevent from another major war. However, internal and outer turmoil still exist in many parts of the world. There is a saying: “if we cannot find peace within, how can we create outer peace”. It is important then to make peace from within and then spread it out. The purpose of this paper is to underline certain concepts in order to keep peace around the world. **First**, how can we spread the idea that ‘all is one’ and we are a part of the whole? Whatever we do always has effects upon others. **Second**, how can we perceive the reality of self? How can we see ourselves in relation to others, the society and the world? **Third**, learn to have sympathy and compassion to all, no matter if there are differences in the outlook, race, nationality, occupation or social status. If we can follow the three points above, we all can exit together in peace and harmony, and we can overcome being self-centered and deceived by the material world around us. No matter what nationality, religion, and social statue one belongs to, one can go beyond all the differences to attain peace, and can overcome any conflicts that may happen. A sense of justice can be created for all people.

Introduction

“We are made wise, not by the recollection of our past. But by the responsibility for our future.”

George Bernard Shaw

Human race have engaged into war for many thousands of year, as evidenced in ancient myths, such as *Maha Bharata*, *Ramayana* of Ancient India and the *Iliad*, and *Odyssey* of Ancient Greece, and *Persian Myths*; all show stories of division between two forces, the righteous and the opposite such as *Arjuna* and his brothers in *Maha Bharata*; honor and dishonor of the Greeks, such as Achilles and Paris. Ahura Mazda and Angra Mainyu represent good and evil respectively.

Are we the slave of our passion and without choice? Words of wisdom of *Zarathustra*, the great Iranian prophet, said “*Man has freedom to choose between good and evil and is responsible for his action.*”, which means we have a free will to choose and if we choose what is good, we can have a good life. After WWII, we all learned from the great loss, as they say: no one wins in a war. Human race were at the loss from wars, and if we will have another war, with all the technology we have, we may not survive till the next century.

We learn that war started from two people who disagree with each other. Wars start from small disagreement into something very big. Wars start from what we cannot give to another. We are the race that has accumulated wealth, land, possession and ideology. And we attach to these qualities what we believe in. In doing so it gives man more misery than happiness. The world becomes cold and cruel to mankind. The purpose of this paper is to underline certain concepts, knowledge and finally attitude that can lead to peace keeping to all. To introduce ideologies that may lead this world to become our home once again.

Discussion

First, how do we perceive ourselves and the rest of the world? There is one concept or a certain truth that we cannot deny that is ‘all is one’. This means that no matter what one does, it will always effect upon another. We always neglect small things we do to ourselves, to those around us and to our environment. For example, a smile can ease your face muscles, your body and those surrounding you. The whole atmosphere can change by your small act. This is just an example of the butterfly effect that Edward Norton Lorenz discovered in the chaos theory:

“That butterfly effect is the sensitive dependency on initial conditions in which a small change at one place in a deterministic nonlinear system can result in large differences in a later state.”

No matter what one does it will always effect upon oneself and another. In Buddhism, the concept is *karma*, which means your action will always effect upon you like a boomerang. The real concept of *karma* means you are the one who is responsible of your own action, no one else. So, one has to be very careful and conscious in all acts, starting from the mind, through speech and one's doing. No matter what one does, it always affects upon the whole as *all is one*.

Second, what is our real self? What are we in relation to the rest of the world? Starting from the first point that we are part of the whole, we are part of the society, the nation and the universe. We are all connected. If we think of ourselves as part of the universe, we are not that big, we are just a small particle or a very tiny piece of dust. What is our self? We can see ourselves as the moving force amongst those around us. No matter what we do, we always affect upon another; we cannot separate our self from the rest of the society, like one big tree, consisting of its roots, branches, flowers. Every single part is a part of the whole; if we conceive ourselves this way, we will do what is good for the whole, as it effects upon all.

When one part of our body is sick, it will affect the well-being of the whole body. This sense of understanding leads one not to be selfish, lead to the ability to help one another more. With the sense of selflessness, we can function well in the society: "*do things for the sake of doing or duty for duty's sake*", not for anything else, as Kant said. This is the key concept for one to enjoy one's life in the society and the world. Kant stressed the importance of our consciousness, our mind. If we learn how to change our thinking, our concept and attitude, the world will appear differently. One will learn also that the more one functions for the society without thinking of the benefit to oneself, one can attain a sense of satisfaction. This sense of satisfaction is lacking upon this contemporary world, in the 21st Century. With the materialistic society we are in, the sense of satisfaction is very difficult to fulfill. But through performing our own duty, for the sake of doing that, is itself a source of satisfaction.

Third, learn to have sympathy and compassion to all. This is the most difficult one that we should not discriminate others from the outlook, race, nationality, occupation or social status. According to Venerable Matthieu Ricard, in his book, *The Art of Meditation*:

"Altruistic love ... is the wish that others be happy, and attitude that consists of wishing others to be happy and find the true causes of happiness. Compassion is defined as the desire to put an end to the suffering of others and the causes of that suffering. All beings want to avoid suffering just as much as we do. Moreover, since we are all interdependent, our own happiness and unhappiness are intimately bound up with the happiness and unhappiness of others. Personal experience shows that they are the most positive of all mental states and create a deep sense of fulfillment and wholesomeness. Research in neuroscience also indicates that among all kinds of meditations, those focusing on unconditional love and compassion give rise to the strongest activation of brain areas related to positive affects."

Giving love and compassion to others, leads one to benefit from the act. The sense of happiness and satisfaction can replace the sense of misery and no satisfaction. It can change the cruel and cold world into the world of love and understanding. We can see that it all depends on our attitude towards others. If all of us in the society can create such altruism among ourselves and human race, war can be replaced by peace. No matter what nationality, religion and social status one has, one can go beyond all the differences, and is able to attain peace. When we can overcome conflicts, the sense of justice can be attained by all.

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***Science and Technology,
Science for Sustainability,
Ethics of Science and
Technology***

Innovative solutions to integrate monitoring of the health services in Malawi

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Abstract

Malawi's current clinical monitoring system relies on vertical data collection by the staff using paper-based checklists, and is not adequate to help strengthen the quality of health service delivery; there are systematic inefficiencies such as fragmented facility performance reporting. Malawi's Ministry of Health (MoH) with support from the USAID-funded "Support for Service Delivery Integration- Systems" (SSDI-Systems) has piloted a revised clinical monitoring system in three districts of Malawi, in tertiary, secondary and primary facilities. The revised system aims to transform the current monitoring system into a 'supportive' supervision system which integrates data collection from vertical programs, employs smartphone technology to collect and analyze performance data, and provides feedback to health facility managers in real time. During monitoring visits facility managers and supervisors have the opportunity to discuss results and identify the needed corrective actions. The system also sends email alerts to specific MoH program managers and policy makers on critical problems as soon as the associated monitoring data is submitted to the online database. There was a program assessment of the pilot system in January 2014 to provide information on the feasibility of institutionalizing the system country-wide. According to the results of this assessment, supervisors believe smartphone is a better tool for conducting supervisions, due to the ease of understanding the color coded results and the ease of preparing for supervision. Using smartphones for monitoring purposes was seen as an improvement over the previous paper-based checklists because of the immediacy of the results and the ability to develop action plans to address problems. The supervised personnel reported receiving feedbacks and that facility staff were making efforts to make the improvements suggested by the results of the supervision. Based on the findings of the assessment, SSDI-Systems will make slight revisions to the system to assist the MoH to roll-out smartphone supervision across 15 districts.

Introduction

The Government of Malawi (GOM) is committed to providing a free Essential Health Package (EHP) of services at various service delivery points in the public sector and via Service Level Agreements with the Christian Health Association of Malawi (CHAM, contracted for maternal and neonatal health services). To support this commitment, the Ministry of Health (MoH) and development partners have jointly developed a Health Sector Strategic Plan 2011-2016 (HSSP). One of the key objectives in the HSSP is to strengthen the performance of the health system to support delivery of EHP services. To contribute to the achievement of this objective, the United States Agency for International Development (USAID)-funded Support for Service Integration-Systems (SSDI-Systems) project is helping the GOM improve and strengthen 'zonal' and 'district' monitoring structures within the MoH.

The decision to support the revision of the tools and process of clinical monitoring in Malawi was premised on the outcome of a desk review and a verification exercise conducted in 2010 in collaboration with development partners aimed at assessing the effectiveness of the existing integrated supportive monitoring system and structures of the MOH. The verification was conducted in two zones: Central West and South East zones in August 2012. Findings of the review revealed that the existing system was not adequately contributing to strengthening service delivery quality due to systemic inefficiencies such as fragmented facility performance reporting, and disparity in the structure and schedule of supervision visits across administrative and program components; monitoring checklists were not harmonized such that a variety existed across health zones, districts and among programs; inadequate funding and other logistic challenges hampered authorities in adhering to the schedule of monitoring visits to the health facilities;

there were parallel disease-specific monitoring visits to the same facility at different times that led to high operational costs and facility staff work over-load; paper-based monitoring checklists, and the integrated monitoring that focused, only, on inspection of facilities and gathering service statistics (demand side) and not addressing of the problems experienced by service providers (supply side).

Based on the above findings, the Ministry decided to ‘streamline and transform the country’s “Integrated Supportive Monitoring” approach into a ‘supportive’ monitoring system which integrates data collection from both vertical programs and horizontal programs, employs smart-phone innovative technology to collect and manage performance data, provides immediate feedback on performance at the time of monitoring visits, and concentrates on improving the performance of both the clinical tasks and resolution of problems experienced by the health workers in health facilities on the supply side, and on clients and patients on the demand side.

In 2012, the MoH set up a taskforce which pioneered the revision of the structure, processes and terms of reference for the existing monitoring system through a consultative approach. The taskforce achieved the following:

By January 2013, the Ministry re-defined the monitoring structures, processes, information flow and terms of references at national, zonal, district and health center levels. The revised system is two-pronged, promoting both external and internal supervision at facility level utilizing smart-phones for optimum effectiveness. External supervision is conducted quarterly by directors, deputy directors, program managers and zonal supervisors to the district and central hospitals. This includes the District Health Management Team (DHMT) monitoring visits to health centers. The internal monitoring at the facility level promotes monthly or bi-monthly self-assessment on improvement areas identified during external supervision.

By March 2013, the task force developed an electronic version of the integrated monitoring checklist, selected Open Data Kit (ODK) software (free software) loaded onto the smartphone technology to collect, analyze, transmit data and provide immediate visualization of facility performance through an indicator matrix coded Red, Yellow and Green. Red implies under performance, yellow is midway while green means expected performance met.

The taskforce also developed training materials for the system and troubleshooting, improved the capacity of supervision structures in pilot health zones and districts through training of staff on the revised system to provide both technical and technological support during pilot implementation. From April – December 2013, the task force led the first and second round of external supervision visits to seven pilot facilities in the districts of Balaka, Salima and Zomba and developed the supervision alert system to speed up information sharing following each supervision visit. By March 2014, the task force evaluated the success of the pilot to inform national rollout plan.

Methodology

The study design was an operational monitoring system with the revised Integrated Supportive Monitoring System that was tailor-made and programmed in line with the Malawi HSSP 2011-2016 and had been piloted in two health zones (South East Zone and Central East Zone) covering three districts of Balaka, Zomba and Salima, respectively. The pilot facilities were: Balaka District Hospital, Kalembo and Phalula Health Centers in Balaka, Zomba Central Hospital in Zomba, Salima District Hospital and Chipoka and SengaBay Health Centers in Salima (refer to Table 1 by ownership and level of service delivery). The seven facilities represented the three levels of primary, secondary and tertiary health care delivery level in the country.

Table 1: Health facilities enrolled to pilot the Integrated Supportive Supervision System using electronic checklist.

Zone	District	Name of facility	Ownership	Level of service delivery
South East	Balaka	Balaka District Hospital	MoH	Secondary
		Kalembo Health Centre	MoH	Primary
		Phalula Health Centre	CHAM	Primary
	Zomba	Zomba Central Hospital	MoH	Tertiary
Central East	Salima	Salima District Hospital	MoH	Secondary
		Chipoka Health Centre	MoH	Primary
		Sengabay Baptist Health Centre	CHAM	Primary

Training of Monitoring Supervisors: 8 trainers and 94 external and internal supervisors at national and district level were trained on use of the electronic checklist for monitoring and 5 programmers were trained in ODK software to support the system. A total of 19 smartphones were loaded with the electronic checklist and distributed to the monitoring structures at both zonal and district (3 smartphones in each district and 2 for each zonal office) level. The training content included the revised terms of reference for the monitoring structures at all levels; accessing the Open Data Kit to access the monitoring checklist on the Smartphone; collecting monitoring data using the smart-phone; classifying monitoring results through color codes; providing feedback based on the automated analyzed results; creation of improvement action plans; and training on uploading and downloading the automated-generated results to online database.

The monitoring Alert System: An Integrated Supportive Monitoring (ISM) framework alert system was developed to provide immediate feedback to decision/policy makers, immediately following the monitoring visit to a health facility. The purpose of the alert is to share information on performance of the facility on key Essential Health Package (EHP) indicators. The alerts messages are sent to decision and policy makers to help foster improvements alongside the health facility managers, their respective zonal supervisors and MoH directors. The alerts work through an electronic mail (e-mail) alert on to the dashboard. The e-mail alert message details specific issues requiring attention by the recipient of the message.

The monitoring Visit Process: During the monitoring visit, external supervisors use the electronic checklist on the smartphone to collect data, analyze the results as service performance gaps or strengths based on the agreed indicators and display the results as *Red*, *Yellow* and *Green* results with an actual performance percentage or number. These results are immediately shared with the program managers or coordinators, ward or departmental in-charges. Through a feedback session, supervisors support the facility management teams and program managers or coordinators to develop quality improvement action plans for corrective measures for all Red and Yellow results.

Once supervision data is submitted to online database, it triggers an alert which is shared in real time with decision and policy makers at district, zonal and national level including key partners. Recipients of the alert message are expected to take action on issues that are within their mandate to support facility improvement.

Assessment of the Monitoring Process at all levels: A team of representatives from the MoH and SSDI-Systems assessed the implementation of the monitoring pilot in January and February 2014. The objective of the assessment was to better understand the implementation experience and to inform any necessary modifications to the system design before the system is implemented in additional facilities. A total of 39 individual interviews were conducted to supervisors at zonal, district and facility level.



Fig 1. Data collection process

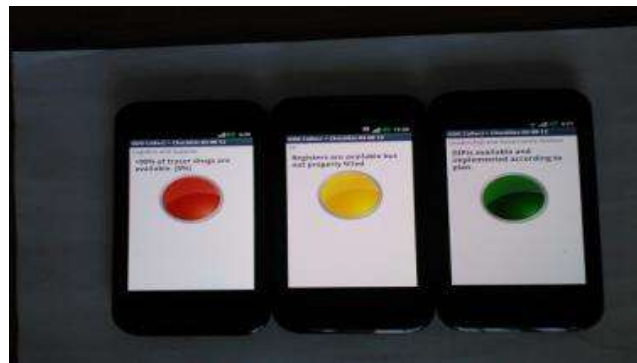


Fig 2. Smartphone displaying monitoring results

Table 2: Total number of Interviews for ISM pilot assessment by district

	Balaka District	Salima District	Zomba District	Central East Zone	Total number of Interview
	(n = 14)	(n = 12)	(n =9)	(n = 2)	(n = 39)
Class of Interviewee					
District Supervisors	4	5	5		14
District Administrators	3	4	2		9
Supervisees	7	5	2		14
Zonal supervisors				2	2
Totals	14	14	9	2	39

Results

The following are the assessment findings from the study:

Eleven out of fourteen district supervisors interviewed (79%) believe the smart-phone is a better tool for conducting supervisions, due to the ease of understanding the color-coded results and the ease of preparing for a monitoring facilitated by the smart-phone. The smart-phone method was also seen as an improvement over the previous paper-based checklists that were used to conduct monitoring because of the immediacy of the results and the color-coded and easy to understand results.

Thirteen out of fourteen monitored personnel (93%) reported receiving feedback from the monitoring which again was an improvement from the baseline paper-based (25%).

Twelve out of fourteen monitored personnel (86%) reported that the facility had made efforts to make the improvements detailed in the supervision action plan. Actions that were not addressed were a result of lack of resources as the main obstacle to making changes, implying that the changes that were made were within the facility's control to make the improvements or changes but those that required more resources were not addressed.

It was unclear if there were changes to the frequency of the supportive monitoring but there was a general agreement that the monitoring schedule conducted with the smart-phone tool is a much quicker process.

Collection and timely transmission of Health Management Information System (HMIS) data to the supervisors during the Integrated Support Monitoring visits enabled decision makers to undertake the following:

Tracking utilization of Malaria Rapid Diagnostic Tests (mRDT) and strengthening accountability arrangements at Zomba Central Hospital; increasing immunization coverage through partner collaboration in Salima facilities; streamlining of staff schedules and deployment of more nursing staff to protect Newborns from acquiring infections during birth at Zomba Central Hospital; and address non-adherence to Malaria Case Management Policy at Kalembo Health Center in Balaka District.

The pilot also revealed that Health Workers felt that the feedback sessions were more objective and oriented towards supervisor-supervisee joint problem solving to improve service. The model strengthens use of HMIS data at all levels of decision making. The associated review of performance and verification of HMIS registers contributes to HMIS data quality improvement.

Discussion

The assessment of the clinical monitoring system recommended that the MoH should scale-up the implementation of the system with SSDI-System's continued support. Specific modifications should be done in the following areas:

Access to and use of the supervision data: The project should introduce the Integrated Supportive Monitoring database and e-mail alerts to more other relevant target audiences such as administrators and zonal health supervisors

and establish their usefulness. The assessment further recommended that users of database should receive a further simple tutorial on how to access, interpret and use the information on the database for service quality improvement.

Smart-phone availability: The project should consider helping the facilities develop a schedule to track the accountability for, availability and use of the phones by users so that monitoring visits can be conducted as warranted.

User guidelines: Additional, optional, practice should be included with the training or the smart-phone could have a “retrain” module that a supervisor could use in preparation for a monitoring visit, especially if they are unfamiliar with smart-phones.

Stimulating interest of supervisors: The project should stimulate the interest of internal supervisors by encouraging the zonal health offices to devise a rewarding system for performing facilities on issues within the facility control such as recognition awards for remarkable improvements despite limitations faced as well as recognition for achieving the recommended frequency of supportive monitoring visits per quarter or per annum.

Technology trouble shooting: The MoH and/or project should provide users, especially at the district level, with an explicit protocol detailing what to do for technological troubleshooting.

Rolling out the project: The MoH was advised to roll out the Integrated Supportive Monitoring system using the electronic checklist to additional 12 districts reaching a total of 15 impact districts.

Monitoring the Scope of Tertiary Health Services: The project learned that the MoH had no monitoring tool to assess performance of tertiary health services provided by the four central hospitals in the country such that monitoring of this level of facility was hardly done using the secondary and primary level checklist. The project has since started working with the MoH to integrate the supervision of tertiary health services in the electronic checklist. Progress made include clarifying the mandate of central hospitals and identifying output and process indicators to be assessed.

Interactions with health workers during the pilot shows that many health workers perceived that supportive monitoring was meant to collect data for use by management at higher levels and not to help their own facilities to improve service delivery until this innovative initiative. The perception is currently changing as the revised system is seen as promoting action and data use on site in order to improve service delivery through collective action planning and follow up activities.

Change of mindset will take some time to fully adopt a system that promotes action and data use on site by management and program managers to improve service delivery. Slowness in addressing corrective actions following supervision is not only affected by limited financial resources but service providers’ attitudes towards data use.

The main challenge experienced during the pilot and the rollout phase is the slow progress in addressing the agreed action points resulting from limited financial resources for service delivery at the district and facility. The project encourages the District Health Management Team (DHMT) to link monitoring, HMIS data with resource mapping within the district so that partners can put available resources together to improve health services. SSDI-Systems has supported the MoH to establish the Health Sector Stakeholders forum at district level to ensure that district health issues are collaboratively addressed based on locally generated evidence.

Conclusion

The implementation of the electronic Integrated Supportive Supervision process and tools appears to have a favorable effect on the experience of the routine monitoring visits in all pilot facilities with a few small discrepancies that have been examined and addressed within the rollout phase. One of the most consistent observations about the electronic based Integrated Supportive Monitoring is immediacy and easiness in interpreting the color-coded-results and the ability of the systems to influence supervisors to address issues that are observed during the monitoring forthwith using action plans. The transition is considered a positive change for health facility management and service quality improvements. The initiative has been recommended to roll out to all the 5 MoH administrative health zones (North, Central East, Central West, South East and South West) covering all the 15 SSDI project districts.

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Effect of thermal storage radiation of an air-conditioning system using underground heat and direct solar heat on a concrete slab

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Abstract

The technique of using underground heat and solar heat for air-conditioning is effective in reducing CO₂ emissions. When using solar heat, it may be necessary to have an auxiliary heat source and a hot-water tank in order to maintain a stable temperature. Underground temperature is relatively stable, but it is insufficient for the fine adjustment of the cold and hot water temperature, for which air-conditioning is used. These techniques, thus, require a heat pump system as a conventional heat source. This type of air-conditioning system, i.e., one that uses underground heat and solar heat, has not been widely used because of its high construction costs. In this research, an improved system is proposed, in which underground heat and direct solar heat are used on a concrete slab and other heat sources, such as a heat pump, are not required. This is a low-cost and easily administered air-conditioning system that utilizes underground heat and solar heat. The effect of the heat storage and heat radiation of this innovative air-conditioning system that uses underground heat and direct solar heat on a concrete slab has been verified in a concrete slab model experiment. An energy simulation was performed to evaluate the energy conservation of the thermal storage radiation air-conditioning system.

Introduction

In recent years, various techniques for the reduction of greenhouse gases and energy consumption have been suggested. Among these, underground heat and solar heat have attracted attention as renewable energy sources, and it is thought that use of these sources is effective in reducing greenhouse gas emissions and conserving energy. However, systems that utilize underground heat and solar heat have not been widely used due to their high construction cost, and because it is necessary to have an auxiliary heat source to ensure stable heat gain. In this research, an improved system is proposed in which underground heat and direct solar heat are used on a concrete slab without auxiliary heat sources. It is a low-cost and easily administered air-conditioning system that utilizes underground heat and solar heat. This direct, indoor method of air-conditioning involves the use of a concrete slab that stores cold and heat. Cold and hot water are used to collect heat from underground heat and direct solar heat, and the heat is then radiated to the concrete slab. The heat radiation is facilitated by an increase in convective heat transfer via a ceiling fan, which prevents dew condensation. The radiant-conditioning system is managed using underground heat in the summer and direct solar heat in the winter. Underground temperature is the optimum temperature for the radiant cooling system because it is approximately 15–18 °C through the year.

The initial and running costs of these systems are very low due to their simple structure and the longer service life of the tube. In this research, a test specimen experiment was performed to evaluate the performance of the radiant heat of a concrete slab. Furthermore, the energy conservation that can be attributed to the air-conditioning system is evaluated via numerical simulation.

Methodology

Test specimen experiment: A test specimen of 1200 mm (width) × 100 mm (depth) × 150 mm (height) was created using a deck plate slab. The tube in the test specimen was buried at 100 mm intervals 60 mm from the surface of the lower slab. The buried tubes were connected by a U-shaped tube. The surface of the test specimen consisted of the upper slab surface with the concrete and the lower slab surface with a galvanized steel sheet from the deck plate slab. The experiment focused on heating in February. The temperature of the hot water supply was maintained at a value 10 °C higher than the air temperature. The experimental condition was 100, 200, 300, and 400 mm at the tube interval.

The measurement values were taken when steady-state was reached after the hot water flowed in a tube for 10 h.

Numerical simulation: To estimate the effect of the actual radiant-conditioning, a building simulation was performed. The calculation software that was used was HASP, which can calculate indoor temperature and air-conditioning load. The Tricea building was used for the calculation, which was recently constructed near the Minami-kusatsu campus of Ritsumeikan University. The calculated value of the air-conditioning load was compared in the cases of radiant-conditioning or general air-conditioning. The calculation was performed in the summer. The radiant panel of the floor and the ceiling was input as a heating element of heat absorption. The amount of heat radiation in the air entering the convective component was obtained from computational fluid dynamics analysis. The heat radiation rate from the slab to the ceiling surface and the floor surface was 50% on both the top and the bottom. The set point temperature and humidity of the air-conditioning was 27 °C and 50%, respectively, and the operation time of the air-conditioning was 8:00–20:00. Incidentally, the operating time of the radiant panel was 24 h.

Discussion

Experimental results: The temperature distribution of the concrete slab increases as the tube interval widens. The rate of temperature increase is faster because the heating capacity increases as the tube interval narrows. In addition, the surface temperature of the ceiling surface is higher than that of the floor in all cases. Comparing the ceiling surface and the floor surface, the temperature distribution of the ceiling is larger than that of the floor. The warmed air of the lower surface stays near the ceiling side. On the other hand, the convective heat transfer coefficient of the floor surface is larger than that of the ceiling surface for generating a slight updraft by buoyancy. The heat flow of the radiative component may decrease while the heat flow of the convective component may increase in the presence of a ceiling fan.

The amount of heat flow per tube is calculated using the inlet and outlet temperature of the hot and cold water. The temperature difference between the water in the tube and the slab is reduced, and the heat flow from the tube to the slab inside decreases, creating an exponential curve. The heat flow per tube becomes larger as the tube interval widens. Furthermore, the amount of heat radiation from the surface to the air is calculated using the measurement value of the radiation temperature and the floor and ceiling surface temperatures. The heat radiation from the surface increases because the surface temperature rises as the tube interval narrows on both surfaces. The heat radiation of the ceiling surface is smaller than that of the floor surface regardless of whether the ceiling surface temperature is higher than the floor surface temperature. The heat radiation of the ceiling surface is low because of the effect of emissivity, which is due to the differences in the finish material of the floor (concrete) and the ceiling (galvanized steel sheet).

Simulation results: The software used to calculate the thermal environment and heat load was the HAPS program. The calculation result of the heat load in summer was compared in the case of the radiant-conditioning to that in the case of the air-conditioning. In the case of radiant-conditioning, the peak heat load was reduced by 35% compared with that of the air-conditioning. In future, Tricea, which was the first building to use the radiant-conditioning system, will be the subject of field measurements. Furthermore, the system performance and the optimal operation method will be evaluated.

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Potential benefits of introducing integrated solid waste management in Kathmandu City: a case study

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Abstract

Rapid economic and population growth experienced in the few last decades has brought a significant increase in the amount of urban waste generation in many developing countries like Nepal. Rapid increase in waste generation has created many problems including littering and dumping in and around outskirts of urban areas. The main problems associated with waste management are 1) a lack of full collection coverage, 2) low recycling levels (recycling limited to informal recyclers), 3) littering, and 4) inappropriate final disposal in sanitary landfill. In addition to urban environmental pollution, inappropriate disposal causes the generation of greenhouse gases (GHG) such as methane (CH₄) and leachates from landfill sites. It is emphasized that most recycling is done by the informal sector, restricted to materials having a high market value like metals, paper and plastics. We tried to identify potential environmental and socio-economic benefits of introducing organic waste recovery coupled with expansion of recycling of inorganic waste through cooperation with the informal sector and establishment of a well-managed sanitary landfill. We used Kathmandu city as the model case. Life Cycle Assessment (LCA) was used to as a tool to evaluate potential environmental impacts. Four different scenarios were proposed based on feasible options that focus on organic recovery and informal recycling at transfer stations prior to movement to the landfill site. Scenarios were evaluated in terms of Global Warming Potential (GWP), Biochemical Oxygen Demand (BOD), final disposal waste, and recycling levels and energy recovery. Introduction of bio-gasification of commercial waste and composting of household waste coupled with enhanced recycling and sanitary landfill might provide the highest environmental and socio-economic benefits. This paper has been accepted in the Journal of Sustainable Development and will be published in December.

Introduction

Waste management is one of the biggest challenges in developing countries due to increasing population, rapid urbanization (i.e. changing lifestyle patterns) and industrialization (Guerrero et al. 2013, Yabar et al. 2009). Kathmandu, the capital city of Nepal is experiencing rapid population growth, causing a fast increase in waste generation that cannot be properly addressed by the local government. Primarily, Kathmandu is facing a significant problem in solid waste management including collection, transfer and final disposal of waste coupled with a lack of public awareness of the solid waste system, haphazard urbanization, introduction of environmental hazardous materials in the waste stream, and changing consumer consumptions patterns (Alam et al. 2008).

The Kathmandu Metropolitan city (called hereafter, KMC) has the responsibility for all solid waste management in Kathmandu city such as sweeping, collection, transportation, transfer stations and final disposal. Most of the waste in Kathmandu city consists of organic waste and almost all of the waste goes to the landfill site, which is a cause for concern due to negative environmental impacts. Therefore, the main objective of our research was to analyze the potential environmental benefits of organic waste treatment and recovery based on the integrated waste management approach which includes recovery of organic material and recyclables.

Our present study proposes alternative scenarios to improve the current situation based on LCA. The scenarios (one to four) design for KMC waste management were based on current situation where almost all of the waste is landfilled; to note, the present landfill has already reached its capacity.

Methodology

Definitions of the Objective and Scope Definition and Life Cycle Inventory stages of LCA were used, and most of the

calculations were done based on Inventory Analysis. Structured interviews were conducted with different government personnel from KMC, Solid Waste Management Technical Support Center, and staff from the NGOs (non-governmental organization) – Small Earth Nepal, and CBOs (community-based organization) – Women’s Environment Preservation Committee (WEPCO, Nepal). Moreover, local people were randomly selected in the KMC and also at the landfill area of Sisdol for interviews in order to know the current situation of Kathmandu’s municipal solid waste.

Interviews with KMC officials were conducted on the following dates: March 12th 2013, Rabindra Kuwar Rai, Senior Engineer, Solid Waste Management Section, KMC); March 13th 2013, Deepak Ratna Kansakar, Civil Engineer and Site Manager of the Sisdol Landfill Site; and March 14th 2013, Bishnu Thakali, President of WEPCO), with the questions that were related to waste shorting, participation of private organization in the sector, women role and participation in waste management and landfill management, etc. in KMC.

Data collection via NGOs and online sources was also carried out. Visits to various private organizations in Kathmandu city for the collection of data and relevant facts and information related to the issues related to waste collection and management in the city was done. In addition, a literature survey was carried out using different online databases and analysis of research papers on the topic. Finally, the collected data was analyzed using an integrated waste management approach in the modeling including the use of LCA for evaluating the potential environmental impacts.

Results

Looking at the Figure 1 (A to E) which was generated based on the four scenarios we can see that there is much less emission of methane gas (Fig. 1A) which decreases the global warming potential in scenario 3 and 4 due to recovery of methane. Similarly, the BOD emission (Fig. 1B) from the Scenario 3 and 4 is much less in amount due to treatment of the leachate, and more recycling of recyclable materials and recovery of organic materials (Fig. 1C). Thus, we can observe the recovery of materials in huge amount in scenario 3 and 4 which decrease the waste going to the landfill (Fig. 1D) and also decrease in the use of virgin materials. The scenario 3 has the potential to generate a small amount of energy (Fig. 1E) due to recovery of organic material and methane gas; whereas, the scenario 4 has a huge potential to generate energy (Fig. 1E) as compared to all the scenarios.

Discussion

In scenario 1 and 2, most of the waste was taken to the landfill. In scenario 1, there was no recovery of methane and proper treatment of leachate produced. In scenario 2 the generated methane gas was flared, and out of the total collected leachate 60% was treated. In scenario 3, it was assumed that with the help of all stakeholders we could encourage most people to separate their recyclable waste. This would help to double recycling compared to scenarios 1 and 2 for households. Indeed, participation of NGOs and CBOs in Khulna City (3rd largest metropolitan city in Bangladesh) has improved the overall MSW management system especially waste collection process from source and motivated the residents to store the waste properly and to keep the premises clean (Ahsan et al. 2012).

Similarly, in the scenario, it was also assumed that the government, NGOs and INGOs will encourage people to compost and bio-gasify for fertilizer and electricity generation to meet the electricity demands of the city. Introduction of organic waste recovery in scenario 3 at lower levels coupled with recycling of inorganic waste with 60% treatment of total leachate will lead to environmental benefits at much higher levels. Likewise, a strong collaboration with all stakeholders and recovery of 100% of total methane and 90% of total leachate treatment will also lead to even further increases in benefits in scenario 4. The stakeholder-based SWOT analysis for successful municipal solid waste management in Lucknow, India is a good example (Srivastava et al. 2005). Figure 1E also shows that scenarios 3 and 4 have the potential for net energy generation.

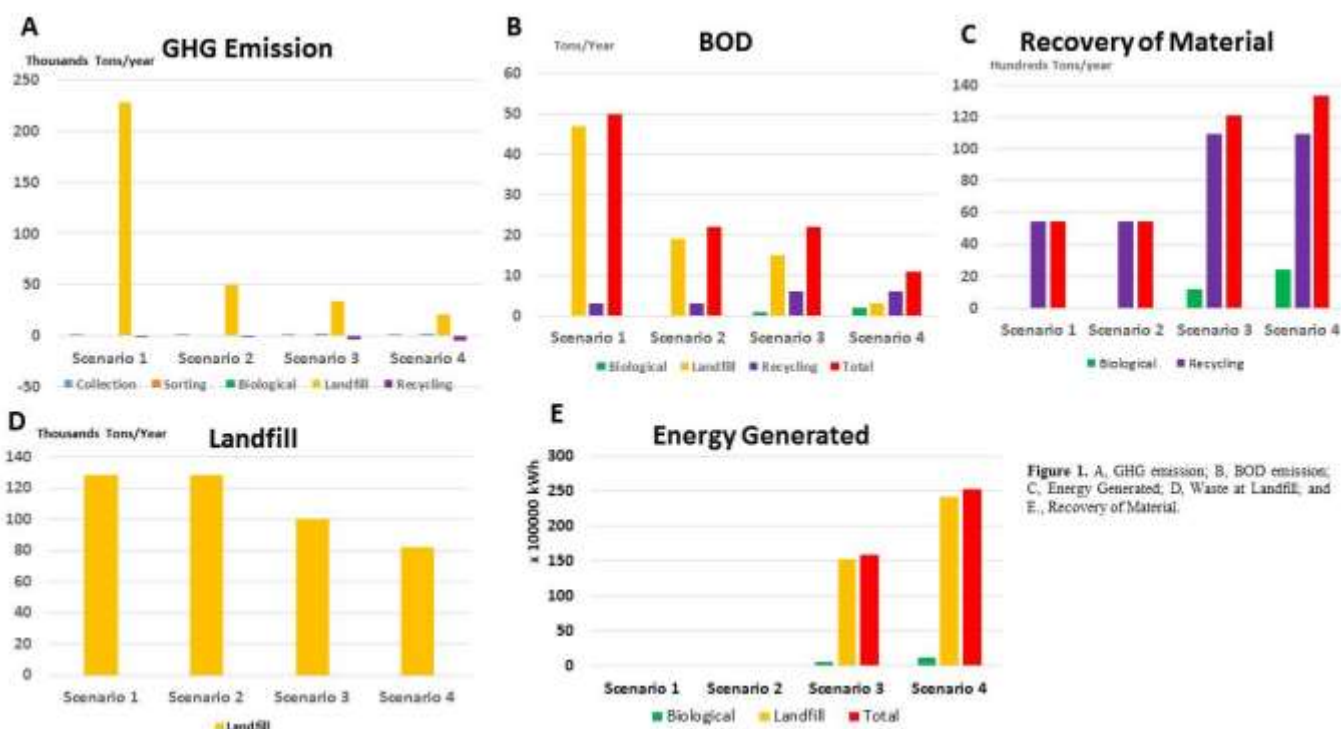


Figure 1. A, GHG emission; B, BOD emission; C, Energy Generated; D, Waste at Landfill; and E., Recovery of Material.

Conclusion

Taken together our results show that the introduction of bio-gasification of commercial waste and composting of household waste coupled with enhanced recycling and sanitary landfill will provide the highest environmental and socio-economic benefits. From our results, it can be seen that scenarios 3 and 4 have provided the highest environmental and socio-economic benefits. However in order to achieve this, cooperation of all stakeholders is crucial. In this sense campaigns for 3 R's awareness must be promoted and enhanced. At present the government is planning to construct a sanitary landfill (Bancharedanda Landfill) for which scenario 4 may be the best and most workable option solving all of the present problems. There is also a huge potential for energy generation which might help to meet some of the present electricity demands. Therefore, we propose the government to consider the need to implement waste management on the basis of scenario 4 while constructing the new sanitary landfill site.

Note: This is a summary version under the name of presenter at the conference. The full-length paper with a list of all contributing authors will be published in *Journal of Sustainable Development* 7(6) in December 2014.

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A global human-computer multi-services platform for promoting rural business innovation

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Abstract

In this paper, we present a novel system of ‘webs of wisdom’ (WoW) that essentially harmonizes collective efforts of machine intelligence and human intelligence scattered geographically with different capabilities, skills, preferences, and availability to achieve common objectives at high accuracy, low cost and reduced production time. The developed ‘WoW’ platform can be used to implement several pragmatic applications for rural enterprise. The system is currently being tested in Sri Lanka and Japan by serving the ‘Precision Agro-Informatics Platform’ (PAIP), cross language grid translation system (*transwow*), and multipurpose digitizing system (*digixwow*). A proposed smart, resilient and sustainable community development initiative in Sri Lanka, as an exemplar project to mark Sri Lanka Japan business and research partnership will also be fueled by WoW service infrastructure.

Introduction

Despite the trend of automation and emergence of unmanned systems, advancement of ICT technologies has given us an opportunity to revisit the possibilities of merging human intelligence and interaction with computer power to take critical and important decisions in a cost effective yet accurate manner, within the required time limits available to accomplish a certain task. Therefore, the potential of a crowded cloud – crowdsourcing (Howe 2008) is evolving as a distributed problem solving and business solution model that gives many opportunities for communities and people to collaborate with others through new style social business applications (Chenhall et al.). Crowdsourcing allows the power of the crowd, empowered by a rich pool of ICT tools, to accomplish tasks that were once the province of just a specialized few.

WoW service framework is a novel cloud-based service model that essentially harmonizes the power of machine intelligence with collective efforts of human beings scattered geographically with different capabilities, skills, preferences, and availability to achieve common objectives at high accuracy, low cost and reduced production time. The Author is the key system designer of WOW framework, which is published at <http://www.wospace.org>.

Discussion

WoW Business Model: WoW is an entirely cloud based system entity that houses web based end-user interfaces, web services, and protocols to efficiently match the customer jobs to user capabilities and working behaviors. The service modules and stakeholder interaction in WoW system is illustrated in Figure 1. Stakeholder interaction in WoW is different from traditional contract-based out sourcing; WOW is essentially a best effort system in which job requests are made through an open call.

The pros and cons of best effort services, i.e. how well customer requirements are met through an open call, will invariably open way for a controversial debate. WoW services make use of customers’ flexibility to service delays to enable fully reliable service quality guarantee. Nevertheless, WoW can implement varying level of service qualities on demand, such as delivery deadline tolerances, selection of accuracy levels, and domain specific expertise etc.

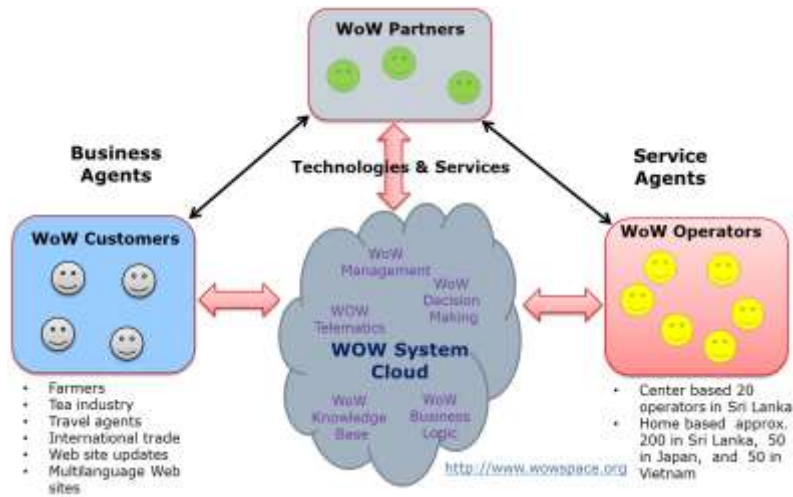


Figure 1. Stakeholder interaction in WoW

WoW Design Rationale: For sustainable operation WoW needs to maintain average job volume and number of operators specialized in different domains above a critical mass. Figure 2 illustrates the 3 functional tiers of WoW that do this trick.

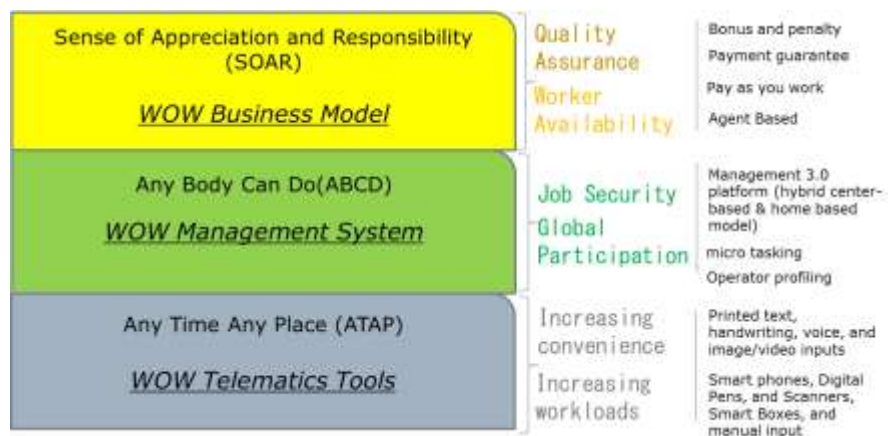


Figure 2 Three tier functional integration of WoW

WoW telematics platform: This provides a basket of metaphors to facilitate user friendly Any Time Any Place (ATAP) human-machine interaction. Multimodal input in the form of typed text, handwritten text, images, audio and video is made possible via end user smart gadgets such as smart phones, digital pens, smart card boxes, and bulk scanners etc., which obviously trigger a significant increase of customer job volumes due to increased convenience of data input. An array of operator interfaces and data processing tools are provided to ensure ubiquitous access and empowerment of operators with knowledge and skills. The telematics platform extends its function to knowledge management (Leung), and extensive data mining resources.

WoW management platform: This is characterized by next generation Management 3 functions, especially designed to match distributed human agents to possible multi-processor pathways by generating micro tasks (*a discrete action that can be accomplished during a short duration via few mouse clicks and key board touches*) to ensure Any Body Can Do (ABCD) some sort of work in a human machine intelligent environment. The task hierarchy is shown in Figure . Here, the role of the WoW task engine is two-fold: first, to generate enough micro tasks in the system to ensure job security and global participation of operators; second, appropriate streamlining and operator assignment of micro tasks and macro-tasks belonging to a job to ensure timely accomplishment of the task. WoW management platform performs operator profiling based on operator capabilities and performance to better streamline the task flow through most suitable operators. The task streamline is a decision making process on multiple criteria such as job accuracy, operator

availability, operator training, and best effort delivery guarantee. WoW management stands as an inclusive module with built in human resource training and QoS management.

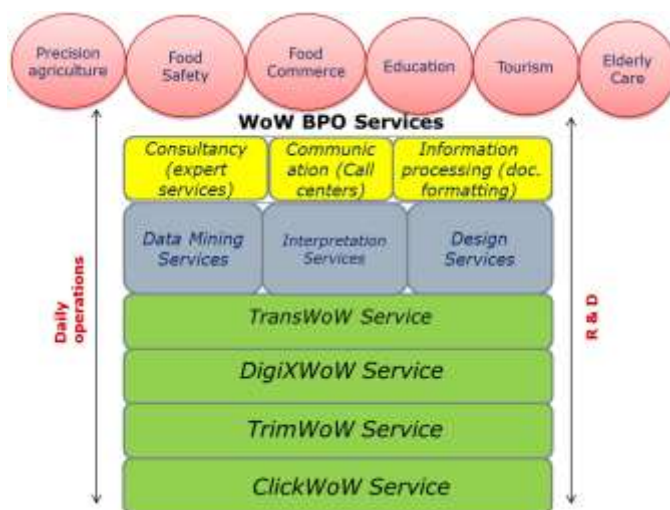


Figure 3. WoW Task Hierarchy

Table 1: WoW services

WOW Service	Service Description	Machine Level Support	Component WoW services used
Document trimming (<i>trimWoW</i>)	Trim documents to mark/hide certain areas of a document.	Image processing, layout matching	Component level wow service
Character validation (<i>digiWoW</i>)	Checks if handwritten characters are correctly digitized and corrected if found incorrect.	Online and Offline Multilanguage character recognition	Component level wow service
Multipurpose Digitizing System (<i>digixWoW</i>)	Identify objects such as shapes, colours and places	Pattern matching against a signature database	Component level wow service
Document Digitization (<i>DigixWoW application</i>)	Extract text from printed or handwritten documents and formatting.	Layout processing and character recognition Document conversion	trimWoW, digiWoW
Language Translation (<i>transWoW</i>)	Performs translation of words, sentences, or paragraphs.	Model based translation.	Component level wow service
Cross Language Translation System (<i>TransWoW application</i>)	Performs translation of text documents and handwritten documents, in general. Establishes a cross translation web service.	Model based translation	trimWoW,digiWoW,transWoW.
Precision Agronomy Informatics Platform (<i>AgroWoW application</i>)	Ago climatic information management, monitoring, and expert based consultancy platform for farmer communities.	Model based inference	trimWoW,digiWoW,digiXWoW, TransWoW
Food Traceability and Safety Assurance System (<i>TracWoW</i>)	A pragmatic food traceability solution for SMEs.	Model based inference	trimWoW,digiWoW,digiXWoW, TransWoW
User Centered Mobile Learning Space (<i>EduWoW</i>)	A user oriented learning management space for students and teachers to effectively produce, annotate, reuse didactic material.	Model based inference	trimWoW,digiWoW,digiXWoW, TransWoW
Integrated e-Business Platform (<i>BizWoW</i>)	An integrated e-business functions from web site management to customer care.	Model based inference	trimWoW,digiWoW,digiXWoW, TransWoW

WoW business platform: This defines the policies of business interaction among customers, intermediaries, and end operators to generate action plans for a job assigned through an open call. Managing delivery guarantees and job accuracy in WoW system is done by implementing a protocol to establish Sense of Appreciation and Responsibility (SOAR). It also uses small organized center-base operator groups to absorb the turbulences in the open call model.

WoW services: At present WoW platform implements the cloud services illustrated in. Each WoW service is implemented to support a key pilot program to serve collaborative research programs in the international community.

Applications scenarios: The developed WoW platform is to serve collaborative research programs in the international community. The system is currently being tested in Sri Lanka and Japan through several pilot implementations as indicated in Table 1.

Table 2. WoW pilot programs

Pilot Program	Program Objective	WoW Contribution
Multipurpose Digitizing System (digixWoW)	Maintains significant volume of WoW jobs at any time (e.g. Business cards, handwritten text digitization, document formatting etc.)	Object trimming, data input, and data validation (basic WOW operations: click, trim, select)
Cross Language Translation System (transWoW)	Performs translation of text documents and handwritten documents, in general. Establishes a cross translation web service.	Multi-level sentence translation coupled with digixWoW functions
Precision Agronomy Informatics Platform (agroWoW)	Ago climatic information management, monitoring, and expert based consultancy platform for farmer communities.	Digitizing farmer diary, validating field inputs, data mining, expert decision making, farmer feed back
Food Traceability and Safety Assurance System (FoodTracs)	A pragmatic food traceability solution for SMEs.	Digitizing paper based records in food supply chain, process linking
User Centered Mobile Learning Space (UCMLS)	A user oriented learning management space for students and teachers to effectively produce, annotate, reuse didactic material.	Produce notes, annotate notes, answer queries, validate answers, group feed back
Integrated e-Business Platform (bizWoW)	An integrated e-business functions from web site management to customer care.	Web site updating, web site translation, blog validation, call centers, order processing.

Conclusion

In this paper, we present a novel system WoW that essentially harmonizes collective efforts of machine and human intelligence to achieve common objectives at high accuracy, low cost and reduced production time. The designed WoW system is expected to support Business Process Outsourcing (BPO) of industries especially related to food and agriculture in a manner that ensures system efficiency, productivity, and operator satisfaction.

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A programming approach to optimize convenience stores' distribution with web scraping and Google API service

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Abstract

Convenience stores are indispensable for the Japanese society and on the average 8 convenience stores serve up to 20,000 people in Japan per day (Statistics Japan ODOMON 2009). In this paper, a practical approach that utilizes computer techniques to find an optimal vehicle routing scheme for goods and service delivery to multiple convenience stores is investigated. A mathematical 'network flow model' is first developed to examine the problem. Next, geographical data of convenience stores, their associated warehouses, garbage dump sites and gas stations is examined through programming with the 'webscraping' technique. A computer program is then developed that utilizes the retrieved data and Google API service to solve any possible networking problem. Several example networks of convenience stores throughout Japan are modeled. Pertinent data that include names, addresses and service details of roughly 55,000 convenience stores and 37,400 gas stations are retrieved. The created program is capable of searching through all the convenience stores, and their associated warehouses and garbage dump sites in a certain geographical location in order to find an optimal route for a network problem of up-to 8 convenience stores based on references from a user. Because of heavy dependency on geographical data sources, availability of the Internet, Google API, as well as lack of a standard to evaluate the optimality of the results, the research performs an extensive testing and comparison with an evolutionary algorithm to justify the optimality of the approach. Out of 1765 input locations in Oita prefecture, 754 example networks of convenience stores were found, and in 95% of them the program could come up with an optimal routing solution with effective timing performance. Hence, the approach can be extended for practical applications.

Introduction

Convenience stores play an important role in the Japanese society. There are totally 54,008 convenience stores located throughout Japan, generating a total sale of 9.81 trillion yen for the fiscal 2013 (Nikkei Asian Review 2014). Convenience stores are attracting Japanese customers because of their convenient locations and supply of ready-to-eat and fresh foods, contributing 34% of the Japan Retail Food Market in 2011 (METI 2014). However, in order to meet huge demand of highly dense Japanese population, convenience store companies have to deliver goods to their retail stores several times per day, which ironically causes a big overhead cost. Such overhead cost is usually associated with the transportation time, fuel refill expenses, and the amount of energy fuel consumed for the delivery, not to mention the associated adverse environmental impacts. This paper addresses the above problem under an optimization perspective, and demonstrates a practical approach for the problem.

Convenience stores distribution problem: On a daily basis, convenience retailers have to deliver goods by trucks from a distribution center to several stores, collect all the garbage, fill-up the gasoline if necessary, and dump the collected garbage at a designated dumpsite. On the average, replenishments of goods for a single convenience store are carried out 9 times a day (7-Eleven). As there exists many routes for such deliveries and garbage dumping, a systematic approach to handle the needs of a network of convenience stores would help in achieving less fuel cost, less transporting time, and also reduce the amount of carbon-dioxide emission to the environment.

In this research, a computer program is created and introduced to scrape geographical data of over 97,000 convenience store and gas station locations in Japan, and find an optimal transportation route to deliver goods from a warehouse (distribution center) to up-to 8 convenience stores in a specific area, pass by a gas station for vehicle

refueling, and end up at a garbage dump site. This practical approach to the convenience stores' distribution optimization problem can help save fuel cost, shorten the delivery time, reduce adverse environmental impacts and ultimately lower product cost.

Methodology

The general approach employed in this research is quantitative and the following four schemes are used in formulating, analyzing and validating its obtained results.

Network Flow Modeling: The convenience stores' distribution optimization problem is examined as a "Network Flow Problem" by assuming each of physical locations in the distributing routes as a node in the network, distance and travelling duration as weights of arches. The network's optimization objective is therefore to find the flow connecting every node that associates with the optimal transportation time (NIPPONIA, Peltier, Ragslade, Albright, ...).

In order to solve this Network Flow optimization problem, data collection of geographical locations of convenience stores, gas stations, warehouses and garbage dump sites, as well as the distance and travel time between these locations are indispensable.

Data Collection Using Web Scraping: Web scraping is a programming technique that can extract data from the World Wide Web. This technique equips the program with an artificial intelligence, help it to continuously surf the Internet and extract relevant pieces of electronic data.

This research mainly relies on NAVITIME website (<http://www.navitime.co.jp>) which contains a list of convenience stores and gas stations in Japan in "html" format, together with their complete address, telephone number, and service details. By applying 'web scraping' technique with Ruby programming language, those electronic data can be retrieved and saved as CSV (Comma-Separated Values) files. The CSV files can then be used as part of input data to solve the convenience stores distribution optimization problem.

Table 1 shows the time it takes to extract all of the 56,925 convenience stores and 39660 gas stations using Ruby programming language with Nokogiri library.

Table 1 - Extraction time of convenience stores and gas stations

Data	No. of Locations	Extraction Time	File Size
Convenience Store	56,925	96 minutes	16.3MB
Gas Station	39,660	80 minutes	14 MB

Google API Service and Computer Algorithm

1. **Google API Service:** Google API is a well-known web service that provides online tools for developers who utilize Google's data and platform. Google API consists of several programming libraries serving many areas such as Mapping, Advertising, Cloud storage, etc.

Google Direction API is one such service that helps retrieve geographical distance and travelling time from one physical location to another. Moreover, the service also helps to calculate the optimal route in terms of time to travel through a maximum of 10 physical locations (including the origin and destination locations) (Google Developers).

A typical request to Google Direction API to find an optimal travelling route for a trip includes:

- **Origin point:** The origin location point from where the trip starts.
- **Via points:** A list of all geographical points to pass-by during the trip.
- **Destination point:** The final destination point where the trip ends.

2. **Computer Algorithm:** A computer program is written in Ruby language to accomplish the process of retrieving pertinent data and transmitting them to Google API service for an optimal routing calculation service. The program is built to interact with users in a friendly manner so as to obtain user references prior to solving the problem.

In order to come up with an optimal route for the convenience stores' distribution problem, the program automatically carries out in the following operations:

Request for Input Parameters

A user of the system needs to supply the following program input parameters:

- Location of **warehouse (distribution center)**,
- Location of **garbage dumpsite**,
- Location (**postal code**) of **convenience stores**,
- Intention on vehicle **refueling**.

Data Mining and Optimization Process

- Locate convenience stores and gas stations in the vicinity of the desired geographical location.
- Request the user to select up-to 8 (7 in case of vehicle refueling) convenience stores from the extracted list.
- Forward an appropriate parameter list to the Google API service.

Display Output Result

Interpret responses that retrieved from Google API service and display them in an easy to follow manner.

Optimality Validation: Because the program heavily depends on the Google Service API in finding the optimal route, an independent optimality validation test is necessary. To achieve this, we have equipped the program with export data functionality, which enables a user to export all the retrieved data, including locations of the warehouse, convenience stores, gas stations and garbage dumpsite, as well as the distance and travel time through these locations, into Excel. An independent optimization analysis can then be performed using the Solver Add-in function of Excel to verify the validity of the originally obtained solution.

Results and Discussion

This section briefly explains the obtained results and discusses validity and limitation of the approach. In order to test correct operation and reliability of a newly developed program, we initially used it to gather various data on roughly 56,925 convenience stores and 39,660 gas stations that are located throughout Japan. We then focused our analytical modeling approach to convenience stores that are located in Oita prefecture.

Our findings show that out of 1765 different districts in Oita prefecture that have a unique postal code, (a complete list of which can be accessed at the link [http:// homepage1.nifty.com/tabotabo/pzips/oita.htm](http://homepage1.nifty.com/tabotabo/pzips/oita.htm)), in 754 or 42% of them there exist convenience stores. We then created examples of convenient store networks with up-to 8 stores per network for supply and garbage collection services. In about 95% of them, the program could come up with an optimal routing solution in less than 1 minute.

In general, routing optimization problem requires much time and computational resources in order to come up with a feasible solution. In this particular case, since optimization problem consisted of a network having a warehouse, up to 8 convenience stores, and a garbage dumpsite, our algorithm had to examine a total of 40,320 possible routes in determining an optimal solution that could yield the least travelling duration or distance. Even though there are many proven algorithms, such as Evolutionary algorithm, to solve the routing optimization problem, their analysis in general takes much more time (Bryant).

This was realized when we validated optimality of our result with that of Evolutionary algorithm built into Excel's Solver Add-in function using its default settings shown in Table 2.

Table 2 - Default Parameters of Excel's Solver Add-in' Function

Convergence	0.0001
Mutation Rate	0.075
Population Size	100
Random Seed	0
Maximum Timeout without Improvement	30

Although both methods yielded the same result in terms of optimality, performance of our approach which relies on Google API is much faster than that of the Evolutionary algorithm built into Excel's Solver Add-in function, as shown in Table 3. Despite the fact that free version of Google API service is limited to a network of 10 nodes, its enterprise version can handle a network of up to 25 nodes.

Table 3 - Performance comparison between Google API service and Evolutionary Algorithm of Excel Solver Add-in.

Testing Network	Evolutionary Algorithm by Excel Solver Add-in (approximately)	Google API service
Network of 6 locations	42 seconds	Less than 10 seconds
Network of 7 locations	51 seconds	Less than 10 seconds
Network of 8 locations	52 seconds	Less than 10 seconds
Network of 9 locations	53 seconds	Less than 10 seconds
Network of 10 locations	58 seconds	Less than 10 seconds

Conclusion

The research promotes the practice of utilizing available technology and services to solve today's pragmatic supply chain management problem. Particularly, a practical approach to convenience stores' retailing distribution optimization problem is introduced. The approach not only recommends the utilization of Google API service to increase performance of the solution to the problem, but also the usage of "web scraping" programming technique to easily collect huge amount of relevant data available on the Internet.

Considering its reliability and fast performance, the approach can be extended for practical applications. The approach can also be extended to solve similar supply chain management in other business fields that require regular delivery services.

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Ethical, legal and social implications (ELSI) of the use of communication robots in care settings

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Abstract

Among the major trends of healthcare today is an increasing integration of knowledge in engineering and use of technology. Advanced robotics has been introduced in the medical field since around the turn of the century. As is well-known, robots transporting medical records and robot-assisted surgery are already in practical use. Robot-assisted therapy, primarily intended for psychological healing of elderly people's minds, is currently being developed. Japan has been an international hub of robotics with several examples of Japanese robotic products in this field including AIBO by Sony Corporation (production discontinued in 1999), Paro by the National Institute of Advanced Industrial Science and Technology, OriHime by Ory Laboratory, Palro by Fujisoft and Hugvie by Vstone Corporation. While the disputes related to robots both in Japan and in the Western countries have centered on the military use or 'cyborgization' (partial robotization of human bodies), the ethical, legal and social implications (ELSI) of the communication robots used in care settings have apparently received less attention. In this paper, I present the result of a systematic review of the literature. After summarizing the arguments made so far in literature, to clarify the research trends of the field, I provide the results of keyword searches of databases provided by patent offices in Japan, the United States and the EU. In doing so, I will point to the ELSI of emerging applications of care robots that has scarcely been discussed so far. In addition, special focus is placed on robots resembling human beings or animals, as it may entail deception of elderly users.

Introduction

Since the late twentieth century, among the increasingly prominent trends of healthcare is an increasing integration of knowledge in engineering and use of technology. In developed countries, advanced robotics has been gradually introduced in the medical field since around the turn of the century. For example, there are robots transporting medical records in medical institutions and robot-assisted surgery, such as da Vinci, already in practical use. Robot-assisted therapy intended for psychological healing of elderly people's minds is currently being put into practice. Robots used for this purpose are often termed communication robots. As Japan has been an international hub of robotics, several examples of application in this field include Japanese robotic products, such as AIBO by Sony Corporation (a canine-form robot whose production discontinued in 1999), Paro by the National Institute of Advanced Industrial Science and Technology, OriHime by Ory Laboratory, Palro by Fujisoft and Hugvie by Vstone Corporation. According to Sumioka et al., Hugvie could mitigate stress when used as the platform for telecommunication.

Whereas the ongoing trends described above apparently require thorough and timely examination of ethical, legal and social implications (ELSI), the disputes related to robots both in Japan and in the Western countries have centered on the military use or 'cyborgization' (partial robotization of human bodies, which might affect our understanding of humanity). Another frequent focus has been placed on autonomy or consciousness of robots, including the possibility of becoming moral agents and its potential consequences, due to exponential advances of artificial intelligence. In the meantime, the ELSI of the communication robots used in care settings have apparently received less attention. Whereas once established it should be hardly possible to change the course of action, as expressed in the Collingridge dilemma, arguments on the ELSI of communication robots seem far from comprehensive.

As the technology advances, relationship between users and robots can change, which also suggests the need to review anew the ELSI of communication robots. In Sony's AIBO, for example, only limited response patterns were installed. Some users felt that their relationships with the robots were not developing. This is an example of shortcomings that can be addressed by the technological progress. The closeness to human beings in terms of

appearance (exterior) and motion is also subject to technological progress. The aim of this presentation is to grasp the state of the art of the applications of communication robots and examine the ELSI of their use in care settings.

Methodology

First, as a preliminary part of the study, I went through relevant publications in order to grasp frameworks of the ELSI pertaining to robots used in care settings and to select search words. This section is not fully included in the presentation.

Second, I conducted a systematic review of the literature using major databases. In this study, I used PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>) and Ichushi-Web (<http://search.jamas.or.jp/>). In so doing, I summarized the arguments made so far. "Ichushi-Web" is the largest database of Japanese biomedical literature, run by Japan Medical Abstracts Society (JAMAS) and contains about 7.5 million articles in medicine, dentistry, pharmacy, nursing and the related areas since 1983 (<http://www.jamas.or.jp/service/ichu/about.html>). This Japanese database was used with a view to make a contribution to other countries and because of Japan's leading role in development in this field. To supplement the keyword searches, other academic articles were collected from the citations.

Third, to understand the research and development trends of the field, I conducted keyword searches of databases provided by the patent offices in Japan, the United States and the EU (the latter two are not within the scope of this presentation, but the study will be expanded to include the others). As the database of the JPO, I used PAJ (<http://www19.ipdl.inpit.go.jp/PA1/cgi-bin/PA1SEARCH>), which is the acronym for "Patent Application of Japan." The search was limited within Japanese unexamined patent application publications and Japanese translations of PCT (Patent Cooperation Treaty) international application publications. More specifically, in order to comprehend the patent applications, abstracts and drawings of the patent applications were used, supplemented by references to claims as necessary.

Rejected patent applications and other unsuccessful applications, such as those that have not been requested for examination, are not excluded (patent applications to the JPO are basically automatically published 18 months after the application, but applicants can choose not to make requests for substantive examination). This is primarily because even after the registration of patents, they can be invalidated. Although the ratio fluctuates each year, approximately half of requests for invalidating registered patents are successful. It is also because products can be marketed without patent and, therefore, applications, whether successful or not, are considered to reflect research and development trends.

Results

Among the three categories (1, Ethics involved in manufacturing robots 2, Ethics that robots should adhere to and 3, Ethics toward robots) of ethical issues of robots (*Kukita*), the third category was not included in the study. The third was also excluded as long as it is concerned with autonomous robots because they are, at least at the moment, too futuristic. Brain machine interfaces or other forms of cyborgization possibly used in care settings were also excluded from the scope of this study. Additionally, special focus is placed on robots resembling human beings or animals. Based on the literature, I classified the applications into 3 categories: human-form, simplified human-form, animal-form, and others, though typical human-form and simplified human-form robots stand at the two ends of a continuum. And considering the current applications of communication robots, I selected the search words. As surgical robots are not within the scope of this study, the word "treatment" was not adopted as a search word.

Second, a search on PubMed yielded 2,026 results with the keywords robot* and care, 10,908 with robot* and therapy, and 1,648 with robot* and communication. Within the scope of this study, I added the term ethics to reduce the results, obtaining 42 results with robot* and therapy and ethics, 37 with robot* and care and ethics, and 25 with robot* and communication and ethics, as of August 26th, 2014. Asterisk(*) was added to include robotics and other derivatives of the word robot. Search results without English abstracts were excluded.

In the first group, 9 search results did not have English abstracts and thus were excluded. Another contained the word robot only in the author's name and was thus irrelevant, too. Among the remaining 32 articles, 16 dealt with surgery and other types of physical interventions, including biopsy and intubations. Nine, some of which discussed

cyborgization or artificial intelligence, were also irrelevant to care robots. Six articles were relevant to this research. The second group of search results contained 14 identical articles with the former and 8 without English abstracts. Among the remaining 15, 5 discussed surgery and related techniques. Seven were irrelevant to care robots and some of them dealt with autonomy, intelligent robots, and brain computer interfaces. Three were relevant to my research.

The third group included 14 articles that have been already mentioned in the previous groups and 4 others without English abstracts. One discussed surgery. Except these, 5 were irrelevant to care robots (one of them discussed artificial intelligence. Another mentioned “human-like emotion-laden faces in robots” in a negative manner). Only one was relevant to this study but discussed the issues in a general way. The authors of the relevant articles belonged to institutions in Canada, France, Netherlands (2), the United Kingdom (2), United States (3), and Sweden in the alphabetical order (The countries refer to the first institution mentioned of the first author).

Some other academic articles were collected from the citations to supplement the keyword searches. The above relevant articles contained arguments for the importance of ethics in use of robotics in care settings, and the resulting necessity to implement ethics on robots, framework for discussion on robot companions’ responsibility and (potential) rights.

Third, the JPO database search with robot and therapy in either Applicant, Title of invention, or Abstract yielded 7 results as of 27th August, 2014. One is a language therapy robot with a simplified human form. Another is a robot arm used for occupational therapy (rehabilitation). The others are intended for robotic surgery or external stimulation. None included human-form robots.

The PAJ search for robot and care yielded 50 results. The majority, 31 out of 50 applications, did not have human- or animal-forms. This category included inventions intended for transferring patients or assisting change in body position (or assisting carer at the time of lifting up a cared person) and rehabilitation of walking (13), and others (industrial robots or manipulators, including robot hands or arms, and systems, including control systems and techniques, and others.)(18). One invention closely related to this category is the invention of an external covering for a human-form robot.

Only one invention had a human-form appearance. Eight had simplified human-form appearance. Four had animal forms. One of these four was explicitly intended for cleaning. The others involved some types of communication. Two of the simplified human-form robots were intended for monitoring health of cared persons through communication. One simplified human-form robot was to monitor and encourage exercise of cared persons. Robots with simplified human forms could be used to provide care of a child, monitor health conditions or other behavior of cared persons, or could be used as interfaces of information. One animal-form robot is a cleaning robot. Another was designed to monitor mental conditions of cared persons. One was even designed to teach respect for life through caring the robot. One robot with a canine form was intended for monitoring cared persons and alleviating loneliness of the persons through dialogue.

Also, one was another form of an autonomous robot. There were two applications with unidentified appearance. One of these was a communication robot intended for alleviating stress.

Among the search results, no patent application publication before 2000 included robots with human, simplified human or animal forms. Likewise, the database search with robot and communication yielded results exceeding 1,000 as of September, 2014. I constrained the search by limiting dates of publication of application.

Discussion

First, considering that inventions can be marketed with patent applications filed, arguments on the ELSI in the above articles were not sufficiently comprehensive or detailed. This may partly be due to the gap between ingenuity of engineers and practice in health care settings (the former is not constrained by the latter). It is unlikely that the engineers educated primarily in engineering have undertaken medico-ethical education or consultation except cases when they explicitly focus on the development of medical machinery.

Relating to the above, some robots apparently took advantage of emotional responses from users, especially vulnerable people. Even if emotions or intelligence implemented on robots are artificial, emotional responses evoked by such robots are truly human. Given the possibility of attachment users can develop toward robots with specific

forms (Feil-seifer, Newton, Wu et al.), human- or animal-like appearances – especially if implemented not merely with the human forms but with the exterior imitating human or animal skin and facial expressions – can pose a risk with potential adverse effects. Even without a human- or animal-form appearance, a device that “gives an emotional stimulus to the person in front of the digital camera” by displaying images of different facial expressions of pets (2004-227167) can entail similar problems.

In particular, central characteristics of the use of robots include deceptiveness; some robots, especially with human or animal appearance, are design to deceive people or to provide some artificially produced reality and absence of real human beings or animals, which can leave users in some way deserted. More comprehensive guidelines for the ELSI of communication robots (e.g., avoidance of unnecessary anthropomorphism or zoomorphism) need to be discussed and elaborated to deal with these aspects. The increase of care robots with human or animal forms since the turn of the century apparently highlights the need for such guidelines.

Finally, judged from the search results obtained so far, Japanese researchers made relatively smaller contributions in ethics of care robots despite their leading roles in development of such robots. Their contributions can help attentions to exterior be included into the design process of communication robots used in care settings.

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The ethical aspects of *halal* certification of medical devices in Malaysia

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Abstract

The medical devices industry is one of the fastest growing sectors of healthcare industry with a large market, a wide variety of products and growing applications. In Malaysia, this industry is a major contributor to the economy and government initiatives support its growth to position Malaysia as a medical device manufacturing hub in the Asia-Pacific region. There are more than 180 manufacturers of medical devices in Malaysia involved in the production of sophisticated devices such as orthopedic products, surgical instruments and dialysis machines. Local companies are moving towards complying with internationally recognized quality standards such as ISO 13485 as an attempt to penetrate the global market. However, there is a religious need to provide medical devices that are certified *halal* in order to cater to the needs of Muslim consumers who make up 64.3% of the Malaysian population. It is an advantage that Malaysia *halal* certification industry is well-developed and recognized as a model all around the world. Malaysia shows a strong industrial manufacturing potential for a wide range of *halal* products. The availability of supporting industries thus provides Malaysia with the ideal conditions to develop into a medical device hub in Asia as well as to establish a global acceptance model for *halal* medical devices. This paper will discuss the ethical aspects of developing *halal* medical devices for the needs of Muslims in Malaysia and other Islamic nations.

Introduction

The issue of *halal* authenticity is a major concern for many Muslims today. In Islam, an important factor for Muslim consumers is whether a product is *halal* (lawful) or haram (unlawful) (Ramin Jorfi et al. 2012). Malaysia is heading towards becoming a main player in the world *halal* market.

Demands for products with *halal* certification are escalating, in line with the growth of population (Ahmad Nizam Abdullah 2006). Extensive literature often debate on the determination of *halal* authentication of food products, cosmetics and pharmaceuticals (Mohammad Aizat Jamaludin et al. 2011). However, up to the best knowledge of the authors, there is still no specific study on *halal* medical devices. Hence, there is a religious need to provide medical devices that are certified *halal* in order to cater to the needs of Muslim consumers who make up 64.3% of the Malaysian population.

The total value of Malaysia medical device export was RM 15.35 billion (USD 4.76 billion) in 2013 representing a 7% increase over RM 14.35 billion in 2012 (AMMI, 2014). In the medical device industry, there are a number of stakeholders who need to have their voices heard throughout the process. Each stakeholder has diverse and unique needs relating to the medical device; the needs of one may highly affect the needs of another, and the relationships between stakeholders may be tenuous (de Ana, Umstead, Phillips & Conner 2013).

This study however, differs from the others as the aim is to identify two distinct types of stakeholders involved in developing *halal* certification of medical devices in Malaysia; either direct stakeholders or indirect stakeholders. This paper demonstrates how there are attribute differences for two distinct categories of stakeholders. This study would be useful for all players in this industry as the findings would help to develop strategies to promote *halal* certification of medical devices in Malaysia.

Methodology

The framework proposed in this study is based on two types of data collection; interview and electronic reference. Preliminary interviews were conducted with the local sutures manufacturers. It took about an hour to cover semi-structured questions. The manufacturer was asked about the process of catgut production in order to determine the *halal* built-in through the production chain and also the procedure to comply with the international standard as well as the *shariah*.

Interviews were also conducted with the Medical Device Authority (MDA) in order to have the details on acts and standards related to medical devices to follow as a guideline to start the *halal* certification for the medical devices in the market.

Discussion

Malaysia is fully committed to strengthening the *halal* industry and achieving the vision of making Malaysia a global *halal* hub. *Halal* is part of *Shariah* principle and is mentioned in the Holy Quran. *Shariah* is the code of conduct for the Muslims to follow and apply in every activity (Ab Talib & Mohd Johan 2012). The definition of *halal* is permitted, permissible and lawful. *Haram* (non-*halal*) is the opposite of *halal*, which means forbidden and unlawful in the context of Islamic law. Currently, *halal* issue has become a concern in the production and application of various products, for example meat products, cosmetics products, pharmaceuticals products, services such as banking and finance and tourism. Unfortunately, *halal* certification for medical devices has not being discussed intensely in the literature.

From a strategic perspective, stakeholder management urges corporations to consider the impact of their action and decision making on various stakeholders. Stakeholder management, with its underlying business ethics component, focuses on the fair treatment, by the 'firm', of its various groups of stakeholders, especially of suture manufacturers, doctors, and patients. However, besides these primary stakeholders, there are also important indirect stakeholders such as civil society and pressure groups who defend the interest of specific stakeholder groups. There are also regulators such as law, official institutions and control organisations; and finally the press and other media. The stakeholder approach also has to focus on the need for corporations to inform transparently and through dialogue, especially in its approach to pressure groups.

According to Freeman et al. (2004), stakeholder theory primarily focuses on corporate responsibility towards a firm's stakeholders. The literature suggests many classifications of stakeholders using various criteria (Vasi & King 2012). The classical categorisation, based on priority, refers to primary versus secondary stakeholders (Donaldson, et al. 1995) or normative versus derivative stakeholders (Phillips 2003).

Stakeholders are those groups or individuals with whom the organization interacts or has interdependencies and any individual or group who can affect or is affected by the actions, decisions, policies, practices or goals of the organization. Primary stakeholders are those who have a formal, official, or contractual relationship, and all others are classified as secondary stakeholders (Gibson 2000). Primary stakeholders enjoy a direct and contractually determined relationship with the organization whereas secondary stakeholders are at the boundaries of the organization who may be affected by its actions but lack any contractual connection (Fassin 2012). Secondary stakeholders are capable of influencing whether the operation is effective (Gibson 2000). The implication is that a stakeholder is any individual or group with the power to be a threat or benefit. Secondary stakeholders include nongovernmental organizations (NGOs), civil society groups, activist groups, outsiders or social movements (de Bakker & den Hond 2008).

Normative stakeholders are those stakeholders to whom the organization has a moral obligation (Phillips 2003). However, derivative stakeholders are those to whom the organization has no direct moral obligation as stakeholders. These groups cover the competitors, activists and the media (Phillips 2003). They can affect the organization even with no legitimate relationship with it as groups or individuals who can either harm or benefit the organization

According to the perspective of promoting *halal* certification for medical devices in Malaysia, this attempt involves ethics responsibility. Ethically, this duty should be a concern for large groups of stakeholders. In order to promote *halal* medical devices, there is a need to build a platform for a discussion between both direct and indirect stakeholders for *halal* medical device standardization (Idamazura 2014).

Primary stakeholders who should directly be involved in the application of *halal* medical devices are manufacturers (local or international), doctors, nurses, and patients. Basically, the manufacturer is responsible to ensure that the manufactured medical devices meet or exceed the required standards of safety and performance (Norshakira Ramli 2014).

The major users of medical devices include the doctors and nurses who employ the medical device only for intended indications. They also ensure the proper use of medical device by being a competent user (having appropriate qualification, training and experience). Besides that, doctors and nurses are encouraged to share the experience gained of using medical devices with others (users, distributors and manufacturers) by reporting any incidents to a coordinating centre from which warnings can be issued (Norshakira Ramli 2014). The users also need to ensure proper maintenance of medical devices during active use and safe disposal of obsolete medical devices (Medical Device Authority (MDA) 2013).

Patients and healthcare providers embody the engagement of religion with modern medicine on a daily basis. Patients' salient health beliefs and healthcare choices are often informed by religious values and understandings. Religion also influences the practice patterns of healthcare professionals in both visible and unconscious ways (Curlin 2008).

However, secondary stakeholders cover the responsibility carried by the policy maker; they include Medical Device Authority (MDA), Department of Islamic Development Malaysia (JAKIM), consumer association, and researchers. MDA serves to address issues of health and safety of people associated with the medical device (Jabatan Perdana Menteri 2012). Generally, MDA is responsible in establishing and implementing policies and regulations to control medical devices to ensure safe and effective medical devices sold or made available in the country (Nor Idamazura 2014).

JAKIM is the authority responsible for *halal* certification in Malaysia. There is a high potential in promoting *halal* medical devices in Malaysia since Malaysia's *halal* certification issued by JAKIM is globally recognised for its stringent criteria and is regarded as having a strong industrial and commercial set up to produce and market *halal* products as well as having strong relationships with the major trading nations of the world, and strong government support (Badrudin et al. 2012). The process of awarding *halal* certificates involves not only an official site inspection of production plants but also the examination on the *halal* status of raw materials (Badrudin et al. 2012). In order for us to promote *halal* certification of medical devices in Malaysia, this attempt has to take into account the needs of its various stakeholders and balance their divergent interests (Frooman 1999).

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***Philosophy of Justice,
Society and Sustainability,
Ethics Philosophy***

India-Japan perception gap on the ‘*Mottainai*’ ethics

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Abstract

Why do the Japanese still hesitate to visit India? Although many researchers and practitioners refer to the cultural or perception gap between the two societies as a reason, less has been done to investigate the specificities of the gap. This paper aims to shed light on a dimension of the cultural or perception gap, mainly referred to as the concept of ‘*mottainai*’ in Japanese language. The *mottainai* ethics was originally based on one’s modesty and subjective ideals to respect the virtues of thrift, moderation and self-realization. Professor Wangari Maathai, Kenyan environmentalist and Nobel Prize winner, is well known as a promoter of *mottainai* as an environmental protection concept. When she visited Japan for an event related to the Kyoto Protocol in 2005, she was given a shirt with the word “*MOTTAINAI*” written on it. She wore that shirt at the Kyoto Protocol conferences and asked the audience to use the word in their everyday lives. She became a widely recognized celebrity particularly in Japan for this. We attempt to point out that the perception gap on ‘wastefulness’ or ‘inefficiency’ between India and Japan should be recognized to ease the mutual barriers to entry and to overcome the cultural gap for strengthening economic relations between the two countries.

Introduction

After the 1991 reforms the Indian market has been opened up to anyone with the talent and energy to take advantage of it. In spite of it, the Japanese did not so actively take it as they did in China, NIEs and ASEAN countries. What holds back the Japanese firms? This paper aims to shed light on a dimension of cultural or perception gap between Japanese and Indian, mainly referring to the concept of *mottainai* in the Japanese language, in order to point out that the perception gap on wastefulness or inefficiency between the two societies should be recognized to understand a mutual barrier to entry and to overcome a cultural gap for strengthening economic relations.

Professor Wangari Maathai, Kenyan environmentalist and Nobel Prize winner, is well known as a promoter of *mottainai* as an environmental protection concept. When she visited Japan for an event related to the Kyoto Protocol in 2005, she was given a shirt with the word “*MOTTAINAI*” written on it. She wore that shirt at the Kyoto Protocol conferences and asked the audience to use the word in their everyday lives. She became a widely recognized celebrity particularly in Japan for this.

It is suggestive that this word seems to have these two different meanings; “what a waste!” and “more than one deserves!”. This shows a dimension of traditional Japanese ethics on consumption. On the one hand, *before* they buy an object (when the goods has not yet been owned by them), they check with modesty whether they deserve the goods. If they find (or they think that they should find) another inexpensive one which they think they deserve, they think of the first goods as “*mottainai!*” meaning “more than one deserves!”. On the other hand, *after* they bought an object (when the goods has already been owned by them), they check with modesty whether they still deserve the goods. If they throw away the goods which they think they still deserve, they think of the action of throwing it away as “*mottainai!*” meaning “what a waste!”.

Methodology

We hypothesize that there exists a gap in each subjective ideals for restraining wasteful expenditures between Indian and Japanese, which may discourage the Japanese firms to invest more in India. The *mottainai* ethics was originally based on one's modesty and subjective ideals respecting the virtues of thrift, moderation and self-realization. We first develop a theoretical framework based on western traditions of institutional economics and socio-economic philosophy for setting forth the foundation for proving our hypothesis.

Then, this research uses an analytic induction framework of qualitative and narrative type analysis upon a strategy of collecting data through relatively unstructured interviews on Japanese expatriates who manage joint-ventures in India by adopting a framework of small-N research design. We attempt to point out that the perception gap on "wastefulness" or "inefficiency" between India and Japan should be recognized to understand as a mutual barrier of mindsets to entry and to overcome a cultural gap for strengthening economic relations.

Findings and Discussion

We conducted face-to-face interviews on three Japanese expatriates who manage joint-ventures in India. The interviews were held in Gurgaon, India on the 23rd and 24th of August, 2014, respectively. We raised a single question; under what occasions do you (Japanese) feel *mottainai* in managing the business operation in India or in supervising Indian staffs?

First of all, we are interested in that all the interviewee raised "overstaffing" generally observed in Delhi as an example of *mottainai*. They appeared to feel *mottainai* on the overstaffing, meaning "Oh, what a waste!". Probably, those people from the egalitarian society feel uneasy to see the situation which leaves the wasteful allocation of human resources unsolved. Furthermore, there is no choice for them except just looking. They may feel powerless and frustrated while casting a wistful glance at the overstaffing. Secondly, we are interested in the sentence which seems to suggest the other meaning of *mottainai* as "more than one deserves". The interviewee thinks of the Indian firms which do not pay sufficient attention to fully utilize the capacity (or the potentiality) as *mottainai*.

Thirdly, we are interested in that an interviewee would rather not favourably consider excess inequality and conspicuous consumption in the richer class. Their favourable impression on modest firms and business persons in Gujarat may endorse the preference. Fourth, we are interested in that all the interviewees seem to be frustrated by the Indian attitude of keeping their way of business and work unchanged, at least, from the Japanese perspective.

We recall that the behaviour of *mottainai* was related to their subjective ideals or belief in the Buddha's teaching for training themselves (*kokki*). Still, many Japanese are more or less concerned, not only to improve physical environment but also to train themselves for better quality of life, and to enhance and ennoble themselves in an endless stream for their self-realization. This *kokki* training is sought even in their business life. Many Japanese think of business and working as a challenge to enhance and ennoble themselves. In contrast, the Indian might be less concerned to train themselves for better quality of life, at least, in their business and working. Probably, the Indian are concerned to enhance themselves in the other dimensions of life, such as life with family or relatives and social activities in communities.

Of course, some Indian are concerned to seek higher qualifications or degrees to get a responsible post. But, seemingly, they are less concerned to train and enhance themselves for better quality of life, in other words, less concerned to ennoble themselves who deserve an object or resource in order not to be blamed as *mottainai*. From the Japanese perspective of respecting the virtue of training themselves (*kokki*), it would be somehow frustrating to work together with the Indian people who pay least efforts to enhance the way of business, because enhancing the way of business is related to the *kokki* training for some of the Japanese. As is mentioned by an interviewee, India is rich in diversity. Therefore, it is not easy to generalize a tendency of "Indian" people as a whole. At the same time, as is mentioned earlier, the recent trend in encouraging Japanese people to quantify the objective, at least, *objectifiable* value of all the goods and services so that they may not pay more than the value they consume - the so-called "*financialization*" - has unwisely changed the criteria for *mottainai* in Japanese people.

It is not easy to generalize a tendency of "Japanese" people, either. However, through the examination of the interviews, we can draw a perception gap in subjective ideals for restraining wasteful resource allocation and opportunity losses between Indian and Japanese. Upon the above analysis and discussion we entail further exploration with a bigger sample to test the hypothesis of cultural distance between two societies as a potential mutual barrier of mindset.

Originality/Value: Despite many researchers and practitioners refer to cultural or perception gap between the two societies as a reason why Japanese still hesitate to come to India, less has been done to investigate how the specificities of the gap are.

A theory of 'justice seeking' analyzed through the rent seeking approach

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Abstract

We aim to propose a fairly new conceptualization, a theory of *justice-seeking*, by expanding the general approach of *rent-seeking*. Justice seeking is the quest for seeking justice towards justice as fairness. However, what is fair or unfair depends on the incumbents' 'subjective' judgment which is driven by such forces as economic motivation, political ideology, religious sentiment, etc. Drawing upon the rent-seeking literature, we develop a matrix showing the likely cost and outcome of justice seeking and then illustrate some episodes of justice seeking under this broader framework. We argue that justice seeking activities sometimes lead to a change in institutions engaged in distributive justice towards fairness. But they can also lead to painful rebellion towards a chaotic outcome. These episodes further illustrate that the by-product of justice seeking can be a vacuum in leadership, inadequate development of some critical spheres of economy and the resulting dysfunctional economic performance.

Introduction

This paper aims to propose a fairly new conceptualization - a theory of *justice-seeking* by expanding the general approach of *rent-seeking*. Rent-seeking results changes in institutions for re-distribution of rights towards rent-seekers. This requires costs in monetary or non-monetary forms or in both whereas the resulting changes in institutions can lead welfare enhancing or reducing effect to the society. As opposed to the general conception that rent-seeking yields negative result, advanced rent-seeking model analyzes net effects of rent-seeking taking into account rent-seeking cost and output.

Similarly, justice-seeking involves with various costs (civil war for instance) and the end result can be welfare enhancing (greater good) or welfare reducing (further chaos). Therefore, justice-seeking can also be analyzed taking into account both justice-seeking cost and outcome under the broader framework of rent-seeking model. This is what the paper aspires to accomplish. It proposes a fairly new conceptualization - a theory of justice-seeking by expanding general approach of rent-seeking. In so doing, the paper examines several events of justice-seeking taking into consideration of both input costs and final outcomes.

Justice is a very critical foundation of a society which serves as a basic building block for maintaining social relationship. Various social institutions such as rules, regulations, customs, and traditions govern the distribution of rights and liberties of individuals. These institutions are formed focusing on the fundamental principles of justice, the centre of which is that everybody in a society should be equally treated or should be fairly treated. Fairness is not a static but a dynamic concept because it can be interpreted and evaluated from several different dimensions. Everyone in a society expects to be equally or fairly treated within their self-defined contextual sense of fairness.

In case of unfair treatment, the person deprived might feel indignation, grievance, anger etc. which would prompt him/her seeking fair treatment. In this sense, justice-seeking refers to the quest for receiving fair treatment. Fairness can be judged in any of the above discussed context.

Methodology

Drawing upon the rent-seeking literature, an analytical framework for justice-seeking is developed based on justice seeking cost and outcome. After that, some episodes of justice-seeking are illustrated under this broader framework to postulate the nature of justice-seeking costs and outcomes and their effects on society.

The outcome of justice seeking which can be the new form of governing structure cannot be known *a priori*. Like rent-seeking, it depends on the efficiency of new social order or governing structure accompanied by justice-seeking. For instances, justice-seeking may result a peaceful resolution of conflict ensued from anger and grievance. This may pave the way for facilitating social, political, economic, or religious freedom. The charter of mutual agreement is a new form of governing structure which yields positive social values compared to the *status quo*. On the contrary, the same charter might invite more anger and grievance either from the existing contesting parties or from new groups who might seek their own justice. If the intensity of discontents is fairly high, new justice-seeking might lead to further chaos, social disorder, new form of repression etc. Such incidents eventually result in vacuum in leadership and abysmal economic performance.

Thus, the net impact of justice seeking depends on both the process justice is sought and the final outcome ensued from it. A peaceful negotiation can lead to worst or at least no-better set of institutions. Also, rebellion can sometimes come up with better governing structure. From this analytical viewpoint, a matrix showing justice-seeking cost and outcome can be developed similar to the rent-seeking model.

Table 1: The relation between justice-seeking cost and outcome

	<i>No-better or negative social value of new governing structure</i>	<i>Positive social value of new governing structure</i>
Rebellion (Relatively higher cost of justice-seeking)	I. Type: Chaotic State Justice-seeking: failed and uncertain Example: Outrage in the pre-war Japanese army	II. Type: Transforming state Justice-seeking: Partly justified (for the winner but can lead to Chaotic state in the process or <i>ex-post</i>) Example: LTTE
Negotiation (Relatively lower cost of justice-seeking)	IV. Type: Static state or tyranny (can lead to rebellion) Justice-seeking: unrealized/failed Example: North Korea	III. Type: Dynamic State Justice-seeking: Justified or justifiable Example: The case of Chittagong Hill tracts

Findings and Discussion

Based on the conceptual framework of justice-seeking developed above, we like to present some cases as evidence of justice-seeking activities and their respective cost and outcome. In selecting episodes, we have taken into consideration both justice-seeking cost and outcome in such as way that in a pair of episodes, justice-seeking was relatively costly but they produced different outcomes. In another pair of cases, justice-seeking cost was restively low, but the outcome was different (welfare enhancing vs. welfare reducing). Based on these criterion, we have selected that the above mentioned four episodes to be useful for our analysis.

Sketching on several different episodes, we have shown justice-seeking cost and outcome. It is seen that a peaceful means of justice-seeking in a dynamic state might be desirable if it brings intuitional changes that lessen the degree of unfair treatment. However, due mainly to contestants' failure of omission or tyranny of the state, peaceful means might not lead to institutions that ensure better distributive justice compared to the *status quo*. In this scenario, justice seeking continues where possible. But at the same time, the process can be throttled by suppression which in turn, can lead to rebellion. Rebellion might end up with institutional changes towards higher degree of fairness but it can also lead to further chaos, brutality, and anarchy. Associated death and destruction in the wake of the fighting are accomplished at the cost of investment in capital and social infrastructure.

Diversion of scarce resources away from development activities therefore, leads to the erosion or weakening state's ability to develop administrative and better governing capacity. Moreover, justice-seeking activities within an organization can result in self-destructive conflict. Consequently, organization fails to raise real professional who

should act with a sense of responsibility and self-control. The failure to raise a real professional keeps us further far away from becoming a rational maximizer of social welfare, resulting in a catastrophe or a dysfunctional performance by the decision-makers.

The above finding shows that rent-seeking activities are pursued under a rule (institution). If an agent is not satisfied with the existing rule, he/she shall seek for a new rule, in principle, under the existing legal framework. In contrast, the justice-seeking activities occasionally together with unconscious irrationality are pursued beyond the existing legal framework (through fighting or other destructive means which are abhorred and prohibited by the existing laws). As a result, we should look closer at the human-beings as economic agents who take actions at their discretion in accordance with their own subjective ideals.

Also, we should investigate how the economic agents act for seeking (also compromising) their subjective ideals in the course of political and economic activities. Though it is intrinsically difficult to precisely estimate the value of x (net gains for gainers) and y (net losses for losers), it is still meaningful to evaluate the *justice* that one considers decomposing into the elements of the justice-seeking upon subjective ideals and the rent-seeking upon objective economic purposes. The estimation of the value of x and y does not always matter for the justice-seekers, but it can possibly make them calm down. Furthermore, a process of trial and error to socialize mutual subjective ideals might prevent justice-seekers from falling into a trap of never-ending mutual growth-retarding justice-seeking.

Originality/Value: The paper has attempted to develop a fairly new concept of justice seeking drawing an analytical light on advanced rent seeking model. Rent-seeking theory expounded on both NIE (New Institutional Economics) and IPE (Institutional Political Economy) has been discussed to enumerate rent-seeking cost and outcome. Like rent seeking, justice seeking might have positive or negative effect on economic and political institutions depending on both input cost of justice seeking and the post justice-seeking institutional change (outcome).

Simonian perspectives on Islamic altruism

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Abstract

One of the salient contributions by New Institutional Economics (NIE) is to support the proposition that effective contracting is dependent upon *institutions* in terms of “rules that constrain economic behavior”, including *informal* or *intangible* institutions such as religious, cultural and customary practices. The paper draws on the theoretical contributions of the NIE and Transaction Cost Economics (TCE) and applies some of these contributions to an analysis of general altruism and reciprocity in the Islamic economies. Although there should not be an overemphasis on the cultural factors, this paper argues that Islamic altruism may play an important role in reducing the transaction costs of contracting. Cizakca (2011) is of the opinion that venture capital (VC) is going to be the rising star of Islamic finance, because VC is a *Shari'ah* based instrument and though risky, embodies a huge profit potential. This paper aims to argue the Islamicity and feasibility of VC through the lens of the NIE and TCE traditions, in particular, the salient contributions by Herbert Simon on bounded rationality and altruistic behavior.

Introduction

The prohibition of *gharar* (uncertainty) is one of the principles in Islamic economies. The prohibition of *gharar* in *speculation* is considered as the wisdom for minimizing the potential periodic financial disaster. In parallel, the prohibition of *gharar* as well as the profit-loss sharing (PLS) framework may have created a dilemma of the so-called “*murabaha* syndrome” - concentration of conservative credit portfolio on asset-backed transactions at mark-up pricing - leading to the financial disintermediation, particularly the dry-up of long-term funds for the potentials of the innovative start-ups. It is reported that more than 70% of financing done by Islamic banks are through *Murabaha*. Basically, the conventional banks and existing Islamic banks are entrepreneur unfriendly.

We are interested in how Islamic altruism and reciprocity may contribute to setting up Islamic venture capital (VC). Based on the best effort to avoid the incompleteness of contract, it might be acceptable, to such an extent in which the associated major uncertainty in *enterprise* can be shared and absorbed in the community through an adequate profit-loss sharing agreement, to incubate small and micro-enterprises in the innovative sector. However, in reality, Islamic VC is not yet well developed. Why not yet?

This paper aims to review the feasibility of Islamic venture capital through the lens of the traditions of New Institutional Economics (NIE) and Transaction Cost Economics (TCE). Although there should not be an overemphasis on the cultural factors, this paper argues that the unique institutional structure which creates Islamic altruism and reciprocity may enhance the supply of Islamic venture capital, but simultaneously, it may cause opportunistic behaviour unless appropriate safeguards can be devised *ex ante*, consequently leading to the drain of the capital for future innovations.

Methodology

One of the salient contributions by NIE is to support the proposition that effective contracting is dependent upon *institutions* in terms of "rules that constrain economic behaviour", including *informal* or *intangible* institutions such as religious, culture and customary practices. This paper draws on the theoretical contributions of the NIE and TCE, and applies some of these contributions to an analysis of general altruism and reciprocity in the Islamic economies.

Findings and Discussion

In the tradition of western political philosophy, altruism itself depends on a recognition of the reality of the other persons, and on the equivalent capacity to regard oneself as merely one individual among many (Thomas Nagel). In contrast, Islamic altruism appears to depend on reciprocity backed by mutual belief in the omnipotence and omniscience of the absolute power. The Qur'an unambiguously states that the poor have a due share in the wealth of the rich. This unique institutional structure which creates Islamic altruism and reciprocity may help the supply of the fund for those entrepreneurs who face difficulties in fund-raising, but it may possibly cause opportunistic behaviour in entrepreneurs and venture capitalists (fund managers) unless appropriate safeguards can be devised *ex ante*.

From the Muslim perspective, there is no agency problem between the absolute existence as the principal and its followers (including fund providers, venture capitalists and capital recipients) as the agent, because the followers retain their firm belief in the omnipotence and omniscience of the absolute existence. Islamic altruism appears to depend on reciprocity backed by mutual (among the followers) belief in the omnipotence and omniscience of the absolute power. At the individual level, the prospect of accountability on the Day of Judgment would bring positive behavioral changes. However, the current-life problem in equity finance is stemming from the structure that nobody knows the judgment on the others, in other words, nobody on earth precisely knows which person among the others would not be allowed to enter into the Kingdom of God on the Day. Unless appropriate safeguards and rules for protecting the right of the principal can be devised *an ante*, it makes sense that potential moral hazard or opportunistic behavior in the agent (particularly capital recipients) would make the principal (particularly fund providers) hesitate to share risks in enterprise if he/she is not unconditional altruist.

It is said that solutions based on the Islamic injunctions (collectively termed the Spiritual Quotient) could serve to mitigate agency risks. However, in theory, the Muslim principal (particularly fund providers) is exposed to higher agency risk unless appropriate rules of protecting the right of the principal (or of punishing the agent when its opportunistic behavior is revealed) are devised, because the Muslim fund providers have the divine obligation to share risks in enterprise under the profit-loss-sharing (PLS) scheme as well as to share a portion of incomes with the poor or those entrepreneurs who face difficulties in fund-raising.

Extensive and intensive arguments on appropriate safeguards and rules over Islamic equity finance, capitalising upon Islamic altruism which may contribute to setting up Islamic VC, are encouraged. Otherwise, the unique structure which creates Islamic altruism and reciprocity would rather drain the supply of venture capital. A better system for enhancing equity finance can only be constructively adapted through a process of trial and error.

Originality/Value: Çizakça raises three financial institutions such as *wasq* of stocks, Islamic venture capital and microfinance; a model of combining these institutions in its structure may play an important role in the eradication of poverty, enhancement of entrepreneurship and building up of human capital in Islamic countries. In particular, he is of the opinion that venture capital (VC) is going to be the rising star of Islamic finance. This is because VC is a *Shari'ah-based* instrument and though risky, embodies huge profit potential. VC is widely considered a significant source of financing for early-stage, innovative, and high growth start-up companies. Successful venture capital companies would help poverty alleviation by increasing employment and would contribute to sustainable economic growth through capital accumulation to further innovations.

Many refer to the lack of the "formal" institutions hindering the sound development of Islamic venture capital (VC). This paper contributes to shedding an analytical light on the unique feature of the Muslims' "informal" constraints which make them hesitate to invest in Islamic VC.

Personal identity and moral responsibility: a Confucian response to neuro-ethics

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Abstract

One of the bioethical problems raised by the advance of neural science is that we have the technology to change one's memory which could disturb our common understanding of one's personal identity. However, personal identity is in a broad sense usually based upon one's memories and it is this base that accounts for the moral responsibility of what one has done before. A radical change of one's memory thus may lead to difficulty in identifying with the self, and if they have committed something wrong, with their wrongdoings. This may provide a loophole for criminals trying to escape the charge of their previously committed crime. Derek Parfit has pointed out the defects of traditional theory or conceptions of personal identity and has tried to replace it with his 'Relation R'. However, 'Relation R' could not cope with such disturbance of memory, and moral responsibility could not be maintained under such circumstances. In this paper, I shall argue how Parfit's thoughtful analysis could not tackle this new challenge and what are the key factors for the solution of this new moral problem. I then argue that the Confucian concept of 'a person' could provide us with another criterion of personal identity that could meet this challenge and could provide strong reasoning to assure that the culprits of a crime shall meet their moral responsibilities.

Introduction

One of the bioethical problems raised by the advances of neural science is that we shall have the technologies available for us to change one's memory which could disturb our common understanding of one's personal identity. Since personal identity is usually based upon our memory (in a broad sense) and it is the base that we account for the moral responsibility of what one has done before. Radical changes of memory may lead to the difficulty of identify the culprit. It may provide a loophole for criminals trying to escape the charge of their previously committed crime.

Methodology

Derek Parfit has pointed out the defects of traditional theory or conceptions of personal identity and tries to replace it with his Relation R. However, Relation R could not cope with such radical changes of our memory and moral responsibility could not be maintained. In this paper, I shall argue how Parfit's thoughtful analysis could not tackle this new challenge and what are the key factors for the solution of the new moral problem. It then argues that a Confucian conception of person could provide us with another criterion of personal identity that could meet this challenge and could afford us a strong support to see that the culprits meet their moral responsibilities.

Discussion

1. The Problem of moral responsibilities in a new era of neural science

The possibility that recent and further development of neural science and technology could be used to change our mental content would be a source that affects our account of moral responsibilities. Moral responsibility is said to be dependent on our concept of personal identity so that we determine who the culprit of certain immoral deed is. Since personal identity is closely related to our memory or psychological made-up, and thus, if we could manipulate our memory or mental content, we may change the personal identity of a person and his or her moral responsibility in relation to some former deeds. It could be an excuse for people who after having done some crime may seek for a neural operation to change his or her personal identity. This leads to our re-consideration of the concept and criteria of

personal identity.

2. Parfit's critique of the notion of personal identity

Derek Parfit is one of the modern philosophers who criticize vigorously the traditional concept of personal identity and its criteria. He argues that both the physical and psychological criteria of personal identity are defective as well as reductive. He regards what matters is the psychological connectedness or continuity of two persons at different times. Hence he devises the concept of Relation R to catch the essential element of personal identity so as to give a better account of moral responsibility. It does not assume a one-to-one relation, and could allow one-to-many kind of relationship between two or more persons only if they have enough R-relatedness. It could do its job in cases that we may have people of split-minds, or of multiple personalities, or possible cases of imagined brain transplantations.

3. Why Relation R is not enough

However, his Relation R seems unable to give a good response to the new neural technologies which could manipulate our mental content. It changes not only our personal identity; it also cuts off our psychological connectedness and continuity from what we previously were. Relation R is basically dependent on the psychological made-up of the person, which could be manipulated by recent or future neural technologies. When a murderer changes his or her own mental memory and experience totally, it seems that we could have no good reason to charge him or her as the one identical with the former actor. Even though we may have certain physical proof such as finger-prints or DNA identifications that the one is the other who did the crime, but the latter one is still not the same one who did the crime now. He may be a completely different person.

4. A Confucian Proposal : Relation E as the Concept of Personal Identity

One of the mayor assumptions of traditional western philosophy is the view of a person as an atomic individual. Any personal identification relies wholly on the psychological constituents of the person involved. Other's certification is never considered. However, as we all live within a community, it is not enough to account anyone only in his or her own terms. Others are involved. In fact, one's personal identity and self-identity is not only related to others, it is most of the time shared with others, since the inter-personal experience is something that is shared between the people involved. The more intimate, the greater the sharing.

Now, family is usually the basic moral community that we have most shared and intimate relationship with others. Such sharing, especially in our earlier life with our parents and siblings, has not only great impacts and in fact part and parcel of our personal identity and self-identity throughout our life. Everybody is reflective of his or her living culture both in personality and characters and thus a socially-formed person. Thus our personal identity must be something involving the community we live with. Community may be greater or lesser, the most intimate is our family, whether our parents' or our own.

A person is embedded in a web of inter-personal relation with others. It forms the major element of the formation of a person's experience and personality. Hence, we propose a new community criterion for the identification of a person, which we called the Relation E as the criterion of personal identity. Relation E places particular importance on family relation and the communal life of a person. Relation E emphasizes the relational and communal aspects of a person as forming truly the personal identity of a person. It has an objective ring of identification over the individualistic and subjective identification of the confessions of the person. Intimate persons could provide confirming evidences such as habits of doing things or ways of speaking which even the owner may not be conscious of and could not be denied.

5. Application of Relation E in identifying the Personal Identity of a person

Relation E gives not only the right view of a person as a person embedded in community, it also provides a better working criterion for us to identity a person even though he himself may not know it or identify with it. It could help us to solve the problem even when one changes drastically his or her own mental set-ups naturally or by artificial methods. The identification by intimate relatives could provide sufficient witness of the personal identity of one against natural or artificial changes of personal identity and personality. For this, witness by family members has priority over others. Witness from a wider circle of human network sometimes may be needed to confirm the identification. Thus, there is a group of inter-subjective element of a person's identity which could not be erased by one-sided changes of one's person mental set-ups.

Spirituality and science; is there a conflict?

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Abstract

Bioethics is a discipline that connects science with human values; it emphasizes on the benefits of science and pushes for their applications that are acceptable within the values of people. People get their values from their cultures and traditions, and religious traditions play a large role in the formation of human values, though there are other sources for traditions besides formalized religions. A common and unfortunately growing misunderstanding in contemporary societies is that a belief in religion and God is contrary to science and/or rational thinking. In this presentation, I shall use a number of arguments to explain why science and religion/spirituality are not contradictory. I will also explain how a belief in any of a number of religions provides the basis for 'spiritual health' among the majority of humans, and trying to take the spirituality away can be the most un-scientific thing to do. The definition of 'health' includes spiritual health as an important dimension of human health. In this paper there are references to the Big Bang theory in relation with the origin of the universe, as well as the theory of evolution through natural selection and research on the probability of spontaneous generation of life in its simplest form. But more importantly the fields of science and spirituality are examined, particularly in areas they may overlap and areas they are completely separate; and the benefits of spirituality on individual health, social culture and traditions are described.

Introduction

In a study entitled as "The Global Religious Landscape" and conducted in 2010 by the Pew Forum on Religion and Public Life, 84 percent of the world population at the time (estimated at 6.9 billion) was reported to identify with a religion (Pew Forum on Religion and Public Life 2013).

Unfortunately, confusing the area of applying science with that of religion/spirituality is common among top scientists, similar to the opposite situation in the past when religious leaders intruded into the area of science. Steven Weinberg considered as the world's living preeminent theoretical physicist has said: "*science doesn't make it impossible to believe in God, it just makes it possible to not believe in God*". I argue that a main issue is the mix-up in the area where science is applicable with that of spirituality/religion, even among the highly educated.

The limitation of science is ingrained in its naturalistic methodology; it can only look for natural causes for natural phenomena. To try to use science outside this limit is a fallacy. In other words, belief and disbelief in spirituality both lie outside the limits of science. Spirituality cannot be verified by using scientific methods. A scientist may be religious, an atheist, or an agnostic like any other human. What is important is to recognize the limits of each, science as well as spirituality, and avoid applying them wrongly. A scientist who comes to the conclusion that the universe is pointless and a religious practitioner who avoids medical treatment in the hope of divine intervention, both are wrong.

Spiritual health refers to the human sense of having found a meaning and purpose in life, of inner peace, and a feeling of inter-connectedness and mindfulness, with a capacity to understand higher values outside the self (Hawks et al. 1995). Most people rely on religious beliefs to attain spiritual health, and this is perhaps the most significant contribution of religion to human health, especially at an individual level (Mueller 2001).

Methodology

This paper is based on a review of literature about spiritual health, science and scientific discoveries especially over the questions of "origin of life", and "origin of universe", as well as an original analysis of the role of spirituality in the life of humankind. After a descriptive review of literature on the above-mentioned subjects, an analytical discussion

will be presented to demonstrate that an intrinsic desire for spirituality is part of human nature, just as wisdom and high intellectual abilities help distinguish humankind from other life forms.

Discussion

There is no contradiction, as it was explained in the part of Introduction, between spirituality and theories of science. The distinction of the fine line between the two lies in the naturalistic methodology of science, while the concepts of spirituality are also limited to the confines of the logically impossible. Two major theories of science, the so-called Big Bang theory of the origin of universe, and the Darwin's theory of the evolution of life through natural selection, are widely accepted by the scientific community. Informed believers in spirituality/religion would not doubt these theories any more than scientists, and may actually refer to them as evidence to the limitations of science in answering two basic questions.

The Big Bang Theory is now the most widely accepted scientific theory about the origin of universe, which rejects the older hypothesis that the universe has always existed. This theory (or model) suggests that the universe originated from a singularity at 13.798 ± 0.037 billion years ago (Planck Collaboration 2014). There may be no way to scientifically investigate anything before the Big Bang (Hawking and Mlodinow 2005: pp 36), and therefore the question of what caused the singularity to start our universe may never be answered with scientific methods. Any model attempting to explain the formation of the singularity out of nothing is purely hypothetical and cannot be scientifically verified. Interestingly, a few pseudo-scientific claims have been made to hypothesize how 'nothing' can cause 'something'; this claim is beyond the limit of "logically impossible" for philosophy that was mentioned before. People believing in religion could call their bluff if they knew science!

Darwin's theory of evolution through natural selection states that life is not generated but evolves. The generation of the first form of life on Earth would be a very unlikely event for a number of reasons. First, there were no special conditions to promote the formation of biomolecules in the seas where the first forms of life could start. The necessary conditions would include having the right sequence of nucleotides (in thousands) for a minimum number of a couple of hundred genes (RNA or DNA) that could support the simplest form of life possible (Glass et al. 2006). Second, scientists who have modeled evolution based on the pace of mutative changes noticed that the time needed to arrive at this level of complexity would be much longer than 3.5 billion years. The hypotheses to explain the probability of spontaneous generation of life include postulating a multi-universe (multiverse) with life being generated somewhere else and carried to the Earth in a meteor, as well as postulating a planetary mega-organism within the primitive oceans to swap genetic data for hundreds of millions of years (Marshall 2011).

What is intriguing the most, however, is how some of the members of the 'modern society' treat religious/spirituality traditions as compared with literature, arts and media. For instance, they show an admiration for Shakespearean visions of spirits and ghosts and artistic depictions of similar entities in various forms of media, but simultaneously deny the spiritual needs of humans. Isn't it true that if more than 84% of all humans affiliate themselves with a religion (Pew Forum 2010) in spite of all the progress in science and technology, perhaps it is a human need? And if spiritual care can provide benefits to the health of so many patients, along with their physical and social health but also in the terminal stage when the available medical science cannot help them, why should there be a denial of the spiritual dimension of humankind? Shouldn't we try to inspire others and be inspired ourselves with hope, a vision for the future of the mankind, the feeling of having a higher purpose and a love of all life? I believe this is the essence of bioethics, and I hope that bioethics can connect science and spirituality for the sake of humanity.

I argue that a belief in God is not unscientific. In fact I would like to show how scientific research methodology could examine the existence of God in a hypothesis. Let's set the 'null hypothesis' as: "There is no God". We shall consider that if the null hypothesis can be rejected, only then, the alternate hypothesis of "God exists" can be accepted. In science, we need a working definition for God; we define it as "creator of first life-form" and "creator of universe" in two separate examinations. Next, we need an error rate; what is the probability we accept to be in fact wrong in rejecting the null hypothesis. In most scientific studies the error rate is set at 5% and in some sensitive medical studies it is set at 1%. Let's set the error rate at the lowest level of seven sigma, namely at 0.0000019%. Next, for the first case, we consider the probability of random formation of life (as opposed to the first life form being created) and accept to reject the null hypothesis only if that probability is larger than our set error rate. However, the null hypothesis,

implying that the first life form could have been generated by itself, is much smaller than this number; it is close to zero! That would be the probability of about 240 genes, each containing hundreds to a few thousands of nucleotides, getting arranged in a meaningful sequence that can support life. For now, we may ignore the issue of entropy that would work against such arrangement. We also know according to the theory of evolution that life only evolves but does not generate out of non-existence! In fact we believe that in about 3.5 billion years of the history of life on Earth, this has never ever happened again!

As for the second examination, on random generation of a universe, the probability is in fact zero, based on our current knowledge of physics. No matter and energy can be generated out of nothing, but they can only change to one another. This is while scientific evidence shows that the universe started with the Big bang at about 13.8 billion years ago. Again we can reject the null hypothesis and the alternate hypothesis automatically can be accepted. As you see, scientific methodology is not only based on observation, but hypothesis formation, hypothesis testing, reductionism (analysis of individual parts), parsimony (minimizing assumptions), and quantification (statistical measurement) are all very common methods used in science.

Let's now consider the costs of attempting to misuse science to disprove God. Japan is a good example of one of the most secular countries in the world. It also has one of the highest suicide rates, and as I argue here, of spiritual health problems among individuals who are under the influence of a very strong social network constructed on Japanese cultural identity. Ironically, Japanese society and culture shows common beliefs in superstitious concepts while a disbelief in any religion is very common. There are already two presentations by Japanese researchers in this conference around the issue of suicide, one of which is suggesting a social legal framework, and the other a faith based remedy as possible solutions.

Learning science must logically lead to 'humility', as the more a scientist learns, the more he realizes there is to learn. Learning bioscience should also lead to 'compassion' because that is what he observes as supporting life systems, for example how plants use the energy of the sun to produce a surplus to feed the animal kingdom. I remember teaching about human intelligence to students in the course of psychology, comparing it with machine intelligence, and reminding them of their major differences such as a lack of an intrinsic desire for 'growth', 'reproduction', and etc. when I realized all that is programmed into the life of the plant kingdom, though they do not have a nervous system.

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The principle of autonomy and decision making differences between the American and Chinese culture

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Abstract

In the United States, it seems that a surrogate from family members makes decision for a patient who has lost decisional capacity. But the important point is that in some states the law would like to find the evidence of the patient's past wishes and 'advance directive'. So finally, this is not a family decision or family autonomy. This 'advance directive' of a patient's wishes is so important for practicing individual autonomy, and individual autonomy is not only protected by American law but also is realized by the American culture of making an 'advance directives'. The family, in Chinese culture, functions as a whole to provide consent for significant medical and surgical interventions when a patient has lost decision-making capacity. And older people, including the current generation do not think it is necessary to give a wish or 'advance directives' before they lose decisional capacity. I think one important reason is that in Chinese culture, death is a bad thing, and especially the faith of the older generation. Most Chinese don't believe human will have next life and go to Heaven after death as said in the Bible of Christians; so they are afraid of death so they can hardly make an 'advance directive' before death. However, the Chinese do make the 'advance directive' for their property left for their family. Does this difference cause the loss of patient autonomy in China and the family autonomy has to be substituted for it in China? It is true that the principle of Autonomy could not simply be imported into 'already existing' Chinese cultural systems; in China this can better be done by formulating more individual-oriented laws and policies, such as those that empower the patient to establish a written 'advance directive' for the family members and physicians to follow regarding surrogate decision making.

Introduction

The four principles of medical ethics suggested by Tom Beauchamp and James Childress's were introduced to China in late 1980s. Later, the bioethical textbooks were more focused on introducing the principles and how to apply it in Chinese bioethics. During a long time, many Chinese scholars misunderstood bioethics as a subject that specifically uses these proposed ethical principles to deal with the ethical issues arising from the application of advanced technologies in biomedical practice in Chinese cultures. But it caused some contradiction cases. Because of this, I researched on the Chinese family autonomy or American patients autonomy in decision making, and I found especially the principle of autonomy could not simply be imported into unaltered previously 'primitive' Chinese cultural systems.

Methodology

This is based on case studies and research in reference books and papers on how Chinese bioethics applied the principle of autonomy within Chinese Culture and how Chinese bioethics applied the principle of autonomy within Chinese Culture.

Discussion

Chinese culture is not only Confucianism; we can find Confucianism, Daoism, and Buddhism in China. But from the Chinese history and reflection on the modern Chinese contemporary society' morals, it is true the Confucianism still is the main valuable morality; it permeates into Chinese's life. During my research on the books written by the Chinese bioethicists who got doctoral degree in bioethics in US, while their background was Confucianism, I saw a hot discussion about the Chinese family autonomy or American patients' autonomy in decision making. This topic is about how Chinese bioethics applied the principle of autonomy within Chinese culture.

Before my research on the issue, in my mind, the Confucius' philosophy is a relationship philosophy. One of Confucian thoughts is to view individuals relationally; individuals are not thought of as existing independently or being separate from any other being of family members, and I thought this philosophy of relationship should be right both in the US and in China. With this in my mind, I researched on how American patients who are related with family can practice individual autonomy during decision making? What is the principle of autonomy and decision making differences between the American and Chinese culture?

From my research, in the United States, the family is being involved to make surrogate decisions for an incompetent family member. The practice of having an established order was done for surrogate decision makers, e.g., spouse, children, and then parents; it reflects the acknowledgment that the family as a social reality cannot be reduced to a stereotype of the appropriate order of default decision makers.

Some survey was done in America for a Western and American model of Decision-Making. The survey found the respondents agreed that the elderly person should keep their responsibility and authority for making their own decisions as long as possible. When they became incapable, then the decisions would be made by their spouse (if living and able) and children.

Allowing them to keep making decisions, when able, was a kind of respect. But they believed that the family would be the best trusted source to make decisions when they were unable, and this authority would not constitute disrespect. Although the respondents wanted their family and children involved in the discussion of advance directives and care plans, they all wanted, if possible, to have "the last word." They would consider some kind of external agent, like a person with power of attorney, or a court, but only temporarily, when a potentially very difficult decision had to be made, or the family was not available and they could not speak for themselves. But ultimately, they all believed that their autonomous decisions should prevail whenever possible and this would also preserve their dignity.

So from these, it seems that surrogate decision making in the US tends to be family-oriented, in the sense that it generally turns first to family members to function as a surrogate decision maker for a patient who has lost decisional capacity. But the important point was some states law would like to find the evidence on the patient' past wishes and "advice directive", so finally, this is not a family decision or family autonomy; the family member who acts as a surrogate decision maker is also a likely reliable historian of the patient's wishes. This "advice directive" and patient's wishes is such important for practice individual autonomy, individual autonomy is not only protected by the American law but also realized by the American culture of making an "advice directive".

In china, a fluid approach is maintained that reflects the wide range of possible familial determination; usually, an important person of this family should be the family's spokesperson to make the decision. The family, in Chinese culture, functions as a whole to provide consent for significant medical and surgical interventions when a patient has lost the decision-making capacity. And the older people, also maybe the younger generation, did not think it necessary to give a wish or "advice directive" before losing decisional capacity.

I think one of important reason is that in Chinese culture, death is a bad thing while it is the faith of the older generation. Most Chinese don't believe that humans will have a next life and Heaven after death like Bible says in Christianity; they are afraid of death. So how can Chinese people be expected to like to make an "advice directive" before death. But the Chinese do make the "advice directive" for their property left for family. Does this cause the loss of patient autonomy in China and the family autonomy has to do for patients in China?

It is true that the principle of Autonomy could not simply be imported into unaltered previously 'primitive' Chinese cultural systems. China might think that this can be done by formulating more individual-oriented laws and policies, such as those that empower the patient to establish a written "advance directive" for the family members and physicians to follow regarding surrogate decision making.

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The impact of selected *Yoga sana* and meditation on psychological variables of Yoga teachers

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Abstract

Yoga is a systematic practice for the realization of higher perceptions, and a method for transformation of the human system which influences all levels of being, including the body, mind, personality, emotions, and their interactions. Yoga recognizes that a pure consciousness exists within each individual which is influenced by all levels of being. The teachings of yoga emerged with the Vedas, other classical texts and a rich oral tradition. Yoga is a living tradition, and its practices are relevant in the modern world. These practices include *asana* (sitting still), *pranayama* (breathing exercise), meditation, *mantra* chants, *mudra* rituals, and a disciplined lifestyle. The researchers selected two educational institutions, the Arul Anandar College and Madurai Kamaraj University, for the present study, where forty male teachers were recruited for the study at random by lot sampling technique. From the 40 participants, 20 male teachers were assigned as the experimental group and 20 male teachers as the control group. The objective of the study was to understand how Yoga teachers particularly embrace the ideal of truthfulness in dealing with students and others. All permanent teachers of both Arul Anandar College and Madurai Kamaraj University were included for data collection. Findings of our study will be discussed in detail, and after presentation of the research paper, some *Mudra* ritual gestures will be demonstrated by the researcher.

Introduction

Yoga is a systematic practice for the realization of higher perceptions. It is the science of life and an ideal way of living, providing rhythm to the body, melody to the mind, harmony to the soul and thereby symphony to life. In short, Yoga is a way to achieve total health, peace, bliss and wisdom. Physical, mental and spiritual aspects of yoga help to make one's life purposeful, useful and noble. Thus Yoga is an art, science and philosophy, which influence the life of man at each level. Therefore, the effect of yoga must be felt in every movement of our day-to-day lives.

Yoga is a way of life. It is an integrated system of education for the body, mind and inner spirit. As we live in the age of modern science and technology, our lifestyle has become very fast. It is also becoming very hard and difficult to live a natural and normal life because of the changing scenario of the world. The very air is becoming unfit for human consumption. Our cities are growing noisier, dirtier and congested. All these do create tension. The mind is always under strain due to various social evils. When we are under stress, our digestion is not proper and we may suffer from some fairly serious ailments like Asthma and Spondylitis etc., and yoga comes to our rescue at this juncture. The aim of yoga is to attain perfection of the intellect, both of the head and the heart, so that, the artist becomes devoted, true and pure. This demands an almost total relinquishment of interest in other activities of life except the chosen path. The mind is fluid and runs after sensual pleasures.

Meditation is a process that anyone can use to calm oneself, cope with stress for those with spiritual inclinations, feel as one with God or the universe. Meditation can be practiced individually or in groups and is easy to learn. It requires no change in belief system and is compatible with most religious practices. The formation of self-concept is fundamental to the development of the individual's personality. Hence, self-concept means how a person thinks or feels about him/herself. It may be positive or negative. In recent years, there has been growing realization of the importance of self concept in understanding and predicting the human behavior. A self-concept is an understanding that one is separate and independent person.

The purpose of this study is to determine the effect of the twelve weeks of selected *yogasanas* and meditation training on psychological variable of male teachers. It was hypothesized that there would be significant effects on

psychological variable as a result of twelve weeks of *yogasanas* and meditation practice when compared with the control group.

Methodology

In the present study, forty male teachers were selected at random by lot sampling technique, from Arul Anandar college and Madurai kamaraj University, which is situated in the Madurai. Twenty male teachers were assigned as experimental group and another 20 male teachers were assigned as control group during the academic year 2014-2015. They were the teachers of Arul Anandar College and Madurai Kamaraj University. Integrated Course and their age ranged from 27 to 40 years. All the teachers were directed to assemble in a multipurpose hall to seek their willingness, to act as subjects. The investigator explained to them the purpose, nature, importance of the experiment. They were requested to co-operate and participate actively for the same.

The subjects selected for the present study were divided randomly into two equal groups called control and experimental, consisting of 20 male teachers in each group. 12 weeks of *yogasanas* and meditation training were given to the experimental group. The control group was not allowed to participate in any of the training programs, except their routine physical education classes. Measurements for the variables were taken at the beginning (pre - test) and attend of the experimental period, after twelve weeks (post - test) the data were collected for all the variables from both control and experimental groups, for five days. During this period the subject were not allowed to participate in any training.

The investigator met the principal of Arul Anandar College and Madurai Kamaraj University in Madurai region and obtained permission to collect data from the teachers. As per the instruction given by the principal, the investigator met the teacher fixed the date and time for data collection. The investigator distributed the questionnaire to the subjects along with sharpened pencils for marking the responses. The subjects went through the instructions, read each statement carefully and indicated their responses. All the questionnaires were administered by the researcher in person in a face to face relationship. Data was collected as per the program fixed. All the filled in questionnaires were collected from the subjects and scored according to the scoring key. The total scores obtained were tabulated and statistically treated to arrive at meaningful conclusions.

The data collected from the two groups on the selected Psychological variable were used for the statistical treatment to find out whether or not there was any significant difference between the two groups by the analysis of covariance (ANCOVA) method. The level of significance was fixed at 0.05 level of confidence. All the statistical calculation was carried out using SPSS, 11.05 packages.

The effect of selected *yogasanas* and meditation on psychological variable of male teachers was examined using voluntary subjects randomly drawn into two groups of twenty each. One group acted as the control group and the other group acted as the experimental group. The twelve weeks of *yogasanas* and meditation training was given only for the experimental group and the other group did not do any physical training. The data for the above mention variables were collected prior to the training (pre-test) and after twelve weeks of training (post-test). The analysis on the effect of 12 weeks of *yogasanas* and meditation training on the psychological variable were statistically examined by analysis of covariance (ANCOVA) and the results have been presented.

Table 1 shows that the pre-test means on Mental Health of the control and the experimental groups are 60.55 and 60.55 respectively. The obtained 'F' ratio value 0.000 for the pre-test mean is lesser than the required table value 4.096 for significance at 0.05 level. Hence, it is not significant and it reveals that there is statistically no significant difference between the control and the experimental groups on Mental Health before the commencement of experimental training. It is inferred that the random selection of the subjects for the two groups are successful. The post-test mean Mental Health of the control and the experimental groups are 61.65 and 68.45 respectively. The obtained 'F' ratio value 9.583 for the post test data is greater than the required table value 4.096 for 1 & 38 degrees of freedom at 0.05 level of significance.

Table 1: Analysis of Covariance for Pre and Post test data on mental health of control and experimental groups

	Control Group	Experimental Group	Source of Variance	Sum of Squares	Df	Mean Squares	'F' Ratio
Pre test	60.55	60.55	Between	0.000	1	0.000	0.000
SD	6.94698	5.90695	Within	1579.900	38	41.576	
Post Test Mean	61.65	68.45	Between	462.400	1	462.400	9.583
SD	6.95304	6.93940	Within	1833.500	38	48.250	
Adjusted Post-test	61.650	68.450	Between	462.400	1	462.400	35.449
Mean			Within	482.637	37	13.044	

Significant at 0.05 level. Required table value at 0.05 level of significant for 1 & 37 degrees of freedom =4.104; 1 & 37 degrees of freedom =4.09

There is a statistically significant difference between the control and the experimental groups on Mental Health after the experimental training. The adjusted post-test mean on the Mental Health of the control and the experimental groups are 61.650 and 68.450 respectively. The obtained 'F' ratio value of 35.449 for the adjusted post test data is greater than the required table value 4.104 for 1 & 37 degrees of freedom at 0.05 level of significance. It shows that there is significant change on the Mental Health as a result of the experimental training.

Table 2 shows that the pre-test means on the Self Concept of the control and the experimental groups are 170.40 and 169.85 respectively. The obtained 'F' ratio value 0.027 for the pre-test mean is lesser than the required table value 4.096 for significance at 0.05 level. Hence, it is not significant and it reveals that there is statistically no significant difference between the control and the experimental groups 146 on the Self-Concept before the commencement of experimental period. It is inferred that the random selection of the subjects for the two groups are successful. The post-test mean on the Self-Concept of the control and the experimental groups are 173.45 and 178.10 respectively.

The obtained 'F' ratio value 2.100 for the post test data is lesser than the required table value 4.096 for 1 & 38 degrees of freedom at 0.05 level of significance. It discloses that there is statistically no significant difference between the control and the experimental groups on Self-Concept after the experimental period. The adjusted post-test mean on Self-Concept of the control and the experimental groups are 173.258 and 178.292 respectively. The obtained 'F' ratio value 5.052 for the adjusted post test data is greater than the required table value 4.104 for 1 & 37 degrees of freedom at 0.05 level of significance. It shows that there is significant change on Self- Concept as a result of experimental period.

Table 3 shows that the pre-test mean on Personality - Neurosis of the control and the experimental groups are 12.75 and 12.60 respectively. The obtained 'F' ratio value 0.016 for pre-test mean is lesser than the required table value 4.096 at 0.05 level of significance. The result reveals that there is no statistically significant difference in the pre-test between the control and the experimental groups on Personality - Neurosis before the commencement of experimental period. It is inferred that the random selection of the subjects for the two groups are successful.

The post-test mean on Personality - Neurosis of the control and the experimental groups are 12.50 and 10.85 respectively. The obtained 'F' ratio value 1.366 for the post test data is lesser than the required table value 4.096 for 1 & 38 degrees of freedom at 0.05 level of significance. This shows that there is no statistically significant difference between the control and the experimental groups on Personality - Neurosis after the experimental period. The adjusted post-test mean on Personality - Neurosis of the control and the experimental groups are 12.428 and 10.922 respectively. The obtained 'F' ratio value 3.195 for the adjusted post test data is lesser than the required table value 4.104 for 1 & 37 degrees of freedom at 0.05 level of significance. It shows that there is no significant change on Personality - Neurosis as a result of experimental period.

Table 2: Analysis of Covariance for Pre and Post test data on self-concept of control and experimental groups

	Control Group	Experimental Group	Source of Variance	Sum of Squares	Df	Mean Squares	'F'Ratio
Pre test	170.40	1690.85	Between	3.025	1	3.025	0.027
SD	9.41667	11.51784	Within	4205.350	38	110.667	
Post Test Mean	173.43	178.10	Between	216.225	1	216.225	2.100
SD	7.95034	11.94681	Within	3912.750	38	102.967	
Adjusted Post Test	173.258	178.292	Between	253.303	1	253.303	5.052*
Mean			Within	1854.991	37	50.135	

*Significant at 0.05 level. Required table value at 0.05 level of significance for 1 & 37 degrees of freedom = 4.104; 1&38 degrees of freedom = 4.096

Table 3: Analysis of Covariance for Pre and Post test data on personality-neurosis of control and experimental groups

	Control Group	Experimental Group	Source of Variance	Sum of Squares	Df	Mean Squares	'F'Ratio
Pre test	12.75	12.60	Between	0.225	1	0.225	0.016
SD	3.61102	3.91219	Within	538.550	38	14.172	
Post Test Mean	12.50	10.85	Between	27.225	1	27.225	1.366
SD	4.44262	4.48712	Within	757.550	38	19.936	
Adjusted Post Test	12.428	10.922	Between	26.677	1	22.677	3.195
Mean			Within	262.581	37	7.097	

Significant at 0.05 level; Required table value at 0.05 level of significance for 1&37 degrees of freedom = 4.104; 1&38 degrees of freedom = 4.096

Table 4 shows that the pre-test means on Personality Extrovert of the control and the experimental groups are 13.35 and 12.50 respectively. The obtained 'F' ratio value of 1.127 for the pre-test mean is lesser than the required table value of 4.096 for significance at 0.05 level. Hence, it is not significant and it reveals that there is no statistically significant difference between the control and the experimental groups on personality extrovert before the commencement of experimental training. It is inferred that the random selection of the subjects for two groups are successful. The post-test mean on Personality Extrovert of the control and the experimental groups are 13.65 and 16.95 respectively. The obtained 'F' ratio value of 15.131 for post test data is greater than the required table value 4.096 for 1 & 38 degrees of freedom at 0.05 level of significance. It discloses that there is statistically significant difference between the control and the experimental groups on Personality Extrovert after the experimental period. The adjusted post-test mean on Personality Extrovert of the control and the experimental groups are 13.313 and 17.287 respectively. The obtained 'F' ratio value 47.027 for the adjusted post test data is greater than the required table value 4.104 for 1 & 37 degrees of freedom at 0.05 level of significance. It shows that there is significant change on Personality Extrovert as

a result of the experimental period. Since the result has revealed that there is significant difference, the hypothesis given is accepted.

Table 4: Analysis of Covariance for Pre & Post Test data on personality- extrovert of control group & experimental group

	Control Group	Experimental Group	Source of Variance	Sum of Squares	Df	Mean Squares	'F' Ratio
Pre test	13.35	12.50	Between	7.225	1	7.225	1.127
SD	2.45539	2.60566	Within	243.550	38	6.409	
Post Test Mean	13.65	16.95	Between	108.900	1	108.900	5.131*
SD	2.81490	2.54383	Within	273.500	38	7.197	
Adjusted Post Test	13.313	17.287	Between	153.331	1	153.331	47.027*
Mean			Within	120.637	37	3.260	

Significant at 0.05 level; Required table value at 0.05 level of significance for 1&37 degrees of freedom = 4.104; 1&38 degrees of freedom = 4.096

Discussion

The hypothesis formulated in this study is, that there would be significant effect on psychological variables as a result of twelve weeks of *yogasanas* and meditation practice. The results of the study determine that there is significant increase in mental health, self-concept and personality - extrovert of the experimental group when compared to the control group. Thus, the hypothesis has been accepted. The other dimension of the personality - neurosis did not show any significant changes. Hence, the hypothesis is rejected.

The researcher selected forty teachers of which twenty samples were considered as experimental group and the remaining twenty samples are assigned as the control group. The yoga and the meditation are given to the experimental group. Thus, the following result of the study has been discussed in detail.

With regard to maintaining competence, the researcher could undertake ongoing efforts to develop and maintain their competence, striving for professional excellence through regular assessment of personal and professional strengths and weaknesses and through continuing education, teaching and consultation.

With a view to personal problems and conflict, the twenty teachers became aware of personal problems that may interfere with their performing work-related duties adequately, they take appropriate measures, obtaining professional supervision and determine whether they should limit, suspend or terminate their work-related duties.

In connection to drug and alcohol use, the respondents made a promise that they never take drugs and alcohol at any cost.

Human rapport: With regard to avoiding harm (Ahimas), the teacher determined to avoid harming their students, colleagues and research participants and others whom they work and to minimize harm where it is foreseeable and unavoidable. The next variable is to unfair discrimination, the professors will not engage in unfair discrimination based on age, race, culture, religion, sexual orientation, gender and any basis prohibited by law. During the discussion on sexual harassment, everybody felt that it is unwelcome, is unpleasant or creates an aggressive workplace or educational environment. They express hatred towards sexual harassment at workplace.

With a view to seeking counsel, the educators seek appropriate professional supervision for any circumstance in which the ethics of their behavior comes into question. In connection to cooperation with other teachers and the

management, they like to cooperate with other teachers, professionals and management in order to serve their students effectively and appropriately. With regard to improper complaints, they do not encourage the filling of ethics complaints that are made with reckless disregard for or willful ignorance of facts that would disprove the allegation.

Student and teacher relations: In the discussion, the role of management with help of yoga teacher is to educate students in the practices of yoga including asana, mudras and mediation to address improved well-being at all levels including physiological, mental, psychological and emotional. When they give such training to students and professors who are teaching in the college, other institutions, there will be a good impact on student's relationship, personalities, trust, a good gender relationship, high self-esteem, personal dignity and mental health. If such a good practices takes place among the students and the professors, it will create an excellent atmosphere in the college/ institutions and universities.

Sexual behavior with current students reflected upon in the debate, they said that they never engage in sexual behavior with current students, because they are all our sons and daughters of our family. They are limited to all forms of seductive speech, gestures and behavior as well as physical contact of a sexual nature. With a view to privacy and confidentiality, it is highly kept in secrecy and developing trust between the professors and the students. The professors act a mentor to the students. They take reasonable precautions to protect confidential information obtained through or stored in the file and in the mind too. The confidentiality is regulated by law and institutional rules.

The results of the twelve weeks of *yogasanas* and meditation training on psychological variable areas produced good results. As a researcher mentioned in the above tables there is no significant difference between the pre-test control group and the experimental groups on mental health. But the twelve weeks of *yogasanas* training to the experimental group, a good result was produced on this study.

Conclusion

From the above discussion and analysis, one can understand and that the mudras, meditation and yoga will give an overall positive change in the character of the individual. The individual is very clear in understanding himself and he tries to shed away the untoward characters and makes himself walk on the right track and thereby his caliber or capacity and productivity in all possible ways and means in the areas and he citizen of the nation.

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***Ethics and Law,
Public Policy and Society,
Economy and Society***

From bioethical definitions to the setting of public policy by the court of law in the Philippines

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Abstract

Population control, abortion and contraception are the most divisive bioethical topics in the Philippines. For years, the Philippine Congress has been embroiled in heated debates and political squabbles between conservative and liberals, hardline constitutionalists and postmodernists. The enactment of the Responsible Parenthood and Reproductive Health Act of 2012 (*RH Law*) aggravated the already tense and polarized social, religious and political atmosphere in the country and led to the submission of petitions to the Philippine Supreme Court to declare the law unconstitutional. Led by religious groups, the cases revolved around the constitutional provision in respect to freedom of religion and the sanctity of human life from the time of conception. The Supreme Court eventually decided to partially grant the petitions on March 19, 2013 and declared Republic Act. No. 10354 as not unconstitutional except with respect to some provisions which are declared unconstitutional, like those related to freedom of religion, consent, freedom of conscience, and contraceptives as primary medicines. But the most striking part of the decision is the definition of the beginning of life, which has now become the basis of all public policies related to the use of contraceptives, abortion, population control, and possibly, even future policies related to stem cell research and therapy, genetic engineering, therapeutic cloning, etc. For bioethics in the Philippines, this is a defining decision, putting a final seal on the debate on the beginning of life and personhood of the individual. In this paper, we shall discuss the implications of the decision in Philippine bioethics as well as public policies related to current bioethical issues in the country.

Introduction

The Republic Act No. 10354 (The Responsible Parenthood and Reproductive Health Act of 2012), or better known as the Reproductive Health Law (RH Law) took more than thirteen years to be enacted and there has never been any government bill and law that polarized the nation more than the RH Law. When the anti-RH Bill were surprised by the “private” signing into law of the Bill by Pres. Aquino before Christmas of 2012, they run to the Supreme Court for intervention, citing articles from the supreme law of the land, the 1987 Constitution, as prohibitive provisions. The petitions to declare the Law as unconstitutional rests on the following grounds, all of which are guaranteed by the Constitution:

1. violation of the right to life of the unborn
2. violation of the right to health and the right to protection against hazardous products
3. violation of the right to religious freedom
4. violation of the right to equal protection of the law
5. violation of the right to free speech
6. intrusion into the zone of privacy of one's family protected by the Constitution
7. violation of natural law

Incidentally, these grounds are significant in bioethics. Any declaration from the Supreme Court on these matters will definitely shape public policy and guide debates and decisions on related matters.

The Philippines is, generally, a conservative country, and majority of its population are Christians. When the 1987 Constitution was promulgated, it was meant to be a supreme law to sanitize the effects of the Marcos regime and to reiterate long-held values and principles. Greatly influenced by the Catholic Church, the Constitution stands as boundary and litmus test to all laws and ordinances proposed or passed by the government, and the Supreme Court is tasked to protect it at all cost.

With the court's declaration of the RH Law as "not unconstitutional," with parts of it declared as unconstitutional, the above mentioned grounds were finally defined definitively. The pro-RH Law claimed the decision was a victory for reproductive health in the country. The anti-RH law cheered the watering down of the law and hailed it as a victory of principles and values.

In this paper, we shall endeavor to understand the decision of the Court and its definitions of the grounds mentioned above, explain its repercussions, and how these definitions affect bioethical decisions and debates in the country.

Discussion

The population program in the Philippine officially begun in 1968 with the creation of the Project Office for Maternal and Child Health in the Department of Health to organize and direct family planning activities in the country. In 1969, the Executive Order No. 233 officially launched the Philippine Population Program with the establishment of the Population Commission (POPCOM). In the early 1970s, the population program was intensified with the arrival of Planned Parenthood International in the country offering comprehensive reproductive health care services. Eventually, the Population Act of 1971 was enacted into law establishing a national population policy and making the POPCOM the national agency in charge of population projects and programs.

The population control program intensified more when the infamous Kissinger Report, the National Security Study Memorandum (NSSM) 200, was adopted as US national policy, with the purpose of reducing population and promotion of contraceptives in 13 populous countries, including the Philippines, so that US interest will be protected. The 1970s, thus, saw the birth of different agencies and programs to curb population increase, and inculcate among the people the contraceptive mentality. Up to the 1980s and early 1990s, the Philippines registered a steady decline in population. During the Corazon Aquino administration, the promotion of contraceptives and other population control methods slowed down because of strong pressure from the Catholic Church and other religious leaders, and during Fidel V. Ramos's presidency, the focus shifted from population control to population management. The shift was mainly influenced by the Rio Declaration and Agenda 21. Eventually, the Philippine Population Management Program and the Population, Resources and Environment Framework were adopted by the government in the early 1990s. Bioethics was nowhere influential during those years, and people were generally unaware of it since it was not part of general education curriculum and it was not a topic in public forums and in the media, until the RH Bill was filed.

The first reproductive health bill introduced in Congress in 1998 was shelved due to great pressure from anti-population control groups. The advocates lobbied for a law almost every year in Congress and even established the Reproductive Health Advocacy Network. The movement met resistance from then Pres. Arroyo who focused more on mainstreaming natural family planning in the country. This gradually changed with the election of Pres. Benigno Aquino III, who openly supported the RH Bill that was filed in Congress and publicly vowed to sign the Bill into law. In 2011, five RH Bills were introduced in Congress which was then consolidated into one measure. And the long battle of words, data, researches, mud-slinging, threats, intimidations, publicity, etc., ended with the approval of the RH Bill in 2012 and its signing into law in the same year. As a result, the Supreme Court was barraged with petitions asking the high court to declare the law unconstitutional. The long court debates soon ensued ending with the court partially granting the petitions and declared the RH law as not unconstitutional *except* with respect to several provisions which are declared unconstitutional.

The decision is now a very important part of Philippine jurisprudence. What are of great interest to us are the substantive definitions made by the court on principles that are bioethically significant.

1. **Right to life** – There are two provisions in the 1987 Philippine Constitution that expressly defend right to life: Sec. 1, Art. II (*right to life*) and Sec. 12, Art. II (*protection of the life of the mother and the life of the unborn from conception*).

Although the Supreme Court hesitated to make a single statement regarding beginning of life believing it "is a scientific and medical issue that should not be decided, at this stage, without proper hearing and evidence," the *ponente* of the decision "is of the strong view that life begins at fertilization" noting the convenient disregarded of some groups

of that scientific fact. Accordingly the position that conception happens at implantation is considered a theory that “is devoid of any legal or scientific mooring. It does not pertain to the beginning of life but to the viability of the fetus. Implantation has been conceptualized only for convenience by those who had population control in mind. To adopt it would constitute textual infidelity not only to the RH Law but also to the Constitution.” The ponente also noted the fact that the Framers of the Constitution were of the same mind that conception begins at fertilization and that they had the intention of prohibiting Congress from “enacting any measures that determines the beginning of life.

2. **Right to health and the right to protection against hazardous products** – The Court believes that the constitutional right to health is a component of the constitutional right to life (from conception), and it is the duty of the State to protect and promote it. It is the position of the Court that Congress cannot legislate, as it has done in the RH Law, that hormonal contraceptives and intra-uterine devices are safe, effective and non-abortifacient since it is the FDA’s job to do so.
3. **Freedom of Religion and the Right to Free Speech** – Consistent with the principle of benevolent neutrality, free expression and conscientious objection, the Court upheld the freedom of religion and conscience of medical practitioners when they refuse to dispense contraceptives. In relation to the RH Law’s obligatory referral provision, the Court decided that this is a violation of the religious belief and conviction of the conscientious objector. The Court also opined that the guarantee of freedom of religion necessarily demands the right to free speech, and consequently, the right to be silent. The RH Law’s provision that compels a conscientious objector to act contrary to his/her beliefs is a violation of these rights and of the principle on non-coercion enshrined in the Constitution. Thus, a conscientious objector, even if he/she serves at a government facility, is excused from compliance with the RH Law (in accordance with the equal protection of the law principle).
4. **The Family and the Right to Privacy** – The Court believes that the RH Law contains provisions that destroy the family as a solid social institution by promoting individualism and deprivation of parental authority over their daughter in specific cases. The Court disagrees with the RH Law when it dispensed partners of mutual consent and decision regarding vasectomy and tubal ligation, believing that it is a matter of spousal decision. Decision regarding reproductive health procedures is considered a shared and a constitutionally guaranteed private right. Any State intervention would be an encroachment into the zones of spousal privacy. Also, the Court does not favor the RH Law’s denial of parental consent to minor who is already a parent or has had miscarriage if she wants to undergo a reproductive health procedure. For the Court, this is an anti-family provision, and the State cannot violate the Constitutional mandate of protection of the family, and must remember the fact that “the right of the parent is superior to that of the State.”
5. **Violation of the Natural Law** – The Court, recognizing its nature, is of the opinion that natural law is not to be used as legal basis for upholding or invalidating any particular law for the following reasons: it is not enacted by any legitimate body; they are mere thoughts and notions of philosophers, theorists, and theologians on inherent rights; it is not a written law; and, it can only be used when there is no applicable law.

On population control and development: Aside from the definitions above, the Court also expressed several opinions that may be relevant to Philippine bioethics. The Court noted that fact that the primary intent of the RH Law is indeed population control, with the idea that lesser population may result to greater development. In response to this, the Court is of the opinion that “population control may not be beneficial for the country in the long run,” citing the growing problem of ageing population in many countries that embarked on a population reduction program with its attendant economic effects. The Court recognized the unequal distribution of wealth as the main culprit to poverty and unemployment and not large population. Moreover, the State “should not use coercive measures” to solve these problems.

Implications to bioethics in the Philippines: Philippine bioethics hardly relied on formal legislation and the court for guidance and direction. The prevailing trust on paternalism in established health care institutions has been the accepted

norm in medical bioethics in the country for many years. Although there are many laws governing scientific and medical practice, they are mainly focused on the legalities and policies. Aside from the issue of illegal organ trade, contraception and abortion are the other two controversial bioethical issues in the country, and the second is the most divisive.

The recent Supreme Court decision on the RH Law is to be considered not merely a legal breakthrough but also a bioethical milestone in the Philippines. And the reasons for such a claim are as follows:

1. The question of **when does life begin** has been definitively settled. This further strengthened the Constitutional prohibition of abortion, including the use of abortifacients in the country. Any attempt to legalize abortion and the distribution of abortifacients is to be tested against this decision. Moreover, since life has been formally recognized by the court to begin at fertilization, any intervention done that might endanger the viability and life of the fertilized egg are thus considered illegal, and in bioethical terms, not permissible. This may include genetic manipulation and other experimentations of the fertilized egg, production of embryos for experimental purposes, freezing of embryos, IVF procedures that allow the destruction of excess embryos, etc. And, by extension, any interventions that protect the embryo and facilitate its implantation in the womb are to be considered permissible.
2. One cannot sanction the use and **distribution of contraceptive products** especially if these are not yet proven to be perfectly safe, effective, and non-abortifacients. Since there is no evidence to prove that all contraceptive products are perfectly safe, effective or non-abortifacient, it follows that none of these products should be promoted, distributed and used in the country. Many studies show negative side-effects of contraceptive products, and these has been recognized even by reputable institutions and scientific communities.
3. **Conscientious objection, referral, and freedom of conscience** – Freedom of conscience is again reiterated as the basis for decision-making, whether it be in cooperation or participation in any medical procedure, or state-sponsored reproductive health programs. The state cannot compel any of its personnel to implement any contraceptive or reproductive health procedures that may be deemed unethical or immoral by them (based on their religious convictions). Of great importance here is the Court’s judgment that the duty to refer imposed by the RH law is a violation of the religious beliefs and convictions of a conscientious objector – in the words of the Decision, “They cannot, in conscience, do indirectly what they cannot do directly. One may not be the principal, but he is equally guilty if he abets the offensive act by indirect participation.”
4. **Privacy and the family** – The pre-eminence and the inviolability of the family and its structure and nature as enshrined in the Constitution is affirmed in the current Decision, thus, banning divorce and protecting it against instrumentalization by the state. The Constitution Fathers, believe that the family is “anterior to the state and not a creation of the state.” Thus, the family is autonomous, which gives it the attendant right to privacy and independence when deciding on sexual and reproductive matters. State intervention can only be allowed, as it is clearly expressed in the Decision, when there is compelling state interest, like providing information on reproductive health or when the case is life threatening, but not to impose one state-sponsored contraceptive and population reduction program, or to legislate any law that undermines the unity and privacy of the family.

Conclusion

The relationship between bioethics and the court has not always been amicable since not everything that is legal may be ethical and vice versa. In the case of the current Decision, the Court benefits bioethics in the Philippines. It’s rare that bioethics and its principles are talked about in public in the country, but thanks to the Decision, policy-makers, the media, the public in general, and educational institutions, even the Churches, are now more aware and interested in bioethics. Legislative initiatives in matters of reproductive health and the strengthening of the family in particular, and medical practice in general, are now measured or tested according to the principles defined in the Decision.

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Balancing global economic competence against the support of citizens in Singapore

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Abstract

Despite its relatively small size and short history, Singapore has emerged in the twenty-first century as an important city-state in the global economy. However, there are challenges for Singapore to continue its growth and also its significance to the world economy. This paper examines the strategies that Singapore has adopted to remain ahead and be relevant in the world economy. The first section describes the current nature of Singapore's economy. The second section describes the sectors that Singapore views as important and the strategies it has developed. The third section describes how people in Singapore respond to the government's economic strategies through changing their support for the ruling party at elections as well as the attempts made by the government to address the needs of the people. The fourth section, addresses the balance that Singapore needs to achieve between global competence and citizen demands for controlling foreign migration to Singapore.

Introduction

Singapore gained independence in 1965 after separation from Malaysia. This was a city-state with a territory of 581.5 km² and a lack of natural resources except for being an *entrepôt* (trading post) and the potential and capability of its people. At that time the first generation of Singapore leaders from the People's Action Party (PAP) whose leader, a Cambridge-educated lawyer Lee Kuan Yew became the first Prime Minister to rule the country from independence in 1959 to November 1990 were forced to find out a way for the economic growth of the country.

The country decided to become a 'Global City' and a global hub for international trade, investment, transportation, medical services and tourism (Beng 2005). In the 21st century, the country reached almost all of its aims. Now Singapore enjoys the highest GDP per capita in Southeast Asia. A lot of companies and international organizations have located their headquarters there. It's also a member of international organizations like the Association of the Southeast Asian Nations (ASEAN) where it is the leading member and actively participates in external affairs.

At the same time Singapore's small size, location and limited resources forced it to adopt total defense in which all of citizens take part. Furthermore Singapore is strong not only in economic performance but also it could built strong civil defense since it has a heavily populated and urbanized city with high-rise buildings that make it vulnerable to attacks (Tan 2005).

As was mentioned above about Singapore's population, the high level is mostly due to foreign labor migration to the small city-state that makes it very diverse in terms of religion and ethnicity. On one hand, the influx of foreign labor force is the essential part of the growth which the country needs in world economy; on the other hand, the growing migration has caused some tension for the local population which will be discussed further.

Even though Singapore is a high income country with an extremely open economy which makes it one of the most globalized countries in terms of global finance, migration, and telecommunication, at the same time Singapore maintains the practice of selecting globalization. This is evident in protecting traditions and Asian 'conservatism' from pornographic magazines and other similar issues. In this connection the main objective of this paper is to examine the strategies that Singapore has adopted to remain ahead and be relevant in the world economy. To achieve the objective of this paper, the author tries to answer the question: What is the balancing mechanism between global economic competence and citizens' support in Singapore?

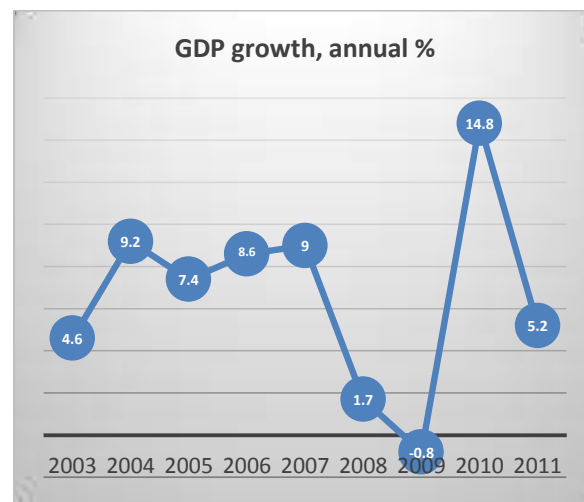
Methodology

This paper employs a qualitative research method and uses secondary data obtained from published sources as the prominent source of data. The data has been collected from annual journal of Southeast Asian Affairs from 2000 to 2013 years.

Discussion

Singapore's current economy: The big challenge for small, resource limited city-state Singapore is to sustain competitiveness and economic strength. Especially with Singapore's high-end manufacturing which is facing serious challenges of growing low-cost manufacturers in China, India and other developing economies in Asia. But Singapore could take on the strategy of stimulating economic, trade and commercial links with ASEAN - China. Singapore's open economy policy and its strong external orientation make it a globalized city-state vulnerable to global economic shocks; it shows following the pace of the economic growth (Figure 1).

Figure 1. Singapore annual % GDP growth from 2003 to 2011 (Source: World Development Indicators, World Bank)



The rapid economic growth in 2004 compared with 2003 was on the back of a strong global economic renewal (Beng 2005). The slowdown in 2005 was mostly due to a slowdown in the world economy because Singapore is highly vulnerable to external changes. There are worries over economic slowdown in the U.S., high world oil prices and the geopolitical tensions in the Middle East (Beng, 2005). In 2006 and 2007, economy grew at a vigorous speed at 8.6 and 9 percent respectively. At the same time unemployment presented its lowest rate in 2007. According to Chong (2009) there are three main factors related to Singapore's growth. First, there is a shift from heavy manufacturing to promotion of services. Second, Singapore's reputation as corruption free attracts investors; and third, the growing economies of India and China in global economy lead Singapore to higher growth.

But this growth turned to a slowdown in 2008 with a high annual inflation rate of 6.5%. This inflation rate as indicated by the Consumer Price Index (CPI) was the highest since March 1982 when inflation level was 7.5% (Chong 2009). The rise in inflation rate was due to housing value revision (Chong 2009). Housing costs have the third-largest weighting after food prices and transport and communication which rose 5.8 and 6.9 percent, respectively. Such high inflation encouraged the National Wage Council (NWC) and government to give one-off special payment or bonus for low wage workers and civil servants.

The financial crisis which started with the bursting bubble price of real estate in the U.S. had a significant impact on Singapore due to its open economy and firm ties with the global economy. This affected tourism which fell in July and August 2008 (Chong 2009). In this economic slowdown, Singapore government decided to use reserve funding

with a Resilience Package of \$20.5 billion with the purpose to save jobs and help companies during the crisis; \$4.5 billion of this was to fund Jobs Credit Scheme and \$5.8 billion was funded for Special Risk-Sharing Initiative (SRI) (Ghani, 2010). The Jobs Credit Scheme aimed to compensate part of employers wage bills allocating the mentioned amount. It could provide businesses with a cash grant of 12 percent of the first \$2,500 of the monthly wage for each employee, both for Singapore citizens and permanent residents (PR). The effect of the fund helped avoid workers retrenchment and saved 30,000 jobs (Ghani, 2010). The other economic motivations included a 1 percentage point cut in corporate tax to 17 percent, as well as \$4.4 billion was spent on infrastructure projects.

The economic recession covered two years 2008-2009 with negative growth in 2009. But in 2010, a strong demand for manufactured goods, recovery of financial services and increasing tourist arrivals contributed to GDP growth. Even though 2010 presented robust economic growth twice more than pre-crisis, 2011 exposed moderate economic growth due to weak external demand. Although full-time resident workers saw their median monthly pay increase by 8.3% to \$3,249 in 2011, actually this median income growth surpassed comparatively high inflation (Tan 2012).

Important sectors and strategies: The result of attentive, exceptional and unique government performance in the corruption free, open economy and globalization policy could transform the small city-state economy from Third World to First World position in the last fifty years. Furthermore, the ambition of the 'Global City' was to become a global hub for investment, transportation, international trade, tourism and medical services (Beng 2005). In this regard, to be competitive is the essential issue for the economy of Singapore. Some industries are facing stronger foreign competition. Electronics which is the leading Singapore export industry has seen a big move to China as well as some of multinational companies that wanted to be closer to the market. The business in the Port of Singapore Authority (PSA) has gone because of Johor's Tanjung Pelepas in Malaysia and Singapore Airlines (SIA) is endangered by the growth of regional budget airlines.

On the other hand, Singapore has the advantage in attracting high value-added investments by offering efficient logistics system, well-educated and productive labor force, and an outstanding physical infrastructure (Beng 2005). Furthermore in December 2004, Singapore asked potential investors to submit proposals for a casino resort which could increase tourist arrivals. One point for building casino was that Singaporean gamblers often visit overseas casinos and the loss in potential revenue is estimated at S\$1.8 billion to S\$2 billion (Chong 2006). The integrated resorts managed to open their doors to visitors in February 2010 at Resorts World Sentosa and in April 2010 at Marina Bay Sands. These two IRs are estimated to annually target 17 million tourists to Singapore with revenues of \$21 billion by 2015 (Yahya 2011). Also Singapore is pushing its Government of Singapore Investment Corporation (GLC) to increase foreign investment and the telecommunication company to lower the costs. In innovative industries, Singapore is aiming to invite foreign direct investment mostly in the biomedical sector (Beng 2005).

Since the labor cost is low in the neighboring countries in the manufacture sector, Singapore is focusing in the service sector offering excellent logistic systems, assisting with business and promoting Chinese companies in China as well as stimulating the growth of tourism from China (Beng 2005). The contribution of tourism to the GDP in 2006 was S\$12 billion (Khai 2007).

In 2003 the Port of Singapore Authority sold a stake in two berths to the Chinese shipping company Cosco and announced changes of policy which to protect Singapore's position as an *entrepot*, but on the other hand the aviation hub is shifting from Singapore to China (Beng 2005). Therefore with technological advances, globalization and developing of the economies of the neighboring countries like China, India, Thailand, Malaysia and others, global economic competition becomes tougher and intensified which is a big challenge for Singapore to stay attractive for foreign investors, remain economic vitality and be the core of the region business.

For the purpose of long-term development policy for sustained economic growth according to the changed global environment, an Economic Strategies Committee (ESC) was established in May 2009 (Yahya 2011). The main goals of the ESC were to reach harmonization between being a global city and meeting the demands of a nation state. Moreover the key emphasis was to achieve growth productivity through innovation and skills. That's why the target of the Budget of 2010 was to create an advanced economy by investment in productivity through education and improvement of skills (Yahya 2011).

First of all for these purposes a Continuing Education and Training system was established with a budget of S\$2.5 billion until 2015 which aimed to help low-wage workers over thirty-five years old through Workforce Training Scheme (WTS). Secondly, Productivity and Innovation Credit (PIC) scheme covering six activities was introduced for increasing productivity and support innovation which would be accessible from 2011 to 2015 with an estimated cost of \$480 million a year. Through it companies can deduct their expenditures. Thirdly, the aim was to support business development through mergers and acquisitions (M&A) for creating an advanced economy. Furthermore there were other programs and associations with the main aim of a sustainable economic growth (Yahya 2011).

Citizen responses and government policy: Modern Singapore shows high economic growth, is a regional business hub and has one of the highest GDP per capita. Singapore is also known as a multi-religious and multicultural society with an ecological clean city with the status of global city. But nevertheless there is growing discontent among Singaporeans regarding the widening wage gap, influx of foreigners, and crowding in public transportation, rising property prices, increasing costs of education and healthcare. All of these make Singaporeans unhappy.

Singapore's robust economic performance and open-door immigration policy raise the issue of balancing between demands of a nation state and the forces of being a global city. It receives a big increase in population mostly by flow of immigrants because country's birth rate is low (Chong 2009). Owing to high salary on global-scale where locals aim to work but foreign workforce may be employed even in low-paying jobs, there is competition between Singaporeans and foreign workers who are ready to work for lower salaries.

In 2007 the population grew by a record 5.5 percent which was the highest increase since 1971. In June 2008 there were 4.84 million people living in Singapore, up from 4.59 million in 2007, due to immigrants whose number increase by 19 percent or about 1.2 million (Chong 2009). In 2008 the population composition included one-third foreigners at 1.8 million, of which 1.25 million are transient and 533,000 permanent residents (Ghani, 2010). The 2010 Advance Census Report indicated population at 5.08 million, including 3.77 million residents of whom 3.23 million were Singapore citizens and 540,000 PRs as well the percentage of citizens to foreigners decreased from 66 to 64 (Yahya, 2011). Each year the number of those who are granted status of PR as well as citizenships is increasing. According to forecasts there could be more than three million foreigners working in Singapore by 2030, forming half the workforce and by 2050 the number will increase to about ten million, making up 75% of employees in the country (Ghani, 2010). At the same time according to National Population Secretariat (NPS), the number of Singaporeans going overseas is increasing (Chong 2009).

According to the NPS, under the Prime Minister's Office the country's fertility rate was low in order to encourage Singaporeans to have children. The government developed the Marriage and Parenthood (M&P) Package in which a higher Parenthood Tax Rebate (PTR) and tax reliefs for income were provided for Singaporeans (Chong 2009).

This issue with foreign work force makes job competitiveness for local residents tougher, and low-skilled Singaporeans face the depression of wage due to cheaper foreign labor. It also raises the social problems through the increasing number of foreigners with different culture and habits and one of the reason of rising of the property price is the renting and buying of homes by higher-skilled foreigners; besides there is a growing competition in the social services, recreation and schools.

Even though the government supports job creation but as statistics in 2007 show, six in ten of jobs created went to foreigners; in 2008, they took seven in ten (Ghani, 2010). Thereby government attempts to support local residents. In 2008 when high inflation hit Singapore, the National Wage Council (NWC) recommended special payment to help low-wage workers (Chong 2009). To control the rising tension for dealing with the lower-skilled workers in Singapore, the Singaporeans government set up a new Ministerial Steering Committee at the end of 2008 to ensure harmonious coexistence between locals and these workers. In 2009 government enforced new restrictions on the flow of foreign workers under the work permit scheme where the ratio between foreign and local workers was widened and another requirement for Chinese workers was to have the diploma verified by the Chinese authorities. In January 2011 the Education Ministry raised school fees for PRs and foreigners (Ghani, 2010). There was also the National Service Recognition Award amounting to \$9000 for each National Serviceman for the education and buying home (Yahya, 2011). There was also a housing loan with 10 percent cash down payment for buyers (Yahya, 2011).

Although the government supports Singaporeans with different bonuses and awards, but the share of salaries to the GDP is 41% which is the lowest in the world compared with countries with high per capita income. The share of

salaries to GDP during economic growth fell from 47% in 2001 to 42% indicating that there was some underpayment (Ghani, 2010). Other Singaporeans concern is the widening wage gap; even though per capita GDP is quite high, the Gini coefficient rose from 42.5 to 47.2 from 1998 to 2006 (Chong 2012). The Household Expenditure Survey discovered that the bottom 20% of households suffered a 3.2% income drop between 1998 and 2003 (Chong 2006).

All of these worries, concerns and increasing discontent of Singaporeans influence the general election where the votes for the People's Action Party decreased from 72% in 2001 to 66.6% in 2006 and further continued to decrease in the general election of 2011 with 61% which was the lowest since independence. The Workers Party of Singapore the biggest after PAP increased its share of votes from 13.3% in 2001 (Khai, 2007).

Conclusion

Singapore is the best example of a globalized country with many headquarters of multinational companies, with the policy of open economy relative to business and a foreign labor force. It is a favorable destination of investment with Singapore's corruption free environment. Singapore supports increased innovation in highly skilled industries like biotechnology, electronics and others with well-paid salaries. The per capita income is the second after Japan. All of these are evidence of capitalistic processes not only in economy but in the society as well with structural unemployment, disappearance of well-paid low skill jobs, widening income gap, the rising price of real property plus the growing influx of foreigners which makes public transport overcrowded.

Therefore in the 21st century government policy should be more social with the principals of equity, sharing of the nation's wealth and progress. Government should try to use economy to serve the people's aspirations and let them feel comfortable to stimulate them to contribute to their common home – Singapore.

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The outcomes of economic planning in Lao PDR

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Abstract

Lao PDR has become a peaceful country in the 21st century and is recognized as capable of economic planning for development. This paper examines the economic planning undertaken by Laos and their outcomes in terms of people's well-being. The paper seeks to examine the years 2006-2010 when a concrete economic development plan was implemented (the Sixth Five-Year Plan, NSEDP). During the implementation of the Sixth Five-Year Plan, the country achieved many proposed targets such as the economy grew continuously with stable macroeconomic climate and there were steps to change from agriculture based to industrial based economy. Per capita GDP grew to more than a thousand dollar PPP (\$PPP), the poverty rate declined and there were some significant progresses in other areas as well (MPI/DIC, 2010). However, the country experienced constraints and challenges with valuable lessons learned. There is an introduction and then a description in detail of the economic planning implemented from 2006-2010. The third section describes the outcomes of economic planning in terms of its impact on the overall economy as well within different sectors with a special emphasis to the well-being of its people. The fourth section examines the constraints and challenges faced by Laos in economic planning. The final section suggests the potential trends in the immediate future.

Introduction

Lao PDR is a landlocked country in Southeast Asia, sharing 5,083 kilometers with five countries, namely Myanmar and China (Northwest), Vietnam (East), Cambodia (South), and Thailand (West). It has plenty of natural resources like timber and minerals (including copper, gold, tin, and gypsum) and has significant hydropower potential. Its population was estimated to be around 6.64 million in 2013 and population density about 28 persons per square kilometers. Laos is a multi-ethnic country (49 ethnicities) with the politically and culturally dominant Lao people making up 54.6% of the population, mostly in the lowlands. Second is the Khmou 10.9%, the Hmong 8%, Tai 3.8%, Phouthay 3.3%, Lue 2.2% and others; 17.1% of the population live in the hills, foothills and mountains.

As Lao PDR is a least developing country and smallest economies among the ASEAN group, two thirds of its households do not have access to electricity, half no safe water supply, and about half of all villages are not reachable by road during the rainy season. The infrastructure remains constrained with a mere 7,141 kilometers of national roads (as of 2004) of which only 56% are paved; besides that there are no railways and only a very limited telecommunications system (Shrestha 2010). Almost one in two persons (46%) lived below the poverty line in 1992 (NSC/MPI, ADB, Sida and WB 2006). So, for bringing poverty down, the National Growth and Poverty Eradication Strategy was prepared in 2003 and consequently, the Sixth National Socio-Economic Development Plan 2006-2010) has placed strong targets for poverty reduction, pushing for an average economic growth of 7.5% per year, growth in agriculture and forestry at 3.0-3.4%, industry at 13.0-14.0%, services at 7.5-8.0%, exports at 18.1%, and imports at 8.8% and etc. After Lao government had reformed the policy, known as the New Economic Mechanism (NEM) in 1986, it was a significant step to open the country to the world especially the step of social economic integration and cooperation i.e. Lao PDR is a member of the Asia-Pacific Trade Agreement (APTA), Association of Southeast Asian Nations (ASEAN) and it is going to be a member of ASEAN Economic Community in 2015 and Lao PDR was granted full membership of WTO, in the recently.

Lao PDR economy has improved especially in the last two decades and highly grew, especially during 2006-2010. The economic has steadily and continually grown from 7.8% in 2007 to 7.9% in 2010 (Das 2012), and it changed from agricultural based economy to industrial based economy respectively. However, Lao PDR is still a least developing

country as shown in the GDP per capita of only \$US1,335 PPP and ranked 8th among the ASEAN countries (World Development Indicators online, World Bank 2014).

Methodology

This paper consists of an introduction and then a description in detail of the economic planning implemented from 2006-2010. It describes the outcomes of economic planning in terms of its impact on the overall economy as well within different sectors with a special emphasis to the well-being of its people. The fourth section examines the constraints and challenges faced by Laos in economic planning. The final section suggests the potential trends in the immediate future.

Findings and Discussion

Economic Plan 2006-2010: The Sixth Five-Year National Socio-Economic Development Plan (2006-2010) (hereinafter called ‘the Sixth Plan’) was formulated to accomplish the general goals of the Socio-Economic Development Strategy until 2020 and Resolution No.8 of the Party Congress, which was approved at the inaugural session of the Sixth National Assembly in July 2006. The Sixth Plan was a breakthrough strategy. The government expanded into programmes and individual projects to implement each year. The targets and goals of the Sixth Plan included:

- Average economic growth at 7.5-8% per year
- Achieve revenue in average of 14.8% of GDP per annum, total investment 32% of GDP (10% public investment, and 22% foreign and private investment)
- Decrease the number of poverty households to below 15% of all households
- Completely stop slash and burn practices
- Create jobs for approximately 652,000 people
- Increase the attendance rate of 6-10 year old children at the primary level to 90.6%
- Decrease the infant mortality rate of less than 1 year old children to 55 per 1,000 live births, and decrease the maternal mortality rate to 300 per 100,000 live births.

Outcomes of Economic Planning: Lao economy has maintained rapid and sustainable growth, low inflation rate, and the national reserves have increased. The Human Development Index (HDI) rank of the country improved from 137 in 2007 to 130 in 2008.

Macroeconomic Growth: The economic grew continuously with average of 7.9% per annum. GDP per capita increased considerably, exceeding the target of the Sixth Five-Year Plan- from USD 818 in 2007-2008 to USD 906 in 2008-2009 and USD 1,069 in 2009-2010, which was an increase of approximately 18% from the year 2008-2009. The economic structure changes from agriculture economy based on raw materials to a market-oriented economy based on processing, and the value added in each sector has shown an increase, which is in accordance with the set direction.

Table 2: Comparison between actual and targeted GDP growth rate in the Sixth Plan

Sector	Target (2006-2010)	Target (Average per annum)	Actual (Average per annum)
Agriculture & Forestry	3-3.4%	3.2%	4.0%
Industry	13-14%	13.7%	12.6%
Services	7.5-8%	7.3%	8.4%
Total	7.5-8%	7.6%	7.9%

Source: NSEDP 2006-2010, MPI, Lao PDR

Financial Sector Growth: the Bank of Lao PDR reported that during 2006-2010, the banking sector contributed to financial stability, and the foreign exchange rate has remained stable. Foreign exchange reserves increased. In short, the banking and finance sector is stable.

Inflation: based on data from Department of Statistics shown, inflation had been effectively managed. The inflation rate decreased from 8% in 2005-2006 to 4.1% in 2006-2007, increased to 7.9% in 2007-2008, and decreased to 0.74% in 2008-2009. In 2010, inflation is likely to increase approximately 4.71%. However, the overall consumer prices remain stable and the inflation rate during the period of the Sixth Plan was an average of 5.09%, which remains at a one-digit level per year, and lower than the economic growth rate.

Sectoral Growth: All the economic sectors experienced growth, which has been linked to structural changes and the enhancement of product quality.

Agriculture and forestry: This sector grew at 4% and accounted for 30.4% of the total GDP in recent years.

Industrial Sector: During the previous years, the industrial sector grew at approximately 12.6% per annum.

Services sector: It grew at a slower rate than the industry sector; its annual growth rate averaged at 8.4% during 2006-2010. Development of the services sector is critical for socioeconomic development. During this period, the contribution of the services sector was 37.2% to GDP. Its major components are wholesale, retail trade and repairing business, constituting 51%; public services 17.3%; and transport, warehousing, post and telecommunication 12.5%. The rest of its constituents are financial services, rental services and public services, including social and private services, hotels and restaurants, and others.

Poverty Reduction

Poverty headcount: the poverty in Lao PDR slightly decreased from 46.0% in 1992/93, 39.1 % in 1997/98, and 33.5% in 2002/03 to 27.6% in 2007/08 respectively. However, if we look at the international poverty line \$1.25 per day the people are still in highly rate of poverty compare to national poverty line – from 56.9% in 1992/93 to 37.4% in 2007/08 (Department of Statistics, 1992/93-2007/08).

Inequality (Gini Index): the inequality still existed in Lao society and it seems to be increased period by period. As we can see from table below, it is increased from 30.5% in 1992/93 to 35.4% in 2007/08 (Department of Statistics, 1992/93-2007/08). In addition, the inequality also increased both in urban and rural areas but it is higher in urban area. However, the inequality in Lao PDR is still lower if compare to other country for example: in 2008, Gini of Thailand was 40.51% and Cambodia was 37.85%.

Figure 1: Poverty Headcount (Source: National Socio-Economic Development, 2006-2010. MPI, Lao PDR)

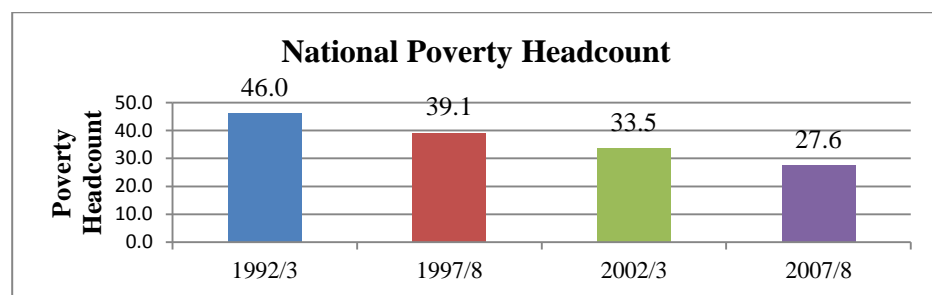


Table 3: Gini Index (Source: LECS I-IV, Department of Statistics, MPI, Lao PDR)

	1992/3	1997/8	2002/3	2007/8
Lao PDR	30.5	34.9	32.6	35.4
Area				
Urban	30.9	39.7	34.8	36.3
Rural	29.0	32.1	30.3	33.4
Rural with road	29.3	32.1	30.3	33.2
Rural w/o road	27.5	30.9	29.4	33.3

Constraints and Challenges: Lao PDR had many achievements during implemented the Sixth Plan (2006-2010); however the country could not avoid constraints challenges, as following:

1. The economic base of Lao PDR is still weak; it is a developing country facing competition at global level.
2. The threats caused by the two phenomenal natural disasters (2008 and 2009) and epidemics such as avian influenza and a new type of influenza, H1N1, somewhat affected the country's development.
3. Many programs and projects lacked financial support to implement
4. Due to disaster recovery projects, project funds were diverted, creating fund shortages in implementing the projects as planned.
5. Macroeconomic management and administration of the government agencies is still limited
6. Population growth may help boost economic growth; however, without proper policies, an increased labor force and aging population can pose challenges. There still is a lack of effective monitoring systems at all levels from the central to the local levels. Information and statistical data are limited and not adequate.

In addition, Shrestha (2010) said that Lao PDR's major development challenges will include, among others, the need for diversifying sources of growth, maintaining macroeconomic stability, strengthening institutional and human capital, creating an attractive business investment climate, ensuring financial sustainability, and strengthening good governance.

Conclusion

The Sixth five-year plan (2006-2010) was a breakthrough strategy and met the development vision of the Party which is mainly focused on the socioeconomic development of the country for better living standard of the citizens and prosperity of the country.

The socioeconomic in Lao PDR was in good status and all the economic sectors experienced growth during 2006-2010 as we can see as following:

- The economy has grown continually with the GDP growth rate about 7.9% per annum; its economic was based on agriculture and forestry with highly share 30.4%, however this sector just grew only 4% per year. The industry was 26.1% with the growth rate of 12.6% and services 37.2% with growth rate of 8.4% per year. The economic structure changes as an economy transforms from subsistence agriculture economy based on raw materials to a market-oriented economy based on processing. From the sectoral composition of GDP suggests that agriculture and forestry sector accounted for 30.4%, industry 26.1% and services 37.2%.
- Foreign exchange reserves have increased, and the country holds enough stock of foreign currencies to pay for import goods and services for approximately six months. Non-performing loans (NPL) have significantly decreased, from 10.52% in 2006 to 3.84% in July 2009. This is lower than the plan projections of approximately 5% of the total credit. However, the rural poor still have only limited access to institutional loans.
- Consumer prices remain stable and the inflation rate during the period of the Sixth Plan was an average of 5.09%, which remains at a one-digit level per year, and lower than the economic growth rate.

Lao PDR has lower income per capita compare to other country. Even though, during the implement of the Sixth Plan achieved major targets such as GDP growth more than 7% but it doesn't mean income distributing increase among the people and cross country. This country still has poor people and inequality in society but the government tries to solve these problems through each stages of planning as we can see in results of LECS, the poverty headcount was decreased from 46% in 1992/93 to 27.6 % in 2007/08 (national poverty line). For inequality, it seems to be increased in lower rate and it was higher in urban area.

However, the implemented period of the Sixth Plan ended but Lao government still tries to initiate plans and policies which suite to country development. As defined in the Seventh Plan (Ministry of Planning and Investment, 2011) , government targets to:

- Maintain the economy in a stable and progressive manner at more than 8% per year.
- Achieve the MDGs (including poverty reduction) and full integration with the ASEAN Community by 2015, and acquire modern technologies and infrastructure.

- Ensure sustainable development by integrating economic development with socio-cultural development and environment protection

Achieving the targets in each period is very challenge for Lao PDR due to impact from country's environment. The important thing that Lao PDR has to consider is enhancing the proposed plans into actions i.e. programmes, projects, financial plans, and human resource plans and include them in the law with real implementation in overall country.

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Bioethics of pharmaceutical services in Indonesia

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Abstract

Public pharmacists are health services professional, and since 1975, pharmacists are required by the Indonesian Government to provide information to patients regarding prescriptive as well as over the counter (OTC) medicines. Before 1975, only the doctors could provide drug- information to the patients and the pharmacists' duty was only to prepare and dispense the doctors' prescriptions. After nearly 40 year, the relation between pharmacists and patients has become more and more complex. Patients have been eager to know about drugs/medicines they get from their doctors, asking questions about pharmacological effects, adverse reactions, the cost of the medicines, possible less expensive substitutes for medicines, etc. The relationship between pharmacists and patients could be built up using ethical principles similar to the relation between doctors and patients. Beauchamp and Childress (1994) have proposed four principles of medical bioethics, known as *prima facie*. The principles include (1) Autonomy (respect to patient autonomy), (2) Beneficence (effect cure), (3) Non-maleficence (cause no harm), and (4) Justice. These four bioethical principles (*prima facie*) could also be adopted by pharmacy professionals in relation with patients. Moreover, some ethical principles in the Universal Declaration on Bioethics and Human Rights (2005), such as principles of human dignity and human rights, benefit and harm, autonomy and individual responsibility, non-discrimination and non-stigmatization, etc. could be adopted in building up ethical principles in the pharmacist-patient relationship.

Introduction

Public pharmacists are health services professionals, and since 1980, pharmacists are required by the Indonesian Government to provide information to patients regarding prescriptive as well as over the counter (OTC) medicines (*Indonesian Government Regulation on Pharmacal Practice* No. 25, 1980). Before 1980, only the doctors could provide drug information to the patients and the pharmacists' duty was only to prepare and dispense the doctors' prescriptions. After nearly 40 years, the relation between pharmacists and patients has become more and more complex. Patients have been eager to know about drugs/medicines they get from their doctors, asking questions about pharmacological effects, adverse reactions, the cost of the medicines, possible less expensive substitutes for medicines, etc. How pharmacists should deal with the patients? Indonesian Pharmacists Ethics Code (*Kode Etik Apoteker Indonesia*, 2009) and Indonesian Government Regulation on Pharmacal Practice (1980) do not give details about pharmacists-patients relationship in public service. This paper tries to answer this question using ethical approach.

Methodology

This paper was developed using literature studies, *i.e.*, comparison of the *Prime facie* of Beauchamp and Childress (1994) with the Universal Declaration on Bioethics and Human Rights (2005), in relation with Pharmacists-Patient relationship in Indonesia.

Discussion

The relationship between pharmacists and patients could be built up using ethical principles similar to the relation between doctors and patients. Beauchamp and Childress (1994) have proposed four principles of medical bioethics, known as *prima facie*. The principles include (1) Autonomy (respect to patient autonomy), (2) Beneficence (effect

cure), (3) Non-maleficence (cause no harm), and (4) Justice. These four bioethical principles (*prima facie*) could also be adopted by pharmacy professionals in relation with patients.

Mephram (2002) stated that respect to patient autonomy means the patients should not be regarded merely as 'cases'. Pharmacists in public duty shall respect the rights of patients. Patients have the right to know about medicines prescribed by their doctors, such as pharmacological effects, adverse reactions, the cost of the medicines, possible less expensive substitutes for medicines, etc. Therefore pharmacists have a noble duty to give all information about those medicines given to them by the doctors. Respect to the patients autonomy has to be translated into professional answers to them.

The second principle, 'beneficence' means that pharmacists in public duty shall give the best and right services in preparation and dispensing of the prescriptive drugs accordingly, as well as OTC ones to the patients. The services could give benefit to the patients and in turn effect cure. The principle of beneficence must be kept strongly by pharmaceutical professional duty in public services.

The non-maleficence as the third principle in *prima facie*, means that the pharmacists in public duty shall not cause harm to the patients. This principle could be implemented by pharmacists using precautional acts. In preparing the prescription drugs for example, an accurate examination of the doctor's prescription must be done first. If there is any doubt about what the doctor has written in this prescription, pharmacist has to consult the doctor, asking clarification about his/her prescription. Only after getting the clarification, the pharmacist could then start preparing drug for the patients.

The fourth principle, 'Justice' means that pharmacists in public duty shall treat patients fairly, e.g. without sexual and racial discrimination (Ben Mephram 2002). Justice also means that pharmacists must use all of their professional capacities for the betterment of patients.

In 2005, the 33rd UNESCO General Conference adopted the Universal Declaration on Bioethics and Human Rights (2005). The Scope of the Declaration includes *addressing ethical issues related to medicine, life sciences and associated technologies as applied to human beings, taking into account their social, legal and environmental dimensions*. Ethical principles set up by the Declaration such as human dignity and human rights, benefit and harm, autonomy and individual responsibility, equality, justice and equity, etc. should be adopted in building up ethical principles in the pharmacist-patient relationship.

Article-3 (Human dignity and human rights) of the Declaration said "*human dignity, human rights and fundamental freedom are to be fully respected*". What is the meaning of the Article? Andorno see (ten Have, 2009) stated that Article-3 reflected a real concern about the need to ensure respect for the inherent value of every human being and of humanity. Moreover he stated that this concern is by far broader than simply ensuring "respect for autonomy", since it includes the protection of those who are not yet, or who are no longer, morally autonomous, such as newborns, persons suffering from serious mental disorders, etc.. Applying Article-3 to the pharmacist-patient relationship is therefore, a must. It will strengthen the principle of respect for patient autonomy in the *prima facie*.

Article-4, 'benefit and harm' states that "in applying and advancing scientific knowledge, medical practice and associated technologies, direct and indirect benefits to patients, research participants and other affected individuals should be maximized and any possible harm to such individuals should be minimized".

Article-4 is strengthening the principle of beneficence and non-maleficence in *the prima facie*. Pellegrino (see ten have, 2009) stated that the physician's obligation to beneficence is binding, even if through some significant suppression of his or her own self interest. Moreover he said that "*within the role-related scope of their duties, nurses, pharmacists and allied health workers are held to proportionate degree of beneficence.*" At the same time, any possible harm should be minimized.

Article-12, 'equality, justice and equity' states that "*the fundamental equality of all human beings in dignity and rights is to be respected so that they are treated justly and equitably*". Therefore in accord with principle of justice in the *prima facie*, this Article could be applied by pharmacists in relation with all patients, to consider them equally as human beings and treated justly and equitably (d'Empaire, see ten Have, 2009).

Conclusion

The *prima facie* and the Universal Declaration on Bioethics and Human Rights, could be used by the Indonesian pharmacists as guidance for improving the Indonesian Pharmacists Ethics Code and the Government Regulation on Pharmacal Practice.

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Public responsibility in healthcare

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Abstract

Health is a basic human right. It is the moral obligation of the society to ensure the access of everyone to some level of health care services necessary for living, functioning normally and pursuing life activities. Traditionally, patients are usually not held responsible for having a role in causation of their illness. When a person becomes ill, medical treatment implies that patients cannot be blamed for their condition. But if the individual choices have been unhealthy, if an individual remains uninfluenced by health education, and suffers a health problem due to his unhealthy life style or risky behavior, some legal and financial repercussions may apply and be justified. Examples include a drunk driver causing an accident, a smoker getting lung cancer, or suffering heart attack because of serious over weight, liver disease caused by alcohol consumption, AIDS because of unsafe sexual activity, etc. Since the person plays a major role in in the causation of the medical problem, he/she may be held legally/financially responsible for the consequence of unhealthy and risky behavior to the public. This is especially true because of the use of advanced technology in contemporary health care which offers sophisticated and expensive therapeutic options. A political dialogue may be needed over the moral and ethical issues.

Introduction

Healthcare has an instrumental power that provides people with good health and long life and special protection from pain and disability. Health is highly valued in the most cultures. It is valuable because it is necessary for an individual to pursue many other values in life. Without life-long access to appropriate healthcare, attaining this goal is hampered. United Nations Universal Declaration of Human Rights stated that *“everyone has the right to a standard of living adequate for the health and well-being of oneself and one’s family, including... medical care.”*

In 2005 the United States and the member states of the World Health Organization (WHO) signed the World Health Assembly resolution, article 58.33, which stated that everyone should have access to healthcare services and should not suffer financial hardship when obtaining these services. A study says the right-to-healthcare is not just good management, justice, or humanitarianism; they are obligations under human-rights law."

But if an individual’s present health problem is due to his unhealthy life style or the risky behavior in the past, is he not responsible for the consequence of his prior behavior? For example, a drunk driver causing an accident, liver disease caused by alcohol consumption, continuation of drinking after liver transplantation where alcohol reduces the chance of organ survival, continuation of smoking after coronary bypass surgery where smoking negatively affects the outcome of coronary bypass surgery, a smoker getting lung cancer, suffering high blood pressure because of over eating fatty meal, persistent obesity causing diabetes, continuation of intravenous drug abuse after valve replacements where it has chance of re-infection, AIDS because of unsafe sexual activity, cycling without helmet and sustaining a head injury, skiing, top-class sports, and other hazardous activity, etc.

As for the Universal Right to healthcare, in 2013 over half of the world’s countries had a right to health care in their national constitutions. Canada spends half as much of its per capita on healthcare. United Kingdom provides healthcare to all citizens spending 41.5% of total budget. USA spends on healthcare US\$1.9 trillion, with Federal government spending of US\$75.5 billion in smoking and obesity related medical expenses per year respectively. Alcoholism and drug addiction account for annual healthcare costs of about US\$22.5 billion and US\$12 billion, respectively. Spending on healthcare relating to HIV/AIDS is over US\$13 billion per year. Since 1980, contemporary healthcare has become sophisticated and expensive due advancements in diagnostic capabilities and related therapeutic possibilities and due to the shortage of recourse; does this not have moral and ethical value?

In addition, governments are spending a lot of money for health education; is it not rational thinking in respect to the concept of responsibility? Liberal egalitarianism, presents a way of holding individuals accountable for their choices that avoids most of the problems pointed out by the critics. The aim of the article is to rethink the responsibility and healthcare access.

Methodology

This retrospective normative research was done based on literature review. The Pubmed, Google scholar, Embase and Web of science were used as the search engine for literature. Key words for search articles were public responsibility; healthcare ethics, shortage of resource in healthcare.

Discussion

Life style diseases: World Health Organization (WHO) shows that 10 leading risk factors contributing to the burden of disease in high income countries can be attributed to unhealthy life styles (table 1).

Table 1 shows 10 leading risk factors contributing to the burden of disease attributed by unhealthy life styles of individuals.

Risk factor	% cause of disease burden
Tobacco	12.2
Blood pressure	10.9
Alcohol	9.2
Cholesterol	7.6
Overweight	7.4
Low fruit and vegetable intake	3.9
Physical inactivity	3.3
Illicit drugs	1.8
Unsafe sex	0.8
Iron deficiency	0.7

WHO has also estimated that “*in the developed countries of North America, Europe and the Asian Pacific, at least one third of all disease burden is attributable to these six risk factors: tobacco, alcohol, blood pressure, cholesterol, obesity and unsafe sex.*” Blood pressure, cholesterol, obesity, and diabetes are related to unhealthy food eating behaviors. It is far better economically, medically and ethically to prevent obesity than to try to treat it, once it occurs. Studies have revealed that men who followed seven personal health habits as for example eating breakfast, not smoking, no alcohol and so forth had lower morbidity and mortality rates than those who followed the six; those who followed six of the habits had better health and mortality outcomes than those who followed five; and so forth. Similarly, researchers demonstrated that individuals who develop their own diet and exercise plans are more successful at achieving and maintaining weight loss than those who play a more passive role. Another research has shown that the leading causes of death for Americans under 75 are not diseases, such as cancer, coronary heart disease and stroke, but rather tobacco, diet, and exercise, sexual behavior and illicit drug use. All these factors are directly related to individual behavior and were found to constitute the greatest causes of premature death. The Stanford Coronary Risk Intervention Program (SCRIP), a research for a 4-year period that combined lifestyle modification (diet, exercise, and smoking) with counseling and medication, reported a significant reduction in cholesterol consumption (40%), low density lipoproteins (LDL) (23%), less narrowing of their arteries (47%), increase in exercise (20%) and other changes.

Western philosopher John Rawls said basic social justice results from a social contract between the society and institutions where the parties (people) come together to achieve the benefits. The parties are imagined as normal and fully cooperating members of society and possessing the two moral powers – capacity for a sense of justice and conception of the good. Norman Daniels shifts Rawls theory in healthcare. Health as a primary social good and people are normal and fully functioning individuals. Therefore, people should make significant contribution to protect the normal function by controlling attitude as much as possible.

In a liberal society, individuals are autonomous bodies. One’s body belongs to oneself (responsibility) and one’s health status is determined by personal behavioral choices (causal responsibility). The human right to healthcare

implies that the individual has an obligation for healthy behavior and the restriction of unhealthy choices as an autonomous individual. Moreover, individuals have provided education in basic health and in safe sex with information about how to avoid sexually transmitted diseases. Furthermore, individual personal control over health is fundamentally a moral question of right and wrong. But when the individual choices turn out badly and when individuals remain uninfluenced by moral appeal of health education, the legal and financial sections may consider justification. Therefore, there is much room for improving health habits, lifestyle modification, and to exert and to control over it.

However, the right to health cannot be an unlimited right. It cannot be a right of everyone to have access to whatever healthcare services would be of net benefit to the individual. Rationing of healthcare has to be a fact of life. We must set priorities. We must acknowledge that recourses must be preserved for other social needs, like housing, education, monitoring of diseases, control infections, guarantee the safety of food and drugs, minimize pollution and scientific research to save millions and millions of lives.

Traditionally, healthcare is disease oriented, rather than health oriented. Health orientation healthcare is focused mainly on behavior and lifestyle issues. In medical model of disease, patients are usually not held responsibility for the genesis of their illness. When a person becomes ill, the medical judgment implies that he cannot be blamed for his condition. The treatment and care are appropriate and morally desirable for him. But the new notion of WHO's health promotion has defined it as "*a process of enabling people to increase control over and to improve their health.*" The strategy behind this notion is to relate personal choice and social responsibility in health for creation of healthy environments and positive personal health behaviors within it. Consequentiality arguments are not concerned with what individuals have done, but rather with how they will behave in the future. It links the distribution of costs or treatment to behavior because it wants to affect future conduct in a certain way by creating incentives or disincentives to certain types of behavior. Holding people responsible for their choices with respect to unhealthy life-styles could be justified purely by incentive arguments.

Conclusion

This attempt may guide and change the individual's behavior for future health and may reduce the cost of healthcare. Research is needed to find out the relationship between major expenditure with certain patterns of behavior. Planning and carrying out a health promotion program can shape individual consciousness about responsibility and causal factors in health. Empowering the role of individuals may address better health-related problems.

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The need for and ethical handling of East-West-Native integrated global medicine

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Abstract

The financial burden of medical care expenses is increasing for families globally. Much of the rise in healthcare costs can be attributed to advances in medical technology. 63% of all deaths worldwide currently stem from non-communicable diseases (NCDs) chiefly cardiovascular diseases, cancers, chronic respiratory diseases and diabetes. The risk factors stem from a combination of modifiable and non-modifiable risk factors; non-modifiable risk factors cannot be changed by an individual or the environment and include age, sex, and genetic make-up. Non-Western traditional medicines should step in to provide local treatment modalities that have been proved suitable because of genetic and local sociocultural and environmental factors and the history of their usage for over thousands of years. Complementary medicine can provide safe and affordable medical care to local residents. Modifiable risk factors are those that societies or individuals can change to improve health outcomes. Traditional Chinese medicine can be of great help. The gap in health and life expectancy between aboriginal and Torres Strait Islander Australians continues to be significant. Western medicine specialists think that the gap in life expectancy will not be closed until aboriginal peoples and Torres Strait Islanders have better access to high quality primary healthcare. Traditional Chinese medicine offers great benefit in health promotion for a unique local social economic environment. There are often major inequalities in access to Western healthcare that may be improved by promoting East-West-Native integrated medicine. However, one may face with ethics, human security and sustainability issues. We thus need to accumulate more knowledge and experience in this new field to provide safe care with scientific evidence to our patients. We need to empower the public in their healthcare choices. The physicians may face role stress in providing Western medicine along with Eastern or native traditional medicine. The principle of autonomy governs decision-making in the healthcare system of local and Native residents. Personal identity and moral responsibility also play an important role in selection of the type of treatment. Many issues such as genetics and ethics, biotechnology, environmental ethics, medical ethics, bioethics education in schools and universities, and public health ethics need to be discussed and debated for promoting East-West-Native integrated global medicine.

Introduction

The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility to patients first and foremost, as well as to society, to other health professionals, and to self. In responsibility to our society, we must understand that the financial burden of medical care expenses is increasing for families globally. Much of the rise in healthcare costs can be attributed to advances in medical technology. Some deaths from non-communicable diseases are caused mainly by cardiovascular diseases, cancers, chronic respiratory diseases and diabetes. The risk factors stem from a combination of modifiable and non-modifiable risk factors; non-modifiable risk factors include age, sex, and genetic make-up.

Western medical doctors should consider promoting medical treatment other than Western medicine and the non-Western traditional medicines should step in to provide local treatment modalities as complimentary treatment. These treatments have been proved suitable because of genetic and local socio-cultural and environmental factors and the history of their usage for over thousands of years. Complementary medicine can provide safe and affordable medical care to local residents. Modifiable risk factors are those that societies or individuals can change to improve health outcomes. The gap in health and life expectancy between aboriginal and others continues to be significant. Western medicine specialists think that the gap in life expectancy will not be closed until aboriginal peoples and others

have better access to high quality ‘Western’ primary healthcare. Traditional Chinese medicine and other Eastern traditional medicine like the Indian, Thailand and Malay traditional medicines offer great benefit in health promotion for a unique local social economic environment. There are often major inequalities in access to Western healthcare that may be improved by promoting East-West-Native integrated medicine. However, one may face with ethics, human security and sustainability issues.

Methodology

We searched for references to support ethical issues in promoting East-West-Native integrated medicine. This includes references to support if traditional medicine of TCM, India, Thailand, Malay (“Eastern Medicine”, other than Western Medicine) and native aboriginal traditional medicines are effective and safe for use. The code of ethics and professional conduct are based on general ethical principles which we must abide to. We search for the code of conduct about specific professional responsibilities like for traditional healers. We search in term of ethical principles contributing to society and human well-being. This includes avoiding harm to others, being honest and trustworthy, being fair and taking action not to discriminate, respect privacy, honor confidentiality and specific professional profession responsibilities, and professional competence.

Also we did a search on how to provide a comprehensive and thorough evaluation of East-West-Native integrated medicine and their impacts, including analysis of possible risks. We must minimize any harm when practicing different medicines. Any kind of treatment is a kind of “medical treatment”. We used to consider all other treatment other than Western medicine as alternative medicine or complementary medicine. This included early Greece traditional “fluid” concept and balanced medical treatment between heat and cold, Indian Ayurveda, Chinese medicine and various traditional medicines around the world. Many Americans use CAM to prevent and control chronic disease.

We reviewed the principles adopted by the American Medical Association (Adopted June 1957; revised June 1980; revised June 2001). They include: a physician must be dedicated to providing competent medical care, with compassion and respect for human dignity and rights. It is clear that we should promote East-West-Native integrated medicine to our patients.

Discussion

Medical treatment is also part of cultural behavior. Since it arises from the local society and culture, it is also affected by culture. Chinese medicine is one of the most complete CAM in both theory and clinical experience. “Zheng” in Chinese Medicine is very different from the general ‘symptoms’ or ‘syndromes’ the Western medicine mentions. “Zheng” represents the status of the human organism with a specific cause of disease, site, the character of disease, physiology and pathological condition at that very moment. It represents the good and evil stage of the patient condition.

Indian Ayurveda is one of the ancient medicines. Foot massage is a kind of medicine that needs no drug or operation. It is a self-healing medical management. Traditional aborigine medicine still plays an important role even in Taiwan special medical environment where both Western and Chinese medicine are mainstream. There are so many kinds of alternative medicine that are very helpful, and not just in pain management. All these help to draw closer the doctor patient relationship and promote a holistic patient care. It is hoped that more physicians will be interested to learn and practice them.

A physician shall uphold the standards of professionalism, be honest in all professional interactions, and strive to report physicians who are deficient in character or competence, or engage in fraud or deception, to appropriate entities. We should uphold our standards of professionalism not only in the field of Western medicine but also should learn more about other types of medicine that may be of great help or can treat our patients much better than if we only use Western medicine.

A physician shall respect the law and also recognize the responsibility to seek changes in requirements which are contrary to the best interests of the patient. This clearly shows that we need to promote medicines that have proof to do

good to patient health and wellbeing, and consider the best interest of all patient.

A physician shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences and privacy within the constraints of the law. This includes the right to choose medicine other than Western medicine.

A physician shall continue to study, apply, and advance scientific knowledge, maintain a commitment to medical education, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated. This encourages all doctors to learn more about East-West-Native Integrated Medicine and learn knowledge and wisdom of aboriginal people too.

A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical care. They should be free to associate with the TCM doctors, Indian medicine, and other doctors and aboriginal traditional medical providers too.

A physician shall recognize the responsibility to participate in activities contributing to the improvement of the community and the betterment of public health. From the experience of the various aboriginal people in different countries, promoting the East-West-Native Integrated Medicine can achieve the betterment of public health, especially mental health in aboriginal people.

A physician shall, while caring for a patient, regard responsibility to the patient as paramount. Thus we should feel responsible for their holistic well being too, and this needs to include the aboriginal people traditional knowledge and traditional medicine and daily practice.

A physician shall support access to medical care for all people. This can only be achieved through promoting East and Native traditional medicine beside Western medicine services because using Western medicine alone is a burden for the government and the public and makes medical care unreachable. We need to empower the public in their healthcare choices concerning East-West-Native Integrated Medicine. The physicians may face role stress in providing Western medicine along with Eastern or native traditional medicine. We thus need to accumulate more knowledge and experience in this new field to provide safe care with scientific evidence to our doctors and patients. The principle of autonomy governs decision-making in the healthcare system of local and native residents.

Personal identity and moral responsibility also play an important role in selection of the type of treatment. But before this can be achieved we need to promote, teach, do research, and train doctors with the ability and competence to practice or at least understand East-West-Native Integrated Medicine. The most difficult is for the law and regulation to allow them to practice. Many issues such as genetics and ethics, biotechnology, environmental ethics, medical ethics, bioethics education in schools and universities, and public health ethics need to be discussed and debated for promoting East-West-Native integrated global medicine.

So many of the public worldwide is using some form of alternative medicine, which reflects the changing needs and values in the society. We agreed with Clark PA who stated that Western medicine has failed to see alternative medicine as complementary and integrative with conventional medicine. This is due to the fact that there is very little scientific data available regarding the safety, efficacy, optimal dosage and side-effects or interactions of these alternative medicine therapies. Many physicians dismiss a patient's questions concerning alternative medicine because the physician believes it is quackery without any proof to support this claim. This violates the patient's right to all possible treatment options and encourages patients to use these therapies without their physician's knowledge.

The combination of failure to inform physicians of usage and the possibility of adverse reactions with prescription traditional drugs/ herbs is placing the lives of many in jeopardy. Ethically, people have the right to use alternative medicine therapies as a matter of autonomy, but they also have the duty not to harm themselves. To ensure their safety, alternative medicine therapies must be evaluated in regards to safety and efficacy before they can be used by the public. So, to do it ethically, there are still lots of hard works to be done before we can promote East-West-Native integrated global medicine. We conclude that there is an urgent need to promote East-West-Native integrated global medicine and also lots of debates and discussions for the ethical handling of it.

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Demand for financial assets with changes in risk under risk aversion

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Abstract

This paper proposes two concepts of changes in risk which are the subsets of first-degree stochastic dominance (FSD) changes called an ‘FSD shift with respect to a point k ’ (k-FSD shift) and a ‘monotone probability ratio FSD shift with respect to a point k ’ (k-MPR shift). These shifts can be applied to specific economic models such as the standard portfolio model or the coinsurance model which is linear in both the decision and the random variable. In the standard portfolio model or the coinsurance problem, point k can be the sure interest rate or the insurance premium, respectively. This paper explores that the MPR shift in Eeckhoudt and Gollier (1995) is the subset of the k-MPR shift and any k-MPR shift can be decomposed into two FSD shifts, one k-FSD and the other MPR. When we restrict the payoff function to be linear in the random variable and limit our analysis to risk-averse decision makers, we obtain interesting comparative statics results for these two shifts. When comparing the result for the MPR shift with the comparative statics result for the k-MPR, a trade-off is observed between the restrictions on the set of changes in the cumulative distribution function (CDF) and the structure of the concerned payoff function.

Introduction

Fishburn and Porter (1976) found that, in the simple case of one risky and one safe asset portfolio model, the first-degree stochastic dominance (FSD) improvement does not necessarily lead a risk averse decision maker to increase his demand for the risky asset. Meyer and Ormiston (1983) also showed that an arbitrary FSD improvement induces the risk-averse agent to increase the level of his optimal choice if and only if the optimal level under uncertainty is independent of the value of the random exogenous variable. However, it is an uninteresting case because the restriction imposed on the structure of the decision model is too severe.

Some researchers imposed the restriction on the subsets of FSD shifts to obtain desirable comparative static statements regarding the choice made by the risk-averse decision maker. Landsberger and Meilijson (1990) introduced the ‘monotone likelihood ratio’ (MLR) order which is given by imposing the monotonicity restriction on the probability density function (pdf) for comparative static purpose. Eeckhoudt and Gollier (1995) considered the ‘monotone probability ratio’ (MPR) order which is defined by requiring the cumulative distribution function (CDF) ratio to be monotone.

Following this line, this paper proposes two concepts of changes in risk which are the point-FSD shift and the point-MPR shift for special subsets of FSD shifts and obtains the interesting comparative statics results for the point-FSD shift and the point-MPR shift with assuming linearity on the payoff function. This paper also shows that the MPR shift considered in Eeckhoudt and Gollier (1995) is the subset of the k -MPR shift and that any point-MPR shift can be decomposed into two FSD shifts, one point-FSD and the other MPR in Property.

This paper applies to the specific economic model such as the standard portfolio model or the coinsurance model for these two shifts. When the payoff function of these decision models is linear in both the decision and the random variable, a simple form of $z(x, \alpha)$ may be expressed as $z(x, \alpha) = \alpha(x - k) + z_0$, where z_0 and k are exogenous parameters. In the standard portfolio model or the coinsurance problem, the point k can be the sure interest rate or the insurance premium, respectively.

This paper is organized as follows. In section 2, we present three definitions of the subsets of FSD shifts (MPR, point-FSD, and point-MPR) and derive the property of the point-MPR. In Section 3, we demonstrate the general economic model, apply to the standard portfolio model and the coinsurance model, and carry out the comparative static analysis for these two shifts. Finally, section 4 provides a concluding remark.

Definitions of the subsets of FSD changes: In this paper, the random variable x is assumed to be characterized by its initial and final cumulative distributions (CDFs), $G(x)$ with a finite interval $[x_1, x_3]$ and $F(x)$ another finite interval $[x_2, x_4]$, where $x_1 \leq x_2 \leq x_3 \leq x_4$ and their corresponding probability density functions (PDFs) are $g(x)$ and $f(x)$, respectively. Two types of FSD shifts are introduced. As a special feature, these two CDF orders are specified by a given point and thus each set of CDF changes satisfying the orders is determined by the given point. One is called an ‘FSD improvement with respect to a point’ (point-FSD). This is defined by imposing restrictions on the CDF difference, $G-F$ and the pdf difference, $g-f$ and the restrictions depend on a given point. A point-FSD shift does not use any monotonicity restriction on the likelihood or the probability ratio between a pair of distributions. Another CDF order which depends on a given point is called an ‘MPR with respect to a point’ (point-MPR). This is obtained from weakening the conditions required for an MPR shift, and the degree of the weakened restriction depends on a given point.

Now we present three different FSD orders, MPR order and two newly defined ones, k -FSD and k -MPR. First, MPR order considered in Eeckhoudt and Gollier (1995) is defined by imposing the monotonicity restriction on the CDF ratio.

Definition 1. $F(x)$ represents a monotone probability ratio FSD shift from $G(x)$ (denoted by F MPR G) if there exists a non-decreasing function $H: [x_2, x_3] \rightarrow [0, 1]$ such that $F(x) = H(x)G(x)$ for all $x \in [x_2, x_3]$.

The fact that $H \in [0,1]$ guarantees $G(x) \geq F(x)$ for all $x \in [x_1, x_4]$, and thus an MPR order is an FSD one. In addition to this order, we introduce two new orders, a point FSD and a point MPR which are the subsets of FSD shifts. A point FSD is defined by imposing monotonicity restrictions on the CDF difference and the pdf difference.

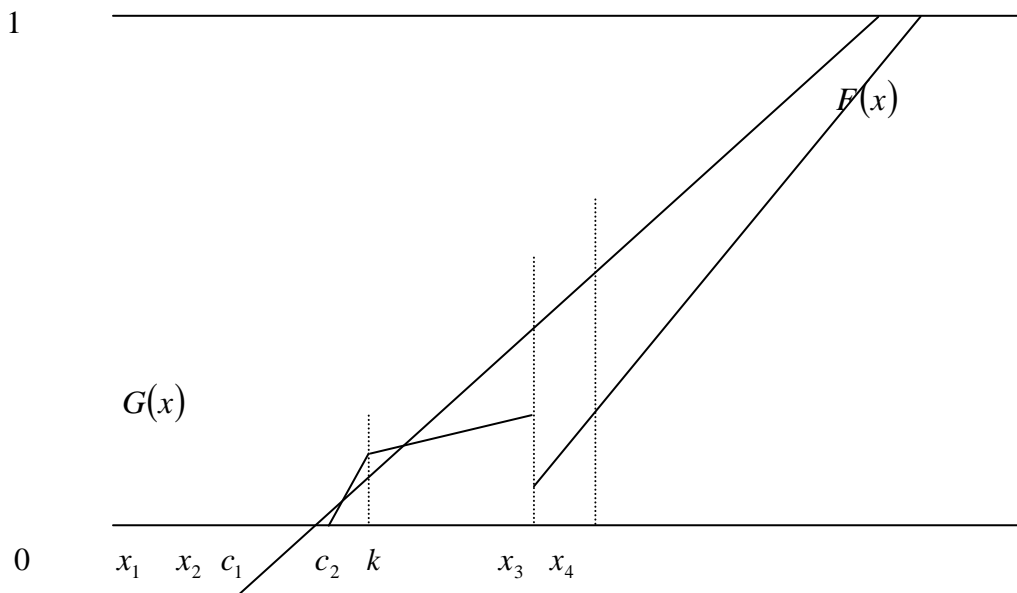


Figure 1. F k -FSD G

Definition 2. Given a point $k \in [x_2, x_3]$, $F(x)$ represents an FSD shift with respect to a point k from $G(x)$ (denoted by F k -FSD G) if $G(x) \geq F(x)$ for all $x \in [x_1, x_4]$, and $g(x) \leq f(x)$ for all $x \in [k, x_3]$.

F k -FSD G is described in Figure 1. Since the condition includes the general FSD condition, a k -FSD shift is also an FSD shift. In addition to the condition F FSD G , a k -FSD change requires only the restriction that, given the point k , $G(x) - F(x)$ is non-increasing or $g(x) \leq f(x)$ for the interval $[k, x_3]$. For the left-side of the point k , the only restriction required is F FSD G .

In figure 1, given the point k , the fact that the difference $G - F$ is decreasing for the interval $[k, x_3]$ guarantees the shift to be a k -FSD shift. Since the ratio of F to G is decreasing for the interval $[c_1, c_2]$, this figure cannot be an MPR shift. We noted that, as the given point k becomes large, the restriction on the point-FSD becomes less severe.

Compared with several definitions of FSD shifts such as the MLR, the L-MLR and the MPR order, a k -FSD does not restrict the number of times of crossing between the PDFs f and g , nor is there any monotonicity restriction on the likelihood or the probability ratio between the two distributions. While the set of CDF changes defined by the point-FSD depends on a given point k , it generally includes shifts that do not satisfy any of the above three types of FSD shifts before. Now, consider a point-MPR requiring the monotonicity restriction on the CDF ratio only for the points to the right-side of the given point, and the shift is defined as:

Definition 3. Given a point $k \in [x_2, x_3]$, $F(x)$ represents a monotone probability ratio FSD shift with respect to a point k from $G(x)$ (denoted by F k -MPR G) if, with the ratio function H given by $H: [x_2, x_3] \rightarrow [1, 0]$ such that $F(x) = H(x)G(x)$, the function H is non-decreasing in $x \in [k, x_3]$ and $H(x) \leq H(k)$ for all $x \in [x_2, k]$.

F k -MPR G is described in Figure 2. Given the point k , the figure shows that the ratio F/G is non-decreasing for the interval $[k, x_3]$, and $F(x)/G(x) \leq F(k)/G(k)$ for all $x \in [x_2, k]$. Figure 2 satisfies the k -MPR conditions, but it cannot be an MPR shift because the CDF ratio is decreasing for the interval $[c_1, c_2]$. Note that the set of MPR shifts is a subset of the set of k -MPR shifts, for any given $k \in [x_2, x_3]$. The shift also does not satisfy k -FSD condition because the difference $G - F$ is increasing for some points in the interval $[k, x_3]$.

The MPR condition is relaxed for the interval $[x_2, k]$ in which a k -MPR does not require the CDF ratio function H to be non-decreasing. As a special case, the set of MPR shifts is equal to the set of k -MPR shifts, where $k = x_2$. A point-MPR is related to a point-FSD shift in such a way that, given a point k , a k -MPR shift can always be decomposed into two shifts, one MPR and the other k -FSD. This is formally given in Property.

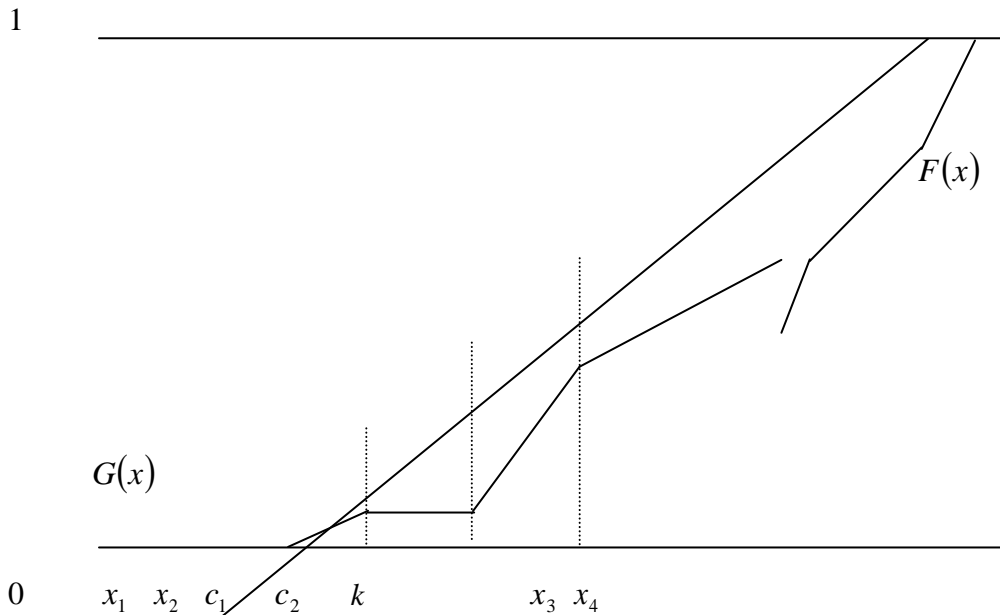


Figure 2. F k -MPR G

Property. Any k -MPR shift can be decomposed into two FSD shifts one k -FSD and the other MPR, that is, F k -MPR G , then there exists an intermediate CDF G_1 such that F k -FSD G_1 MPR G .

Proof: With a shift from G and F satisfying the condition F k -MPR G , where $k \in [x_2, x_3]$, define an intermediate CDF G_1 as

$$G_1(x) = \begin{cases} \lambda_k G(x), & \text{when } x < k \\ F(x), & \text{when } x \geq k \end{cases} \quad (1)$$

where $\lambda_k = F(k)/G(k)$, respectively. Then we know that G_1 MPR G because the ratio of G to G_1 is non-decreasing for all $x \in [x_1, x_4]$, and that F k -FSD G_1 because the k -MPR condition implies that $F(x)/G(x) \leq \lambda_k$ for all $x \in [x_2, k]$ which, in turn, implies $G_1(x) \geq F(x)$ for all $x \in [x_2, k]$. Q.E.D.

Figure 3 is given to show the result in Property. The shift from G to F described in Figure 3 satisfies the condition F k -MPR G , but does not satisfy the MPR or k -FSD condition given in Definitions 1 and 2, respectively. The figure shows that the intermediate CDF G_1 , given by using (1), satisfies the relationship that F k -FSD G_1 MPR G .

This property can be considered as the examples showing that a CDF order can be decomposed into shifts that can be generated by two CDF orders. It has an important consequence with regard to providing a general comparative static statement. By Property, the comparative static statement for the set of k -MPR shifts can be obtained from the ones made for the MPR and the k -FSD orders.

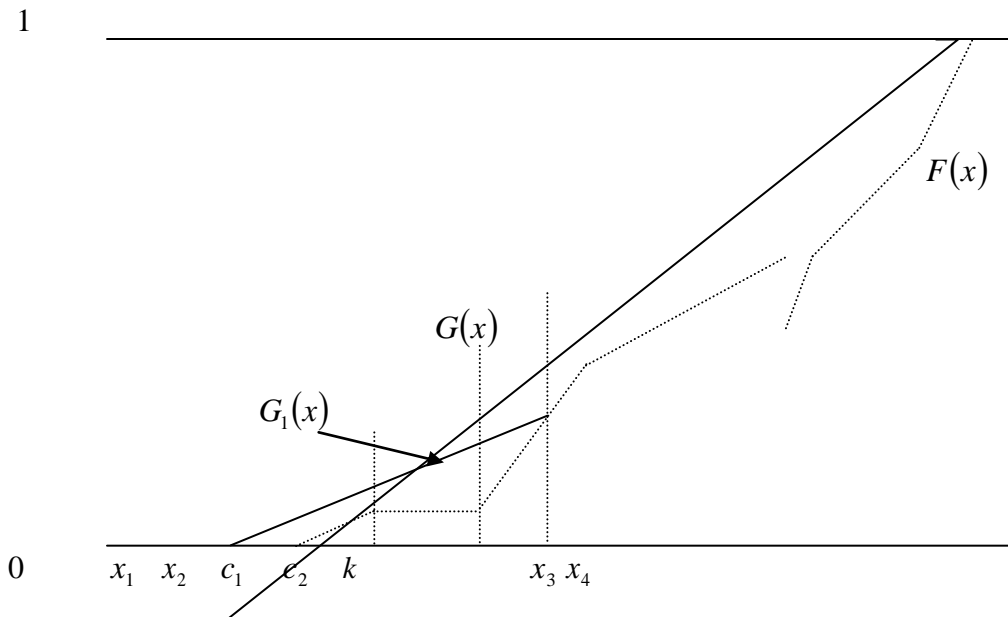


Figure 3. F k -MPR G that is the sum of a k -FSD and an MPR

Comparative Statics Results: Following the general one-argument decision model in Kraus (1979), Katz (1981), and Meyer and Ormiston (1985), the standard notation for this general decision model is

$$\max_b E[u(z(x, b))], \quad (2)$$

where b is a choice variable, x is an exogenous random variable, and z is the payoff function which depends on both the choice variable and the random variable. It is also assumed that the utility function u is strictly concave.

When we assume that the payoff function is linear in both the decision and the random variable, a simple form of $z(x, \alpha)$ may be expressed as $z(x, \alpha) = \alpha(x - k) + z_0$, where z_0 and c are exogenous parameters. Applications of this decision model and changes in PDF or CDF to financial market analysis are numerous. In the standard portfolio

model, the payoff function can be expressed as $z(x, \alpha) = z_0 + bW_0(x - k)$ where b is the proportion of the initial wealth W_0 allocated to the risky financial asset, x the random rate of return of the risky financial asset and $z_0 \equiv W_0(1 + k)$ with k being the sure interest rate. This payoff function is equivalent to the simple form of $z(x, \alpha)$ when $\alpha \equiv bW_0$. Point k can be the sure interest rate in k -FSD and k -MPR orders.

In the standard coinsurance problem, the payoff function is given by the final wealth $z(x, \alpha) = W_0 - \lambda\mu - (1 - b)(x - \lambda\mu)$ where x is the amount of random loss, μ the expected loss, b coinsurance rate, $b\lambda\mu$ the insurance premium, and W_0 the initial wealth. This payoff function is equivalent to the simple form of $z(x, \alpha)$ when $z_0 \equiv W_0 - \lambda\mu$, $\alpha \equiv -(1 - b)$ and $k \equiv \lambda\mu$. If we limit the discussion to private insurance contracts, the coinsurance rate b belongs to the interval $[0, 1]$. Then, by definition, α is non-positive and belongs to the interval $[-1, 0]$. Point k can be the insurance premium in k -FSD and k -MPR orders.

Given the general one-argument model (2), let b_G and b_F be optimal choices under the CDF's G and F , respectively.

First, we examine the sign of $b_F - b_G$ when a shift from an initial CDF G to a final CDF F occurs. Adding a structural restriction that the concerned payoff is linear in the choice variable b , the following theorem shows that, given a point k , the set of the k -FSD shifts is shown to be sufficient for a desirable comparative static statement.

Theorem. For all risk averse decision-makers, $b_F \geq b_G$ if

- (a) $z(x, b)$ is linear in b and $z_b(k, b) = 0$
- (b) F k -FSD G
- (c) $z_x \geq 0$ and $z_{bx} \geq 0$.

Proof: With the CDF's F and G given, each expected utility can be expressed as a function of the choice variable b ,

$$EU_F(b) = \int_{x_2}^{x_4} u[z(x, b)]f(x)dx$$

$$\text{and } EU_G(b) = \int_{x_1}^{x_3} u[z(x, b)]g(x)dx,$$

respectively. Remember that the support of G is a finite interval $[x_1, x_3]$ and the support of F is another finite interval $[x_2, x_4]$. In order to prove $b_G \leq b_F$, it suffices to show that for any pair of choices b_1 and b_2 such that $b_1 \leq b_2$,

$$\text{if } EU_G(b_1) \leq EU_G(b_2), \text{ then } EU_F(b_1) \leq EU_F(b_2) \quad (3)$$

Assume that $\Delta_G = EU_G(b_2) - EU_G(b_1) \geq 0$, where $b_1 < b_2$, then it is sufficient to show that the following is non-negative,

$$\Delta_F = EU_F(b_2) - EU_F(b_1) = \int_{x_2}^{x_4} A(x)f(x)dx \quad (4)$$

where $A(x) = u[z(x, b_2)] - u[z(x, b_1)]$. Since $z_{bx} \geq 0$ by assumption, the difference $z(x, b_2) - z(x, b_1)$ is non-decreasing in x . The assumption $\Delta_G = \int_{x_1}^{x_3} A(x)g(x)dx \geq 0$ excludes the case where $z(x, b_2) - z(x, b_1) \leq 0$ for all $x \in [x_2, x_3]$ because the difference $z(x, b_2) - z(x, b_1)$ is non-decreasing in x by the assumption of $z_b(x, b)$, and it contradicts the assumption, that is, with the assumption $u' \geq 0$, the case implies $A(x) \leq 0$ for all $x \in [x_1, x_3]$ and thus $\Delta_G \leq 0$. If $z(x, b_2) - z(x, b_1) \geq 0$ for all $x \in [x_2, x_3]$, then the assumption $u' \geq 0$ implies that $A(x) \geq 0$ for all $x \in [x_2, x_4]$ and thus $\Delta_F \geq 0$.

First consider the set of k -FSD shifts. We know that the linearity assumption of the payoff function implies that for b_1 and b_2 , there exists a point $k(b_1, b_2, z) \in [x_2, x_3]$ such that the difference $z(x, b_2) - z(x, b_1)$ is non-positive for all $x \leq k$ and non-negative for all $x \geq k$. This implies that $A(x) \leq 0$ for all $x \leq k$ and $A(x) \geq 0$ for all $x \geq k$.

Let's rewrite (4) as,

$$\Delta_F = \int_{x_1}^k A(x)f(x)dx + \int_k^{x_3} A(x)f(x)dx + \int_{x_3}^{x_4} A(x)f(x)dx. \quad (5)$$

Integrating the first term in right-hand-side of (5) by parts, and by adding and subtracting,

$$\Delta_F = A(x)F(x) \Big|_{x_1}^k - \int_{x_1}^k B(x)F(x)dx + \int_k^{x_3} A(x)f(x)dx + \int_{x_3}^{x_4} A(x)f(x)dx$$

$$\begin{aligned}
&= A(x)[F(x) - G(x)] \Big|_{x_1}^k + A(x)G(x) \Big|_{x_1}^k - \int_{x_1}^k B(x)[F(x) - G(x)]dx - \int_{x_1}^k B(x)G(x)dx \\
&+ \int_k^{x_3} A(x)[f(x) - g(x)]dx + \int_k^{x_3} A(x)g(x)dx + \int_{x_3}^{x_4} A(x)f(x)dx
\end{aligned}$$

where $B(x) = dA/dx = u'(z(x, b_2))z_x(x, b_2) - u'(z(x, b_1))z_x(x, b_1)$. By rearranging the above,

$$\begin{aligned}
\Delta_F = \Delta_G + A(x)[F(x) - G(x)] \Big|_{x_1}^k - \int_{x_1}^k B(x)[F(x) - G(x)]dx \\
+ \int_k^{x_3} A(x)[f(x) - g(x)]dx + \int_{x_3}^{x_4} A(x)f(x)dx.
\end{aligned}$$

Note that $z(x, b_2) \leq z(x, b_1)$ when $x \leq k$ and $z_x(x, b_2) \geq z_x(x, b_1)$ when $x \geq x_1$ by the assumption $z_{bx} \geq 0$. The assumptions $u' \geq 0$, $u'' \leq 0$ and $z_x \geq 0$ imply that $B(x) \geq 0$ for $x \in [x_1, k]$. Since $A(x) \leq 0$ for all $x \leq k$ and $A(x) \geq 0$ for all $x \geq k$, and the condition of F k -FSD G implies that $F(x) \leq G(x)$ for all $x \in [x_1, x_4]$ and $f(x) \geq g(x)$ for all $x \in [k, x_3]$, the assumption $\Delta_G \geq 0$ implies that $\Delta_F \geq 0$. Q.E.D.

The extension to the set of k -MPR shifts comes directly from Property.

Corollary. For all risk averse decision-makers, $b_F \geq b_G$ if

- (a) $z(x, b)$ is linear in b and $z_b(k, b) = 0$
- (b) F k -MPR G
- (c) $z_x \geq 0$ and $z_{bx} \geq 0$.

Proof: Given the proof for the set of k -FSD shifts in Theorem, the proof for the set of k -MPR shift can be completed by Property and Theorem. By Property, it is known that a k -MPR shift can always be decomposed into two FSD shifts, one k -FSD and the other MPR. Q.E.D.

Conclusion

This paper proposes two concepts of a ‘FSD shift with respect to a point k ’ (k -FSD shift) and a ‘monotone probability ratio FSD shift with respect to a point k ’ (k -MPR shift) for special subsets of first-degree stochastic dominance (FSD) shifts. These shifts can be applied to the specific economic model such as the standard portfolio model or the coinsurance model which is linear in both the decision and the random variable. In the standard portfolio model or the coinsurance problem, the point k can be the sure interest rate or the insurance premium, respectively.

This paper shows that by adding to linearity restriction to the payoff function, the comparative static result given in Corollary includes the more general set of changes in CDF, k -MPR shifts, than the set of MPR shifts considered in Eeckhoudt and Gollier (1995). It is shown that there is a trade-off between the restrictions on the set of changes in CDF and the structure of the concerned decision model. It is easy to see that each of FSD shifts shown in Figure 1 and 2 is neither an MLR shift nor an MPR shift. Given the point k , the shift satisfies the conditions, F k -FSD G and F k -MPR G , respectively. This paper also demonstrates that, for these two shifts, $b_G \leq b_F$ for all risk-averse decision-makers, when the payoff function is linear and that any k -MPR shift can be decomposed into two FSD shifts, one k -FSD and the other MPR.

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Provincial FDI inflows and differential growth in different provinces in China

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Abstract

Foreign direct investment (FDI) inflows have been known as a key growth driver in China for the past several decades. On national level, only a few studies were done on whether and how FDI inflows contributed to China's economic growth and they confirmed very often that FDI did stimulate economic growth for China. However, China's open and reform policies were very discriminatory among regions in that they were limited to coastal provinces and cities along Eastern China. In this study, we investigate whether the above opening-growth formula worked at the provincial level, too. Using a provincial panel data, we try to evaluate how crucial FDI inflows have been used in generating income in provinces of China. Using panel estimations, we test and confirm that the FDI inflow did significantly stimulate regional growth at provincial level. In addition, after dividing the total sample into two sub-samples, Coastal areas (where most SEZs are designated) and Inland areas, we run the panel model on the two sub-samples again. We cannot find significant difference in the results between the two. Again after dividing the total sample into two sub-periods, we check whether FDI inflows produce the same impacts on incomes between the two sub-periods or not. FDI inflows turn out to have had higher impact on regional income during the first stage (78'-95') than during the second stage (96'-2011) of reform and opening up.

Introduction

In this study, we want to see how significant FDI inflows are in generating incomes in China's provinces (or cities). Unlike the previous studies which focused on FDI's effect on income at national level, in this study we focus on provincial experience of FDI inflows and income generation. Why is this re-orientation of study focus so important? Reform and opening-up measures in the past were adopted mostly in SEZs (Special Economic Zones) such as Shenzhen and Shanghai, which are located in the coastal Eastern China. But in land-locked areas of the Western China, such liberalization policies were rarely adopted. Across regions, the degree of liberalization and openness did differ significantly. Hence, the two economic engines, FDI inflow and export, might have functioned in creating incomes differently across regions in China.

In this respect, it would be very interesting to see if the growth formula (that is, FDI-led growth) at national level works at provincial level, too. After constructing a panel data consisting of 31 regions (provinces and administrative cities), and 34 years (periods of 1978-2011), we test a main hypothesis: Do FDI inflows and exports significantly influence income at Chinese provinces? After that, we divide the total sample (31 areas) into two sub-samples (11 coastal areas vs. 20 inland areas) and see how differently FDI inflows and exports influence GDP between the two groups. In addition, we divide the sample period into two sub-periods (1978-1995) and (1996-2011), and do the same panel regressions to check whether two sub-periods produce big difference in the impact of FDI inflows on incomes. The hypotheses is tested through pooled least squares and fixed effect estimations.

This study's focus on *regional* or *provincial* impact of FDI and export on income generation provides us with new insights on how China has achieved economic growth at regional levels.

Table 1. The Sample of Coastal provinces and Inland provinces (31 provinces)

Coastal provinces (11)	Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Guangxi, Hainan, Liaoning
Inland provinces (20)	Beijing, Shanxi, Neimenggu, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan, Chongqing, Sichu, Guizhou, Yunnan, Xizang, Shanxi, Gansu, Qinghai, Ningxia, Xinjiang.

Methodology

For empirical testing, we collect data of FDI, Export, Import and GDP at provincial level. The data we use are available from China's authorized official organizations including National Bureau of Statistics of China. (<http://www.stats.gov.cn/english/Statisticaldata/AnnualData/>). The panel data include 31 Chinese provinces and metropolitan cities during the period of 34 years (1978 ~ 2011). Since there are missing values in time series or cross-section series, our panel is of unbalanced type. After logarithmic transformations of the data, key variables are defined in the following way:

LogGRDP : Log of Gross Regional Domestic Product (Regional GDP)

LogFDI : Log of Foreign Direct Investment Inflow (Regional FDI inflows)

LogExp : Log of *Export*(Regional Exports)

A multivariate regression model is set up and estimated through panel (or pooled) LS (Least Squares) methods. In our estimation equation, we employ two independent variables, *LogFDI* and *LogExp*, and one dependent variable, *LogGRDP*.

1) Pooled LS Estimation

$$\text{LogGRDP} = \alpha + \beta_1 \text{LogFDI} + \beta_2 \text{LogExp} + \varepsilon$$

As a first step, we perform pooled LS estimations. This estimation is very simple since it just pools all time-series and cross section data and runs LS estimations. This "Pooled LS" assumes only a common, single intercept α all across years and provinces. Hence it neither asks whether a province has an individual effect nor asks whether a specific year has an annual effect. Pooled OLS estimation is done with cross-section weight to consider the cross-sectional heteroscedasticity problem. The estimation result is reported in Table 3.

2) Cross-section Fixed Effect Estimation

$$\text{LogGRDP} = \alpha_i + \beta_1 \text{LogFDI} + \beta_2 \text{LogExp} + \varepsilon$$

(α_i describes a cross-section fixed effect for a province i)

In practice, panel data allow us to estimate other types of specifications such as fixed effect and random effect specifications. Unfortunately, it is not allowed to estimate random effect models since our panel is unbalanced. To see which specification is more appropriate between the pooled OLS and the fixed effect specifications, we undertake F tests with the cross-section data. All F test results show in Table 2 that the null hypothesis that all individual intercepts are equal was not rejected except for cross-section fixed-effect specification.

As discussed above, opening and reform policies varies significantly across regions in China. Hence, it is interesting to see whether or not open regions (mostly Coastal areas) and closed regions (Inland areas) show the same growth effect of FDI and exports. To do so, the total sample is divided into two sub-samples: Coastal provinces versus Inland provinces (see Table 1).

For the two, we undertake redundant F tests to check whether the specifications of cross-section fixed effect are redundant or not. In addition, to see whether different stages of reform and opening up might produce different outcomes or not, we also have two sub-period samples: the 1st period (78²-95²) and the 2nd period (96²-2011). Table 2 shows that the null hypothesis (the fixed effect specifications are redundant) is all strongly rejected. Hence, it implies that the fixed effect model is more appropriate than the pooled LS.

Table 2 Redundant Fixed Effects Test

All provinces				
The Number of Cross-sessions	Effects Test	F-Statistic	d.f.	Prob.
31	Cross-section F	141.3233	(30,810)	0.0000
Coastal provinces vs. Inland provinces				
The Number of Cross-sessions	Effects Test	F-Statistic	d.f.	Prob.
20 (Coastal areas)	Cross-section F	36.2865	(19,502)	0.0000
11 (Inland areas)	Cross-section F	167.7279	(10,306)	0.0000
The 1 st period (78'-95') vs. The 2 nd period (96'-2011)				
The Number of Cross-sessions	Effects Test	F-Statistic	d.f.	Prob.
29 (the 1 st period)	Cross-section F	148.2126	(28,326)	0.0000
31 (the 2 nd period)	Cross-section F	117.5578	(30,453)	0.0000

Findings and Discussions

Overall, the test results are shown in Table 3 and they are very consistent with our prior expectation. The parameter estimates of FDI and exports turn out to be all positive and statistically significant at 1% level. Also, R-square values indicate the high level of the explanatory power of independent variables such as FDI inflows and exports in our specifications. The parameter estimates differ significantly between the Pooled LS and the Fixed Effect specifications. F tests suggest that when we consider provincial difference in cross-section fixed effect specification, we have more robust estimation results. All standard errors of estimates are lower (alternatively *t* statistics are higher) in weighted estimations than in non-weighted ones, and it suggests that when we corrected the error term's cross sectional heteroscedasticity, estimations turns out to be efficient.

In the cross-section fixed effect (All areas) results as bench mark case, the parameter estimates for FDI inflow and export are respectively about 0.19 and 0.68. Both FDI and exports have positive effects on GRDP, but such effects are not "elastic" since the estimates are all below 1. They imply that 10% increase in FDI and export will lead to 1.9% and 6.8% increase in GRDP respectively. Comparing the two variables, exports are more influential than FDI inflows in creating GRDP.

The estimation results for two sub-groups of provinces are also compared in the Table 3. As mentioned above, 31 provinces and cities are divided into two groups: 11 Coastal areas and 20 In-land areas. Under the central government's policy direction, attractive incentives or measures for foreign investors were given mostly to SEZs in the Coastal areas, not in the Inland areas. Based upon such policy discrimination between the two, we expect that FDI inflows would influence incomes more strongly in the Coastal areas than in the Inland areas. Surprisingly, however, the two groups show no significant difference in parameter estimates. This indicates that regardless of where they are in the Coastal or Inland areas, FDI inflows and exports were equally effective in creating income in Chinese regions. It implies that the FDI-led growth formula *did* work too in inland areas where FDI-friendly policies have been adopted weakly and only recently.

Table 3 also compares estimation results for two sub-periods: the period of 1978-95 and the period of 1996-2011. It turns out that FDI inflow do have higher impact on regional income during the 1st period than during the 2nd period. The growth momentum triggered by the opening up and resulting FDI inflows seems to have gradually slowed down. In contrast, exports remain still a viable growth trigger.

Table 3. Estimation Results

Variables	Pooled LS	Cross-section Fixed Effect				
		All areas	Regional sub-samples		Period sub-samples	
			Coastal areas	Inland areas	1 st period (78'-95')	2 nd Period (96'-2011)
LogFDI	0.2875*** (0.0099)	0.1947*** (0.0067)	0.2008*** (0.01263)	0.2133*** (0.0117)	0.1522*** (0.0070)	0.1061*** (0.0168)
LogEXP	0.3539*** (0.0132)	0.6790*** (0.0131)	0.6696*** (0.0223)	0.5907*** (0.0213)	0.6034*** (0.0229)	0.6082*** (0.0158)
C	0.1284*** (0.1019)	-2.9684*** (0.1126)	-3.5953*** (0.2013)	-1.6786*** (0.1718)	-1.9459*** (0.2171)	-0.8905*** (0.1207)
R ²	0.99	0.96	0.96	0.91	0.97	0.97

1. Pooled LS estimation is undertaken with cross-section weight to consider cross-section heteroscedasticity. 2. The values in the bracket are standard errors of estimates. 3. *** indicates 1% significance level.

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Factor determinants of total factor productivity growth for OECD countries

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Abstract

This study investigates the interaction between productivity growth and its factor determinants by empirically estimating a model that includes embodied technical progress, externality effects, and openness, along with other control factors as sources of productivity growth for the OECD countries. Specifically, the study investigates factor determinants of productivity growth that simultaneously include both disembodied and physical capital, embodied technological progress, human capital, learning by trade, and other external effects at the industry level. First, the study estimates the impacts of new capital goods measured by vintage of capital goods to represent capital-embodied productivity growth. In addition, physical capital is divided into IT capital and other physical capital to isolate the impact of IT capital on TFP growth. Secondly, the study includes human capital, which is represented either by average wage or labor quality, as an explanatory variable to estimate labor-embodied productivity growth. Third, the study analyzes the contributions of disembodied variables such as IT and R&D capitals as sources of industry TFP growth, and considers industry-specific learning-by-trade and unpriced externalities resulting from industry-wide IT and R&D investments.

Introduction

This study is to provide additional insight by investigating an interaction between productivity growth and its factor determinants by empirically estimating a model that includes embodied technical progress, externality effects, and openness, along with other control factors as sources of productivity growth. Thus, the study can investigate determinant factors of TFP growth for the manufacturing industry of the OECD countries rather systemically than previous studies, which concentrate on a certain part of factor sources. From this, the study recommends policies that are effective in improving the overall productivity of the OECD economy.

From its construction, the Solow residual is intended to measure disembodied technical progress, i.e., Hicks-neutral technical change. In empirical application, however, the changes in the quality of factor inputs are hard to calculate or often omitted, without reflecting embodied technical progress correctly. So, the measured Solow residual is likely to include a bias resulting from unaccounted or misrepresented embodied technical progress (Jorgenson and Griliches 1972). As a result, not only the Solow residual fails to measure TFP growth accurately, but it is misleading if the influence technical progress on the output growth is discussed in the context of the Solow residual because it does not reflect embodied technical progress. Recent empirical studies also confirm the large portion of TFP growth is explained by embodied technical progress.

In another strand of studies on the Solow residual, researchers generally assume constant returns to scale (CRS), perfect competition, and full employment of factor inputs to estimate the Solow residual. Researchers, however, suggest the Solow residual fails to provide an accurate measure of changes in total factor productivity (TFP) if one of the assumptions is violated. Thus, researchers suggest that the measure for technology shocks can be better estimated by eliminating the effects of markup and increasing RTS from the Solow residual, by allowing for variable capital utilization, under conditions of increasing RTS and imperfect competition (Basu, 1996; Burnside & Eichenbaum, 1994; Caballero & Lyons, 1992; Hall, 1988, 1989).

Building on these two strands of studies, this paper utilizes industrial panel data for the OECD manufacturing industry to estimate the impact of TFP growth on the OECD economy by designing an empirical framework that includes both embodied and disembodied technical progress without restrictive assumptions of CRS and perfect competition. Thus, this study tries to estimate factor determinants of TFP growth after deleting the influence of scale

economies and market competition from the Solow residual, with special emphasis on identifying and estimating embodied technical change both in physical capital and human capital to separate its impacts on productivity growth from disembodied technical change.

Theoretical Background: This section summarizes the theoretical background of estimating embodied technical progress simultaneously with disembodied technical progress when there are scale economies and imperfect competition. We begin with the following production function:

$$Y_{it} = A_{it} \cdot T_{it} \cdot R_{it} \cdot V_{it}^i \cdot IT_{it} \cdot F(V_{it}^k K_{it}, H_{it} L_{it}, M_{it}), \quad (1)$$

where Y_{it} , K_{it} , L_{it} , and M_{it} represent real output, capital stock, labor, and intermediate goods for industry i at period t , respectively, in which capital is augmented by its vintage V_{it}^k to capture capital-embodied technical progress, and labor is augmented by human capital H_{it} . And A_{it} is a Hicks-neutral technology index, which allows for shifts in the production function. Finally, T_{it} , R_{it} , and IT_{it} denote learning-by-trade, R&D investment, and IT capital stock, respectively, in which IT capital is augmented by its vintage V_{it}^l to represent IT capital-embodied technical progress. Notice here that these variables are treated as shift factors causing neutral technical change, and separated from factor inputs and placed outside of $F(\cdot)$.

By taking the logarithm on both sides of (1), and totally differentiating with respect to time, we can generate the following growth equation:

$$\Delta y_{it} = \Delta a_{it} + \Delta t_{it} + \Delta r_{it} + \Delta v_{it}^i + \Delta IT_{it} + \varepsilon_{it}^k (\Delta v_{it}^k + \Delta k_{it}) + \varepsilon_{it}^l (\Delta h_{it} + \Delta l_{it}) + \varepsilon_{it}^m \Delta m_{it}, \quad (2)$$

where Δx is a log-derivative of variable X with respect to time, representing growth rate of the variable. And ε_{it}^j denote output elasticity of factor j . To separate TFP growth from factor input growth, Eq. (2) can be rewritten as:

$$\Delta y_{it} = \Delta TFP_{it} + \varepsilon_{it}^k \Delta k_{it} + \varepsilon_{it}^l \Delta l_{it} + \varepsilon_{it}^m \Delta m_{it}, \quad (3)$$

where TFP growth $\Delta TFP_{it} = \Delta a_{it} + \Delta t_{it} + \Delta r_{it} + \Delta v_{it}^i + \Delta IT_{it} + \varepsilon_{it}^k \Delta v_{it}^k + \varepsilon_{it}^l \Delta h_{it}$. Therefore, TFP growth represents the output growth that is not explained by input growth. In the growth accounting, the Solow residual is usually measured by Δa_{it} to estimate disembodied technical change. In Eq. (3), however, TFP growth results from many other factors such as industry-specific learning-by-trade, R&D investment, IT investment, and quality embodied in labor and capital inputs, in addition to Δa_{it} , which represents the disembodied technical change that the Solow residual attempts to measure.

The relationship shows that the Solow residual deviates from total factor productivity under conditions of increasing RTS in technology, price markup under imperfect competition, and changes in capacity utilization. After replacing the traditionally measured Solow residual without restrictive assumptions, we can derive a growth equation that includes both disembodied technical change and embodied technical change under realistic economic environment of imperfect competition, and increasing returns to scale as:

$$\Delta y_{it} = \Delta a_{it} + \Delta t_{it} + \Delta r_{it} + \Delta v_{it}^i + \Delta IT_{it} + \varepsilon_{it}^k \Delta v_{it}^k + \varepsilon_{it}^l \Delta h_{it} + \gamma_{it} \Delta k_{it} + \mu_{it} markup + \varphi_{it} \Delta \delta_{it}, \quad (4)$$

where $markup_{it} = [s_{it}^l (\Delta l_{it} - \Delta k_{it}) + s_{it}^m (\Delta m_{it} - \Delta k_{it})]$, and $\varphi_{it} = [\gamma_{it} - \mu_{it} (s_{it}^l + s_{it}^m)]$.

By deleting $\varepsilon_{it}^k \Delta k_{it} + \varepsilon_{it}^l \Delta l_{it} + \varepsilon_{it}^m \Delta m_{it}$ from both sides of Eq. (4) and rearranging the equation, we derive the Solow residual as a function of factor determinants that include disembodied technical change, external effects, openness and trade, and technological and market environments:

$$SR_{it} = \Delta a_{it} + \Delta t_{it} + \Delta r_{it} + \Delta v_{it}^i + \Delta IT_{it} + \varepsilon_{it}^k \Delta v_{it}^k + \varepsilon_{it}^l \Delta h_{it} + (\gamma_{it} - 1) \Delta k_{it} + (\mu_{it} - 1) markup + \varphi_{it} \Delta \delta_{it}. \quad (5)$$

This equation constitutes the regression model that will be used to estimate the impact of various factors on the productivity growth for the Japanese manufacturing industry.

Methodology

We use EUKLEM Database 2011. For estimation, capital stock (K) is given by the real amount of tangible fixed assets, labor inputs (L) are proxied by the number of working hours, intermediate goods (M) is measured by total value of

intermediate input, and total value of output (Y) is used for output. Labor cost (C_l) consists of employee remuneration, including wages, bonuses, retirement compensation, and other welfare costs, and capital cost is calculated as the sum of interest payments, rents, and depreciation costs. Capital costs (C_k) are calculated as the sum of the interest payments, rents and depreciation costs, and material costs (C_m) are represented by value of intermediate input. Total costs (c) were calculated as the total sum of three factor costs; the factor share in total costs (S_l, S_k, S_m) is calculated as each factor's share of the total costs.

Following Basu and Kimball (1997), capital utilization rate (δ) is proxied by changes in working hours per employee (dh) that are proportional to unobserved changes in the capital utilization. This is to acknowledge that changes in observed inputs can potentially proxy for unobserved utilization changes as cost-minimizing firms operate on all margins simultaneously.

To investigate technology embodied in capital, the average vintage of capital (Vin) is used as proxy to represent the quality of existing capital stock. Vintage represents the age distribution of the stock of capital, and is estimated by the weighted average age of capital stock with ascending values for most recent vintages. Thus, vintage can isolate investment-specific technological progress embodied in capital stock from neutral technological progress. Vintages corresponding to total capital stock (Vin), non-IT capital stock (Vin_{nonIT}), and IT capital stock (Vin_{IT}) are estimated to distinguish the impacts of embodied technical progress of IT capital from other capital stock.

To represent human capital, average wage rate (W) are used as proxies. The former draws on the theory that human capital is compensated accordingly by wage because it cannot be separated from its owner (Becker, 1964), whereas the latter tries to measure human capital directly by considering various determinant factors including education, skill, age, and gender. To consider overall innovation, however, R&D stock (RD) is used to estimate the impact of R&D activity on productivity growth.

Finally, two variables are constructed to estimate the impact of economic inter-industry externality: Total R&D stock (tRD) and total IT stock (tIT) for the whole Japanese manufacturing industry. Total R&D stock is to acknowledge that the impact of increased R&D investment in one industry spills over into other industries as industries are interconnected each other, capturing inter-industry externality of R&D investment.

Results and Discussion

All the variables in the regression model of Eq. (5) are specified in growth rates of logged first difference, so any persistent unobservable industry-specific characteristics are effectively eliminated from estimation. However, factor inputs such as changes in both capital stock and working hours are likely to be correlated with the error terms of the regression equation, as the variables reflect business cycles like the measured Solow residual. Similarly, wage rate, openness and exports are subject to endogeneity in estimation because wage rate is linked to worker's productivity and productivity causes exports and imports.

To address the endogeneity problem, we utilize the two-stage instrumental variables (IV) fixed-effects estimation method for panel data. However, we also utilize the dynamic panel data model of the general method of moments (GMM) after including lagged dependent variables as regressors because the number of industry is larger than the number of time period.

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Use of survival analysis to study employment instability in Korea

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Abstract

Recently the size of the flexible employment labor market has enlarged. Unlike the past, the concept of keeping a permanent job has become loosened and various employment types such as regular, temporary, service contract and part-time employment are common in the labor market. Especially, the average of continuous service years is currently the lowest in Korea among OECD countries. It means that the rate of voluntary or involuntary turnover of Korean workers is high. High flexibility in the labor market makes it possible to increase the diversity of using workforce but it may also cause job insecurity. The resultant job instability can lead to income insecurity, which could act as a scale factor for income inequality. Therefore we analyze the extent of employment instability in the domestic labor market in Korea using 13 years of the KLIPS (Korea Labor and Income Panel Study) data, and find the relation between income and job instability through survival analysis.

Introduction

Employment concepts and types have been changed along with industry and socio economic situation. In Korea, workers tended to take lifelong employment for granted at early industrial era. But since 1987, labor relations made internal labor market more rigid. Since IMF crisis of 1997, restructuring and regular employment adjustment have appeared and the firms have sought cost saving and employment flexibility through the expansion of indirect or temporary employment (Choi 2009, p. 123). These socio-economic changes and the economic crisis were an opportunity for companies to elastically operate labor costs based on labor market flexibility and it has brought a lot of changes in employment.

Regular job ensuring the retirement age is a still most popular type of employment but many people willingly or reluctantly occupy irregular jobs in labor market such as temporary, daily or contract workers. It is well-known that the changes of employment type lead to job instability. However we need to not only focus on job instability resulting from employment type change but also on how socio-economic and human factors affect employment insecurity in the situation that labor market flexibility has a dominant way. Therefore we examine job instability in Korean labor market using the period of continuous service by survival analysis. In addition, we analyze for factors influencing survival rate.

Methodology

We used KLIPS (Korea Labor and Income Panel Study) data. This includes personal data and work history for 13 years. We merged each data set into one large data set and got 184, 790 data. The process of erasing almost useless data is as follows. First, we kept common data in personal and work history data set, and second, we deleted retrospective data because it doesn't indicate accurate date of entering to or retiring from a company. Third, we eliminated the data which shows that a person has his/her own job. At last, we erased some incorrect data or unknown data, and finally we used 21,714 data in this analysis. It consists of retirement (event) data and censored data.

In many fields, researchers want to know time duration until a specific event happens to subject, and they would like to analyze the factors affecting the event. Survival analysis is one of the most widely used analytical methods in the above cases. We define retirement as event, and observe the period of continuous service for each individual. Subsequently, we will carry out an analysis of the influential factors on the event.

Table 4 Basic Statistics

Variables		Mean	Percent (%)
Duration (days)		1174.004	-
Wage (Won(₩) per month)		106.1066	-
age		40.87	-
Gender (Man)		16,086	54.92
Birth Year	Before 1949	4,020	13.72
	1950-1959	5,429	18.53
	1960-1969	7,591	25.92
	1970-1979	8,276	28.25
	After 1980	3,975	13.57
Education Level	Under Middle School	7,458	25.46
	High School	12,490	42.64
	Undergraduate school	8,509	29.05
	Graduate School	834	2.85
Relationship with Householder	Householder	14,830	50.63
	Spouse	7,609	25.98
	Et cetera	6,852	23.39
Job type	Wage Job	21,912	74.81
	Non-wage Job	7,370	25.16
Regular or non- regular	Regular Job	11,882	40.57
Work Status	Permanent Worker	14,271	48.72
	Temporary Worker	4,800	16.39
	Day Worker	2,833	9.67
Labor Union		2,227	7.6

In this paper, we define ‘regular worker’ as who are guaranteed retirement. According to Statistics Korea, workers are classified into 3 types depending on contract year. 1) More than one year: permanent worker, 2) more than one month to less than one year: temporary worker, 3) less than one month: day worker. Therefore, regular worker and permanent worker are not the same concept in this paper.

Therefore, in this paper, survival function refers to the probability of maintaining a continuous service without retirement. Survival time variable, namely the duration of continuous service is represented by T and real observed duration of continuous service is represented by t . Survival function is as following:

$$S(t) = \Pr(T \geq t)$$

As the contrary concept of survival function, we use cumulative distribution function which means the probability of occurring event by time t . This is as following:

$$F(t) = \Pr(T \leq t) = 1 - S(t)$$

Density function or $f(t)$ is used to find the intensity on the case at a given point in time. It measures the risk of incidents in the total number of the entire analysis period. In contrast, hazard function or $h(t)$ means a risk for persons who survived to the time ‘ t ’. Therefore, this is a conditional probability that calculates the event observed in short time from time ‘ t ’. These are as following:

$$f(t) = \lim_{\Delta t \rightarrow 0} \frac{[\Pr(t \leq T < t + \Delta t)]}{\Delta t}$$

$$h(t) = \lim_{\Delta t \rightarrow 0} \frac{\Pr(t \leq T < t + \Delta t | T \geq t)}{\Delta t}$$

All of the expressions described above are linked with each other. Thus, if we know one of these values, we can calculate the rest easily. We estimate the survival function for the duration of the workers on the basis of the above mathematical model.

To analyze the influential factors for the survival probability, we use the Cox-proportional hazard model. There are several reasons that the Cox regression is so important and widely applied in biomedical, engineering, economic, social, and behavioral sciences. First, prior to the Cox regression, the leading approach to multivariate survival analysis

was the parametric model. But the Cox regression is a distribution-free model and does not require such information. Second, the main estimation method Cox developed is partial likelihood, which is innovative in several ways. Among other things, it allows the user to estimate the regression coefficients of the proportional hazards model without having to specify the baseline hazard function, and the estimates depend only on the ranks of the event times, not their numerical values. Third, the Cox regression is the very first model that permits the user to incorporate the time-varying covariates in survival analysis (Guo 2010, 73-74).

We find the factors affecting employment instability in accordance with wage. In addition to this, we consider human characteristics, regional properties, and industrial features.

Discussion

We hypothesized several about factors increasing survival rate. These are as in the following. We estimated that more stable wages or higher wages increase survival rate. Education level has a different effect on survival rate depending on the employment type or work status. We estimate that survival rate is high in the age of 30-40 and men's survival rate is higher than women's. We would like to stress on this assumption, because if it is wrong, we can search to find what is affecting the situation.

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Creation of shared values by Indian enterprises

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Abstract

In today's globally inter-connected and changing socio-economic and political environment, there is a shift of economic power from West to East, with increased global political awareness because of media, the Internet and other fast technological changes. The global problems of poverty, malnutrition, lack of access to healthcare and illiteracy also continue among the vast majority of population in the world. The issue of climate change is likely to increase the misery of poor people and countries. The solution to these problems requires resources and willingness while most governments lack the needed resources. Economic activities are being organized under corporate entities with the governments withdrawing from economic and welfare activities for a lack of resources. Enterprises have become the dominant economic and political players in all countries though there is a variation in institutional governance system. The economic resources and technology owned and managed by these enterprises are massive. It is expected and debated at global economic forums that these enterprises should be asked, motivated and persuaded to help mitigate the social problems of climate change and others. Michael Porter (2011) has argued for the creation of shared values by corporates adapting their strategies to service social needs. By combining economic value and serving social needs, a "shared value" is created. Porter argued that "for profit" companies are well suited to solve social problems while serving their shareholders' interest to maximize investor returns. In comparison with CSR programs, shared values are an integral part of successful corporate strategies. The present paper aims at examining the role of Indian enterprises in creating shared values and meeting social responsibility. For this purpose, the top 30 companies listed on the Mumbai Stock Exchange that also are part of SENSEX are selected to identify their corporate strategy, their sustainability efforts and other activities to serve the society. The main focus of the paper is to examine the type of effort made by Indian enterprises to create shared values as explained by Porter.

Introduction

All over the world, economic activities are being increasingly organized by corporate entities, as Governments, lacking resources, are seen withdrawing from economic and welfare activities. Enterprises have become dominant economic and political players in all countries despite variation in their institutional governance systems. These enterprises are also adding to the climate change problems. However, the economic resources and technology owned and managed by these enterprises are massive. It is therefore expected, and is also being debated at all the global economic forums that these enterprises should be encouraged and motivated to help mitigate the social and environmental problems of poverty, illiteracy, climate change, etc.

Using literature of CSR and related concepts such as social innovation, bottom of the Pyramid, and etc. Porter and Kramer (2011) have argued for creation of shared values by the corporates and adapting their strategies to service social needs. By combining the creation of economic value and serving social needs, 'shared value' is created. They argued that 'for profit' companies are well suited to solve social problems while at the same time serving their shareholders' interest to maximize investor returns. In comparison to CSR programs, shared values, as a concept, is becoming an integral part of successful corporate strategies of a large number of enterprises.

This paper aims at examining the role of Indian enterprises in creating shared values and meeting social responsibility in India. For this purpose, 30 companies listed on the Bombay Stock Exchange (i.e. part of SENSEX index) are selected (the total market capitalization of these 30 companies is around 42% of the total market capitalization of all companies listed on the Bombay Stock Exchange). Out of these, Companies belonging to five industries: Extractive industries, Pharmaceuticals, Automobiles, Information Technology and Banking are chosen to identify their corporate strategy, their sustainability efforts and other activities to serve the society. A content analysis technique is used to collect the information out of the latest Annual Reports, Sustainability Reports, Business

Responsibility Reports of these selected companies. The main focus of the paper is to examine the types of effort made by Indian enterprises to create shared values.

Evolution of corporate social responsibility (CSR) to Creation of Shared Values (CSV): The term ‘corporate social responsibility’ (CSR) has emerged since the 1960s to discuss the role of business in society (Carroll 1999). In 1970’s Milton Friedman criticized the CSR and proclaimed that employing CSR principles in the business world is unfair both to the firms’ shareholders and to the general public. During 1980s and 1990s, the process of privatization, deregulation, and globalization led to explosion of CSR activities and propagation. Different authors have defined CSR as per their understanding, experience and perspective. Further, it is recognized that the activities involved in CSR and its beneficiaries are likely to vary across industries, time and institutional and cultural contexts (Griffin & Prakash 2014).

There is another stream of researchers who have suggested and argued for focusing on social goal and integrating them in business strategy. Porter and Kramer in their recent paper attempted to present all these concepts in a holistic framework in the form of ‘Creation of Shared Values’ (CSV) to unify these concept with clear policies and practices to legitimize business in the era of capitalism. The aim of Porter and Kramer was that CSV would supersede CSR. But in reality, we find both these concepts are being used in the business circles.

Porter and Kramer have suggested three distinct ways to create shared values: by re-conceiving products and markets; redefining productivity in the value chain; and building supportive industry clusters at the company's locations. Each of these is part of the virtuous circle of shared value: improving value in one area gives rise to opportunities in the others.

Porter and Kramer have conceptualized “*the policies and operating practices that enhance the competitiveness of an enterprise, simultaneously advancing economic and social condition in communities in which it operates*”. The concept of shared value resets the boundaries of capitalism. By better connecting companies' success with societal improvement, it opens up many ways to serve new needs, gain efficiency, create differentiation, and expand markets. CSV would help companies to focus on the right kind of profits, profits that create social benefits rather than diminish them, which would then start a positive cycle of company and community prosperity, which would reconnect business with society.

Despite all the criticism, the ‘creation of shared value’ has attracted the attention of practitioners and academicians. It is continuous of the earlier concepts, i.e. of social innovation, of being at the bottom of the pyramid and others that have been focusing on the same aspect of serving low income people by creating products and services for them as a business opportunity. The real test is to what extent it has resulted in having impact on the social objectives and the social development. These concepts have been suggested for developed countries enterprises to legitimize their business and reinvent capitalism.

In a developed capitalist economy, the problems of inequality and financial crisis have led the demand for reinvention or reform in capitalist system. In developing countries, on the other hand, issues of poverty, malnutrition and illiteracy are still prevalent in addition to inequality. There is a huge market consisting of people at the lower end of income. Producing and marketing products and services for these people is the issue of for survival of the business itself. For instance, in country like India, with the second largest population in the world, the proportion of people at low level of income to bottom of the pyramid are substantial. There is a real business opportunity to produce for them. Even enhancing productivity and efficiency to have cost advantage and then selling in the market has substantial gain for the companies. Developing the community is equally important, as they are stakeholder and consumer also.

The competence and experience gained from doing business for the bottom of the pyramid can be extended to other regions of the world. In the recessionary condition in the western world, people became conscious of the value for money proposition and learning and competence gained in the operation in developing countries have been utilized by MNC to remain competitive.

Corporate Social Responsibility and Creation of Shared Values in India:India has a long history of rich people and merchants involved in charity and philanthropic activities. The corporate social responsibility landscape in the last 150 years is associated with its political and economic history and can be divided in to four phases (Sundar 2000). I have proposed that a fifth phase of CSR has started in India from 2014. It can be designated as ‘Mission Oriented CSR’.

In 2013, India passed the amended Companies Act that reformed outdated business practices and has resulted in a stronger commitment to corporate social responsibility (CSR). The Act mandates that companies worth more than Rs

500 crores (\$92.5 million), or having turnover of Rs 1000 crores, or with yearly profits exceeding Rs 5 crores (\$78 million) should spend at least 2% of their profits on CSR; establish a CSR committee overseen by a minimum of three directors; and stipulates that noncompliance with the mandate can result in government sanctions and jail time.

The incorporation of CSR in legislation is likely to be game changer. In May 2014 India has chosen a new government. The new Prime Minister Mr Narendra Modi, has embarked on a cleanliness mission and placed the issue of social concern like sanitation at centre stage. The result is that big companies have announced their commitment for this cause. These changes making CSR mandatory and a strong leadership pushing for accelerating these activities define a fifth phase of CSR activities in India starting from 2014. This can be designated as “Mission Oriented CSR”.

Findings and Discussion

This section outlines case studies in the form of CSR and CSV activities of Indian enterprises working in selected industries.

Information Technology: India has emerged as the most competitive country in the software industry. Indian companies like TCS, Infosys, Wipro, HCL Infotech, Tech Mahindra and many others have emerged among the top companies in this sector. These companies are exposed to the global competition and have established global governance systems. These companies are also among the front runners for CSR and CSV activities. The concept of green banking, green infrastructure, green business processes, etc are being designed, developed and facilitated by these companies. Here, the Infosys case has been presented to highlight this aspect of CSR.

Infosys is a leading Indian IT company. Its services are helping other big companies to transform their operation by consolidating ERP landscaping, modernizing infrastructure and creating alternative operating model with new partners. Cost optimization and enhanced agility provided by these companies are used to develop new products and services. The Infosys 3.0 strategy, designed to deliver superior client value, offered a predictable sustainable, profitable and de-risked model. The company has a three pronged strategy, outsourcing services, transformative consultancy and intellectual property creation, in order to create a resilient business model. Competency development is a key area of strategic importance to the company. Training of employees is the key. The company is also helping employees to obtain external certifications. It is involved in industry-academia partnership programs, Campus Connect, ‘SPARK’, etc. The company has got several awards for sustainability development initiatives.

The CSR activities of the company are not linked to philanthropy, but encompasses holistic community development, institution building and sustainability related initiatives. Its Board of Directors Committee on CSR has adopted a policy that intends to strive for economic development that positively impacts society at large with a minimal research footprint; and be responsible for corporate action and encourage a positive impact through its activities on the environment, communities and stakeholders. It conducts its CSR activities through the Infosys Foundation, which has initiated, guided and conducted several programs in education, healthcare, disaster relief and rural development, and has been successful in bringing about a positive change in the lives of the underprivileged section of society. The sustainability actions are focused on three themes — social contract, resources intensity and Green innovation.

Pharmaceutical Industry: **Cipla** aims at supplying reliable, high quality medicines on a long-term sustainable basis. The company works with a philosophy of ‘none shall be denied’. ‘Cipla Global Access (C-GA) program’ focuses on four therapies (HIV/AIDS, Malaria, Multi-Drug Resistant tuberculosis, Reproductive Health) and has touched nearly 58 million lives in India and South Africa. The company is redefining its productivity through reengineering and reduction in cycle times. The company partnered with global scientific research organizations to develop innovative, effective and affordable formulations for these four therapies. For other CSR activities, the company has five central themes: education, public health, occupational health and safety, environmental compliance and employee welfare. The company has ISO 14001 certified plants which helps in achieving sustainable practices in energy, water conservation and waste minimization. The company follows nine principles of National Voluntary Guidelines on social, economic and environmental responsibility, as per global ISO 26000 standards.

Banking Industry: Axis Bank, a private sector bank, has opened up branches in unbanked areas. As a part of financial inclusion, the bank has created a customer base of 74 lakhs, served through 576 rural branches and more than 74,000 business correspondents spread over more than 47,000 villages. Around 76% of rural branches are in unbanked locations. The bank provides credit to SMEs and agricultural farmers. It has also initiated Aadhar enabled payments, enjoys a leading position and has also embarked on green banking venture in a big way.

Green banking is an umbrella term referring to practices and guidelines that make banks sustainable in economic environment, and the social dimension. The aim is to make banking processes and use of IT and physical infrastructure as efficient and effective as possible. All the Indian banks have adopted these practices. Green banking initiated by banks include recycling initiatives, use of renewable energy to power energy, lights generated through solar power plants, installed motion sensors for reducing energy usage, rain water harvesting systems, sewage treatment plants, etc. In addition to these activities of shared value creation, the bank is involved in CSR activities through education, public health and medical relief, sustainable livelihood and skill development programs. Axis bank is engaged in 20 programs of education in 10 states and 20 districts.

Automobile industry: Hero MotoCorp, a two wheeler manufacturer, aims at providing world class mobility solutions. After a split from Honda, it has been maintaining its leadership position and sustaining its competitiveness. The company has been developing new products keeping in mind fuel efficiency and climate change. This includes environmental friendly hydrogen fuel using bike, electrical cell vehicle. The company is involved in clean processes and green infrastructure to ensure low-carbon footprint. In order to enhance its productivity, company has focused on green supply chains (Green Dealer Development & Green Vendor Development program).

The company has identified six pillars of energy management: Green roofs, sewage treatment plants, waste food recycling, paint conservation, energy conservation, oil conservation, etc. In order to enhance its efficiencies and robustness of supply chains, major initiatives were undertaken for quality, cost, and productivity and delivery improvement at vendor levels. In addition, the company has engaged in CSR activities, through schools, hospitals, sports complexes, vocational training centers, adult literacy centers, rural health care, etc.

Conclusion

CSV is not a new concept in Indian context, as it has evolved over time with the contribution of scholars emphasizing the role of business in society by raising the issues of inclusive growth, social enterprises, social entrepreneurship, social innovation, bottom of the pyramid etc. Among the large profitable enterprises, there is a simultaneous attempt to look at CSV and CSR activities. As far as CSV is concerned, there are a few companies involved in conscious creation of shared values. However, it is expected that with the changes in the legal environment making CSR mandatory for large profitable companies and with a new political leadership in the country which is focusing on social upliftment, the movement towards creation of shared value will be expedited in the years to come.

Looking at the Porter and Kramer's shared values creation activities, it is found that majority of the companies are already involved in energy conservation activities in the value chain. Greening process and products etc also comes in this category. For instance, banking, auto, capital goods are focusing on green processes by increasing e-process. At the second stage, most of the companies are involved in cluster supporting activities. Here, the main focus is supporting vendor and suppliers. This is true in case of Automobile industry. At the last stage, the re-conceiving of the product and market activities is prevalent. The banking, pharmaceutical and IT industries come under this category.

In India, a country with poor people, creation of shared value is a necessity for enterprises to survive and compete. It is different from developed countries where capitalism is in question and CSR and shared value creation are suggested to legitimize their business. Indian enterprises have focused on CSR as philanthropic activities as in other countries. However, some large companies and SMEs also are involved in creation of shared value. The nature of CSR and CSV activities vary among companies depending on their industry and their profitability.

Over time, as the challenges before business and society are changing, the corporate sector's response to social problems is also changing. There is an attempt to redefine the role of the corporation in society. At present the Indian

society is dominated by a young population with access to technology and media, and well connected. They have high aspiration levels, join good companies, and want more education.

The Government has accordingly formulated policies to empower people through education, adopting inclusive growth as policies, and ensuring health care to every individual. Environmental concerns are at the core of all economic decisions. This has led to the development of several initiatives at local, national and global levels. The Government has passed a new legislation that requires companies to invest in CSR activities out of their profits in addition to following legal compliance to number of environmental and social concerns.

With the changed economic, legal and political environment in the country, there is likely to be changes in the CSR activities. The involvement of Directors' Committee in the CSR activities has brought governance systems directly into CSR. This is likely to influence the strategies of the companies involved. There will be rigorous thought in integrating Strategy and CSR activities that will result in the creation of shared values. That is the beginning of another phase of CSR evolution in India. I have designated this fifth phase of CSR as 'Mission Oriented CSR', and this can be said to have started in the year 2014.

It must be made clear that the instances of poverty, hunger, illiteracy, etc are not going to be finished by one or two concepts of CSR or CSV. There is a need to make concerted efforts on multiple levels. There is also a need to look at the actual activities of CSR and CSV and their impact in desired directions. The cases studied in this paper are large scale profitable companies in India. There are many other large, medium and small enterprises in India. As per the new government policies, a firm having more than Rs 5 crores as net profits, is large in size. There is a need to explore, study and research CSR and CSV activities of these companies. This new legislation is likely to influence the strategy making in Indian enterprises. Consequently, there is a possibility of a shift in the orientation of these companies towards CSR and CSV.

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Innovative and sustainable micro enterprises of hinterland India

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Abstract

Micro enterprises have remained an important part of the Indian economy from ancient times. Uniquely innovated through 'craft technology', some of their products like 'Muslin' were a source of pride in mediaeval India and attained fame in foreign countries till the emergence of factory made cloth. Even today, these enterprises are at the helm of harnessing innovations for commercial purposes. However, they need technological synergies through collaboration with R&D institutions. The developed nations have made concerted efforts to create and maintain this vital linkage for developing a business environment in which both established and start-up enterprises can benefit immensely. Though the linkages of R&D institutions with smaller firms have huge potential for innovations and job creation in developing countries including India, they are lagging far behind in this regard. Pro-science technology and innovation environment were almost absent in pre-independent India. After independence, there was little deliberate effort to establish linkages between industry and R&D institutions including universities for sharing technological innovations for business use. Small enterprises had a marginal position in the picture. This paper aims at exploring the business models and practices of micro and small enterprises of hinterland India to find their innovative practices, entrepreneurial ability and sustainable models that may be replicated in other developing countries for inclusive growth. It will also attempt to standardize those business models, their innovations and practices, with possible synergies through institutions/universities for others to follow, if they want to. Furthermore, the paper intends to analyze the sustainability of these micro enterprises and entrepreneurs after looking at their financing patterns.

Introduction

While taking rounds of many trade fairs, exhibitions, craft *melas* in India, we found a large presence of micro, tiny enterprises and entrepreneurs coming from different rural and remote parts of India. These entrepreneurs and their enterprises are showcasing products which have some distinctive features and identified with their traditional cultural legacy. This is also carried on from generation to generation. A close observation of their business models and sources of finance reveals engagement of own arranged resources and financial assistance from mainly public institutions.

The most revealing aspect of funding is the amount of lending which is as low as Rs. 20,000 (\$ 300) in most of the cases. These enterprises are at the helm of harnessing innovations for commercial purposes traditionally but they need technological synergies through collaborations from R&D institutions to not only sustain themselves but also carry on the mettle of their enterprises. The developed nations have made deliberate and focused efforts to develop and maintain this vital linkage for developing their business environment through which already established and start-up enterprises benefited immensely. Researchers advocated special efforts in the form of R&D institutions' linkages with smaller firms because these firms have huge potential for innovations and new jobs creation. In comparison, developing countries are reported to be far behind.

In this backdrop, this paper aims at exploring the business models and practices of micro and tiny enterprises of the hinterland to find their innovative practices, entrepreneurial ability and sustainable models which may be replicated in other developing nations for inclusive growth. Efforts are being made here to standardize these innovative business models and practices of these enterprises operating in their clusters with possible synergies through institutions-universities' linkages for others to follow.

Methodology

In the first place, we tried to explore the extant literature delineating business models and especially for micro enterprises. Many scholars have studied business models and questioned its meaning, rationale and logic in recent decades. The type of investigations include;- are they operational tools that rationally inform investment decisions in a judicious way? Or are they rituals that fulfil, at best, some symbolic function but lack a genuine economic meaning? What purposes do they serve, if any? (Baker et al. 1993, Honig and Karlsson 2004, Magretta 2002, Porter 2001: p. 73). The dotcom bubble and its aftermath however put an end to the interest of management scholars in exploring business model as a management tool; yet did not halt its use by practitioners (Doganova and Renault 2009). Indeed, it proliferates in daily practices, especially in technology entrepreneurship (Chesbrough and Rosenbloom 2002, Delmar and Shane 2003).

In general authors have followed two approaches: essentialist or functionalistic and market device propositions while describing business models. However, we could not find traces of literature delineating the business models fitting into the types of micro enterprises. Even the recent position of Doganova and Renault's approach (2009) derived from market device approach seems quite pragmatic in the present context which examined business models as intelligent collective devices in the contexts of uncertainty. Their approach is that the business model works as both a calculative and a narrative device. It allows entrepreneurs to explore a market and to bring their innovation – a new product, a new venture and the network that supports it – into existence. However, there are no traces of literature found on its application for micro enterprises. At the same time it may be emphasized that the business models of these Indian micro enterprises are centuries old based on rich cultural traditions and synergies of the operating regions.

Here, we hypothesize that, business models of Indian micro enterprise are influenced by tradition and executed for meeting the economic welfare. Generally speaking, the main actors in this model are the clusters where these enterprise are located (here we are focusing on hinterlands) due to the synergistic benefits (of traditional skill, raw material, processes), skilled manpower and entrepreneurial ability, and market. They are indulging in the business which is carried over from generation to generation and having strongly backed by culture, traditions, processes and manpower (family is the main source). Thus, we have derived the following objective for further exploration.

To map out the business models, entrepreneurial ability and innovations profile of micro enterprises to investigate sustainability. In this backdrop, this paper uses an analytic induction framework of qualitative research upon a strategy of developing case studies based on collecting first hand data and information through relatively unstructured interviews by adopting *small-N* research designs. Further, this is supplemented by reports and other secondary sources. Application of small-n designs is required here due to the lack of depth in knowing which variables matter the most and how they are causally related. Many authors applied this method to carry out explorative studies (Birkinshaw, Brannen & Tung 2011, Doz 2011, Eisenhardt 1989, Ghauri 2004, Malnight 2001). This type of qualitative research further substantiated in the words of Doz (2011: 588), "*qualitative research methods offer the opportunity to help move the field forward and assist in providing its own theoretical grounding*".

Researchers (Yin 1994, Stake 1994) tested and advocated the case study method to provide useful insight into the relevant issues pertaining to a research topic involving *what, how* and *why* queries. John Liggett (1968) advocates the case study method to gain an understanding of the 'group of people', smaller communities in an industrial setting or any other social unit. He further asserts that the case 'study method' comprehends 'uniqueness' of the group under study. The purpose of the case study method is often quite practical i.e. to establish a rational basis which helps in modifying situations containing problems and issues. The case study method employs more techniques than one including interviewing and questionnaire mailing. With this backdrop, we have engaged a hybrid research methodology including case studies to understand this phenomenon in its natural setting. Keeping the objective in mind, we have undertaken the task of identifying these enterprises and their clusters for further exploration as stated in the methodology. We have chosen the hinterlands of the national capital region (NCR) of Delhi for the study. The interviews and fieldwork were conducted during the period, February 2014 to September 2014 for these micro enterprises and initial results are analysed as given below.

Discussion

These micro enterprises are found to be mainly engaged in handicrafts, textiles, small manufacturing units, leather, food beverages, furniture etc. They have been engaged in this venture from generation to generation and mostly owned by sole proprietors. These enterprises are mostly propelled by the skill passed on to them from their ancestors. The surrounding business environment of the area (cluster) proved to be a great facilitator for their trade and business. Starting from skilled manpower to sourcing of raw material to processes is facilitated by the networks developed over the years through synergistic benefits as experienced from the interviews of manufacturers of traditional lock and key enterprises of Aligarh.

Aligarh (90 miles from Delhi) is an important business centre of Uttar Pradesh in India and is most famous for its lock and key industry. Manufacturing of locks in Aligarh dates back to 1890 when English company Johnson & Co initiated production of locks in this city. In the versions of locals, after the closure of the plant, the workers started making locks to fend for themselves and thereafter, this has developed as a family based trade having a close network of suppliers, vendors for fulfilling economic needs of the family. Here, the simple business model is based on an income formula (meeting the basic needs) generated out of the key resources and processes. The key resources here refer to the skilled manpower (mainly family trained) and equipments. The processes include the sourcing of inputs to manufacturing processes. With the increasing competition, there has been tremendous pressure on the small manufacturers. Some of them already closed their enterprises and some of them are in extremely difficult situation. However, there are some sustaining enterprises that still earn a decent earning and may be classified as successful. Their business models thus become a repository from which potential entrepreneurs may draw in future. The response from the owner of a successful enterprise who happens to come a long way from being a worker to become the owner of one such enterprise is stated below:

“Now, the competition is very severe. Here we do business at a very small margin. Hence, the only possibility of survival is adopting new techniques, methods and practices in our system to enhance production. Here, I have added some innovative techniques to my machines so as to manufacture locks at a fast pace and able to reduce costs. Earlier, I used to engage three power motors to run my machines. Now, we have connected all these three machines to single counter (self-developed) and it is fixed with a single motor which drives all these machines. By bringing a little modification in design, I am able to reduce power tariff by two third of the previous tariffs”

The presence of these enterprises in cluster brings them synergistic value additions. Even in the case of lock and key industry, the production is passed through many processes before the final product is rolled out. Most of the houses in those very narrow streets of Aligarh are running *karkhanas* (Indian name of factory) and *vattis* (small furnaces) and the whole family is engaged in this trade. Not only they get family trained skilled workers but also substantial reduction in input costs as a result of this. Although, evidence of innovations are found to be present in their manufacturing processes, yet innovations in product development is seemingly lacking. On being pressed further, one respondent puts forth the following logic:

“We are unable to bring changes in the product development as there is no pro-active role of governmental organisations and institutions in creating awareness, imparting training and helping us to modernize. Further, none of the public funded banks extend any lending facility to us which might have helped us to procure modern machinery.”

This observation hints at lack of institutional linkages and patronage which is working as a deterrent for growth of these enterprises. Even in the post-independence India hardly witnessed deliberate and aggressively pursued linkages between industry and R&D institutions as also universities for creating and disseminating innovation and technology particularly in relation to these enterprises. But the most revealing aspect of these enterprises' is the entrepreneurial ability of their owners. Despite adverse circumstances and pressure of competition, they are not only sustaining themselves but also generating employment opportunities for local population. The risk exposure of these enterprises is explained below by owner of another enterprise:

“Besides the market uncertainties, the biggest challenge before us is in connection with safety of our workers. Due to the nature of our work, our workers are susceptible to injuries to their hands in general and fingers in particular. Unfortunately, we do not have any insurance cover for attending to bigger mishaps caused by accidents like chopping of fingers or hand in the machines. Neither we could afford the medical cost nor there any state sponsored mechanism for attending to this need. So we operate under a constant threat and pray that no unfortunate incident happens in my unit.”

Thus, the description and demonstration of business models of Indian micro enterprises and subsequent discussions hint at the presence of sustainable enterprises driven by entrepreneurial ability and innovations in their processes. This is complemented by the synergistic benefits flowing from the cluster where they operate. However, expansion and growth of these units to the next level depends on the efficacy of the institutional linkages. Here lies the great role of patronage of institutional actors like Universities, R&D Labs, Incubators and Financial institutions in helping them scaling to next level and becoming ‘working examples’ or ‘templates’ (Baden-Fuller and Winter 2007). Then, these successful models may become part of a repository from which future enterprises may replicate those models. We hope that our study would contribute towards development of literature and better understanding of the functioning of micro enterprises.

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Recent developments in environment disclosure practices of companies in India

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Abstract

Climate change is a global threat with catastrophic consequences for the entire ecosystem. Greenhouse gas emissions, the main reason behind climate change mainly stem from industrialization. While economic development without industrialization is not feasible, it leads to environmental degradation that affects economies in the long-run. Thus the emphasis now is on a stable and sustainable growth path whereby companies integrate sustainability in the process of development. In this context, companies have started providing information about their environmental performance and policies to various stakeholders. The present paper attempts to study the extent of environmental reporting by Indian companies. A sample of 30 Indian companies was taken and their annual reports were examined to gather information about the initiatives taken by these companies towards making India a low carbon economy. Content analysis was used to convert qualitative information in annual reports into quantitative information, and an environmental disclosure index was calculated on the basis of themes identified for environmental information. Our results show that companies in the automobile and IT sector have the highest environmental score while companies in banking sector had low scores.

Introduction

The rapid industrialization of many developing and emerging market economies has resulted in a heavily polluted environment that adversely affects the quality of life. Environmental issues such as climate change and global warming are now seen as corporate financial issues. Historically, a lot of companies believed that abiding by the environmental regulations will have an adverse impact on the company's profit as an extra cost for the companies. In a report by Innovent Strategic Investors, the green moody has shown that companies which are perceived to more environmentally aware are also more financially successful. Various studies by Singh & Sahay (2004), Goldar & Gupta (2003) and Bammi (2013) have empirically confirmed that companies which are sensitive towards environment experience a positive impact on their financial performance.

Therefore, it would benefit companies if they provide information about their environmental performance and policies to various stakeholders. This incorporation of environmental issues into the corporate annual report can be identified as 'environmental reporting'. Environmental reporting includes voluntary and involuntary disclosure of the activities of a company, having an impact on the environment. Accounting and disclosure of environmental aspects have been emerging as an important dimension of reporting practices. Stakeholders demand disclosure of company's environmental information because of the potential liabilities and cost associated with environmental issues. Therefore, corporates should consider using environmental annual reports to communicate with their stakeholder and foster a long term relationship between the shareholders (Mastrandonas & Strife 1992).

Companies should adopt a sustainable approach that ensures that resources are utilized in a manner that meets stakeholders and societal expectations. Businesses should incorporate sustainability into their corporate goals to maintain a balance between financial performance and environmental performance.

Rationale of the study: Generally, companies with large market capitalization are believed to have a larger impact on the economy and environment. In the light of this, there has been an increasing tendency for companies to provide information about the environmental implications of their operations. Further, the recent regulation by Securities and Exchange Board of India (SEBI), dated 13 August 2012, makes it mandatory to include the Business Responsibility Reports (BRR) as part of the annual reports for top 100 listed entities. Hence, it is imperative to understand the extent

to which companies, especially those with large market capitalization, have disclosed their environment related activities.

This paper examines the extent of environment disclosure by 30 Indian companies (having highest market capitalization) by analyzing the annual reports for the year 2012-2013. The present study will add value to the existing literature by examining the extent of Environment disclosure by companies after SEBI's mandatory inclusion of Business Responsibility Report in annual reports of companies. Further, we have tried to quantify these reporting practices by Indian companies.

The objectives of the study are as follows: to study the various regulations and laws that exists for disclosure of environmental practices for Indian companies; to find out the extent of Environmental disclosure practices in Indian companies; and to examine if there are differences across industries regarding the extent of environmental disclosure.

Literature Review: The inception of Environmental reporting by companies was first initiated in the developed countries namely the US and UK. Harte & Owen (1991), Hughes et al (2001), Ahmed & Suleiman (2004) and Campbell (2004) analyzed the annual reports of companies of different countries to examine the extent, volume and type of Environmental disclosure of companies. The findings indicate that Environmental Reporting was done at a very general level by the companies.

There has always been a debate over whether there is a link between Environmental performance, Economic performance and environmental disclosure of companies. Therefore, Patten (2002) examined the relationship between environmental performance and environmental disclosure for US companies. The results indicate that the disclosure for less environmentally sensitive companies is affected more by TRI data release than from environmentally sensitive companies. A similar study by Tuwajri et al. (2004) studied the relationship among environmental disclosure, environmental performance and economic performance. The results show that good environmental performance is associated with good economic performance and also with quantifiable environmental disclosures of firms.

Studies on Environmental Reporting by Indian companies comprise of Chatterjee & Zaman (2008), Malavizhi & Yadav (2008), Arora & Kapoor (2012), Kundra (2013) and Goyal (2014). They made an attempt to understand and analyze the corporate environmental reporting of Indian Companies. They evaluated the annual reports using content analysis. The findings revealed that Indian companies have not developed a universal approach to Environmental reporting.

Environmental reporting by companies depends upon various firm-specific factors such as size, profitability, age etc. Various studies by Singh & Joshi (2009), Mukherjee et al (2010) and Joshi et al (2011) tried to examine the firm specific characteristics that influence the level of Environmental Disclosure information in Indian companies. They used environmental disclosure index to measure the amount of disclosure for environmental information in Indian companies.

Environmental Reporting in India: India has no mandatory environmental reporting provided by government or industry therefore Indian companies design their own mechanism and follow certain practices for disclosure. During the last decade, there has been a growing awareness owing to United Nations Framework on Climate Change and Kyoto Protocol on the disclosure of environmental performance. Environmental reporting has been seen as a way of increasing accountability of organizations regarding environmental issues. The ecological degradation caused by economic development raises concern about the environmental practices of business and Industry. A balance has to restore between ecology and economy for maintaining the quality of life. Therefore, corporate social responsibility is of wider significance.

The economic reforms started by Government of India during early 90s, have accelerated rapid economic development and the process of industrialization. As industrialization creates more environmental problems such as pollution and GHG emissions, companies have started providing information about their environmental performance and policies owing of increased accountability. At the same time, there has been a growing awareness internationally on the disclosure of environmental performance, particularly from those firms that have a direct and substantial influence on the environment like manufacturing, power generation, mining etc. to provide information regarding the environment implications of their operations.

In India, Provisions have been incorporated under various legislations and laws mandating business organizations to report on Environmental matters.

The Companies Act, 1956, governs the overall regulation of companies in India and includes sections on disclosure. Section 217 of the Act stipulates that the Board of Directors Report (Attached to every balance sheet tabled at a company annual general meeting) shall contain information on conservation of energy such as energy conservation measures and additional investments and proposals for reduction of the consumption of energy. The Water (Prevention and Control of Pollution) Act 1974, The Air (Prevention and Control of Pollution) Act 1981, The Environment Protection Act 1981 are three important acts made by Government of India to translate the constitutional mandate into action.

The National Conservation Strategy on Environment & Development of 1992, the Policy Statement for Abatement of Pollution of 1992, and the National Forest Policy of 1988 perhaps are the three documents related to the policy framework concerning environmental protection in Indian context.

The Ministry of Environment and Forests is the apex body in India which is responsible for planning, promotion, coordination and overseeing of Environmental programs in India. National Environmental Policy (NEP) 2006, approved by the Ministry of Environment and Forest recommends the use of “standardized environmental accounting practices and norms” in preparation of statutory financial statements for large industrial enterprises.

In 2008, The Institute of Chartered Accountants of India (ICAI) has set up the ICAI –Accounting Research Foundation (ICAI-ARF), which has undertaken a special project to suggest a suitable framework for sustainability reporting for Indian companies. It is compulsory for the companies to report on social, environmental and economic initiatives. In 2012, SEBI has made it mandatory for top 100 listed entities based on market capitalization at BSE and NSE as on 31 March 2012 to include BR Reports as part of their annual reports from the financial year ending on or after 31 December 2012.

Methodology

The research methodology involves a study of annual reports of top 30 Indian companies by market capitalization. The annual reports of the companies for 2012-2013 in the sample were studied to investigate the extent of environmental information disclosure. Wilmhurst and Frost (2000, p. 16) define environmental disclosures as “those disclosures that relate to the impact company activities have on the physical or natural environment in which they operate”. Fortes (2002) argued that environmental reporting encompasses those information items that communicate whether natural resources have been used responsibly. This paper adopts these definitions as the basis for analyzing information in annual reports to identify information relating to the environment.

The sample companies for our study comprise the top 30 Indian companies by market capitalization as listed on Bombay Stock Exchange (<http://www.bseindia.com/>). A list of the companies in the sample is provided in Appendix. Content Analysis has been used to investigate the amount of environmental disclosure in companies. Content Analysis refers to a set of procedures for collecting and organizing information in a standardized format (US General Accounting Office –GAO 1982). Content analysis is “any technique for making inferences by systematically and objectively identifying special characteristics of messages (Holsti 1968). In other words, Content Analysis is a research technique which converts qualitative data in quantitative information for making logical conclusions. Seven major elements in written messages can be counted in content analysis- words or terms, themes, characters, paragraphs, items, concepts and semantics. (Berelson 1952, Berg 1983, Merton 1968, Selltiz et al.1959)

Various studies have been conducted on Environmental Disclosure using content analysis. Arora & Kapoor (2012) categorized the information given in the annual report regarding environmental degradation, pollution, ecology, green technology etc. in five steps. Wiseman (1982), Freedman and Jaggi (1986) and Hughes et al. (1986) also used content analysis. They collected four categories of disclosure information: economic factors, litigation, pollution abatement and other environmentally related information. Under each category, related disclosure items were also included. The present study adopts a methodology in line with the study of Tuwajiri *et al.* (2004) and Mukherjee et al (2010) for environmental disclosure measurement. We have used themes in our study as it is a more useful unit to count. A theme is a simple sentence, a string of words with a subject and a predicate.

Content analysis of Annual Reports has been done based on certain themes related to environmental disclosure information. A total of 12 themes have been identified for the study after an extensive literature review and the list of the identified themes is provided in Table 1. The information is collected from the annual reports of the sample

companies on the basis of these 12 identified indicators. If any company's annual report mentions about the reference of other reports for further environmental disclosure on their websites such as Sustainability Reports, than they were also referred for calculating the environmental score.

Table 1: List of themes identified for Environmental disclosure information

1.	Implementation of standards such as ISO 14000 series, ISO14064 series
2.	Adoption of Environmentally friendly technology
3.	Energy conservation efforts
4.	Reduction of GHG emissions or CO ₂ emissions
5.	Recycling waste
6.	Afforestation programmes
7.	Water conservation efforts
8.	Investment in solar energy/wind energy
9.	Use of renewable energy
10.	Launch of Environment friendly products
11.	Environmental Audits
12.	Nature conservation projects

If any information exists in the annual report related to the identified indicators then its occurrence is denoted as 'yes' and is given a score of (+1). If there is no information, it is denoted by 'no' and given a score of (0). As we know, quantitative disclosure is more objective and informative to stakeholders than qualitative and physical or general information. Thus we have assigned scores for quantitative, qualitative and general/physical information derived from content analysis as per previous literature. We have assigned a score of (+3) for quantitative information, a score of (+2) for qualitative information and a score of (+1) for general or physical information. Final disclosure score is calculated by adding the total quality score and then dividing it with sum total of occurrence score. Table 2 explains the research methodology applied for the calculation of Environmental Disclosure Score taking ITC Ltd. as an example.

Table 2: Environmental Score of ITC Ltd

Environmental Themes	Occurrence	Score	Information	Quality Score
Implementation of standards such as ISO 14000 series, ISO14064 series.	Yes	1	General	1
Adoption of Environmentally friendly technology	Yes	1	Qualitative	2
Energy conservation efforts	Yes	1	Quantitative	3
Reduction of GHG emissions or CO ₂ emissions	Yes	1	Quantitative	3
Recycling waste	Yes	1	Quantitative	3
Afforestation programmes	Yes	1	Quantitative	3
Water conservation efforts	Yes	1	Quantitative	3
Investment in solar energy/wind energy	Yes	1	Quantitative	3
Use of renewable energy	Yes	1	General	1
Launch of Environment friendly products	Yes	1	Quantitative	3
Environmental Audits	Yes	1	Qualitative	2
Nature conservation Projects	No	0	No	1
Environmental Disclosure Score = Quality Score/Occurrence Score				
=27/11				
=2.4545				

Results and Discussion

After applying content analysis as explained above, the following Environmental disclosure scores for the 30 companies were obtained (Table 3). The findings show that out of the sectors categorised in the study-Information Technology, Banking and Finance, Oil Exploration and Mining, Power, Automobiles and FMCG. Information technology and Automobile sector has the highest environmental score. TCS, Infosys and HCL Technologies, the three big IT companies of India have an environmental score of above two. IT companies have made a sincere and wholesome effort to ensure that its operations, procurement and consumption practices are environment friendly. The banking sector has the lowest rating due to the reason that banking sector has a lower environmental impact than other sectors of the economy. Axis bank and HDFC bank are the two banks that have undertaken initiatives to be green as compared to their competitors.

ITC Ltd, a diversified Indian conglomerate has the highest environmental score out of the 30 companies. High environmental score indicates good understanding of climate change related issues affecting the company and society. ITC has incorporated sustainable practices into its entire value chain. Another company in the FMCG sector, Hindustan Unilever has also shown responsible and sustainable growth. The Automobile sector has also performed well in our study. Larsen and Tourbo is the second top environmental scorer in the list. Mahindra & Mahindra and Maruti Suzuki have also displayed a strong approach to information disclosure regarding environmental footprint with environmental scores of 2.083 and 1.777 respectively.

Table 3: Environmental Scores for the Selected Companies

S.No	Indian Companies	Environmental Disclosure Score
1.	Tata Consultancy Services Ltd	2.0909
2.	Oil and Natural Gas Corporation	1.9090
3.	Reliance Industries Ltd	1.9166
4.	ITC Ltd	2.4545
5.	Coal India Ltd	1.3750
6.	HDFC Bank Ltd	1.0000
7.	State Bank of India	0.7500
8.	Infosys Ltd	2.000
9.	ICICI Bank Ltd	0.6000
10.	Sun Pharmaceutical Industries Ltd	1.4285
11.	Larsen & Tourbo Ltd	2.3333
12.	Housing Development Finance Corp Ltd	0.7500
13.	Hindustan Unilever Ltd	1.6250
14.	Bharti Airtel Ltd	1.3750
15.	Wipro Ltd	1.8181
16.	Tata Motors Ltd	1.5000
17.	NTPC Ltd	1.3000
18.	HCL Technologies Ltd	2.1000
19.	Axis Bank Ltd	1.2500
20.	Sesa Sterlite Limited	1.3333
21.	Indian Oil Corporation Ltd	1.2000
22.	Maruti Suzuki India Ltd	1.7777
23.	Mahindra & Mahindra Ltd	2.0833
24.	Power grid Corporation of India Ltd	1.4000
25.	Hindustan Zinc Ltd	1.8750
26.	Ultra Tech Cement Ltd	1.8571
27.	Kotak Mahindra Bank Ltd	1.0000
28.	NMDC Ltd	1.4444
29.	Cairn India	1.3750
30.	Bajaj Auto Ltd	1.0000

The two companies in the power sector namely NTPC and Power Grid corporation of India Ltd are average below average scorers in terms of environmental scores. Another sector, mining which results in high environment degradation has not disclosed properly about their environmental impact of its operations. Coal India, Cairn India, Sesa Sterlite and NMDC have scores less than average environmental score (1.5). Hindustan Zinc was one such exception in this category; the company's score was 1.8571. Oil exploration companies such as ONGC and Reliance have scores of 1.9090 and 1.9166 respectively. The leading energy majors of India have strived to position themselves as a leading organisation in sustainable management. Pharmaceutical company, Sun Pharmaceuticals and Telecom Company, Airtel environmental score was insufficient to count them in the environment friendly companies list.

Conclusion

According to a report by World Bank (2013), climate change in India has resulted in warmer temperatures, higher frequency of heavy rain falls, flooding and droughts and therefore India faces major climate change risks due to changing weather patterns. Climate change will have an impact on business, environment and community. Nowadays, increasing number of Indian companies is disclosing their emission targets and communicating their emissions and climate change initiatives to the society. The findings of the study suggest that the Indian companies should adopt a more strategic and long term approach to address the climate challenge in the coming future. Environment protection constitutes the core of good business practices in today's world. The upcoming risks of climate change require urgent and sincere efforts by companies to incorporate sustainability principles into their businesses.

Companies that leave more environment footprint should develop a business model that lessens their environmental impact. Diverse programmes should be run by Governments to create awareness about the adverse and inevitable consequences of environment degradation. Investing in energy efficiency activities is not only beneficial for reducing GHG emissions, but can also contribute to profitability, as highlighted by a recent report by CDP and WWF (2013). Therefore, companies should understand that investing in sustainable practises will positively impact their financial performance due to savings of energy costs. They should be confident in disclosing emissions and targets and in communicating their initiatives for a better environment.

Implications of the study: Though a number of Indian companies have shown a reasonably good environmental performance in the present study, it needs to be understood that such disclosures need to be but an increasing number of national and international investors are using sustainability ratings of companies such as Dow Jones Sustainability Index to increase their investment value. Therefore, it is becoming imperative for companies to disclose more environment information.

Financial performance coupled with good environmental performance serves as an excellent benchmark to judge a company's long term future. ITC, Larsen & Turbo, Infosys, TCS, ONGC and Reliance which have high environmental scores features as the top 20 companies by profits (www.moneycontrol.com). Thus, companies should conduct business more responsibly.

The effects of climate change are impacting the operations of Indian companies and their value chains, increasing their costs, and preventing them from achieving high financial performance. Therefore, companies should innovate to create sustainable products and services, identify new markets and creating differentiation strategies, adopt sustainable practices such as energy, water and waste management to succeed in the market place.

Companies that work towards sustainable growth generally see a positive effect on their reputation as leaders in climate change action and more desired by customers than their counterparts. The first mover advantage theory can be applied towards climate change action.

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Public service values: a study of the experiences and preferences of NSW Australia local government councilors

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Abstract

More than two decades ago, with the introduction of the Local Government Act 1993, NSW saw fundamental changes in the power relationship between councilors and the council staff but almost no serious study exists that assessed the views of councilors about this relationship. This study, based on a survey of well over one hundred councilors triangulated with interviews across urban and rural councils, finds that councilors perceive that the council staff is largely neutral which they expect them to be. Councilors prefer the council staff to be neither responsive nor trustee and in the councilor experience council staff conform to the councilor preferences on both the values.

Introduction

A strong tradition exists in the constitutional theory of the Westminster style parliamentary government that appointed officials should be separated from the elected officials. There are two interrelated elements in this ideal. Politicians must not have any role in the employment matters of public servants and second politicians must not be allowed to influence public servants as they carry out their tasks. In accordance with this ideal, elected politicians formulate policies and public servants provide advice and implement policies. In order to ensure that public servants have the employment conditions necessary to their being able to provide neutral advice and implement policies in accordance with law, politicians must not control the from employment matters of public servants. Ideally, the employment of public servants is managed by constitutionally instituted bodies that are above political influence (Spann, 1973).

In practice, this ideal has not always been achieved in the local government of New South Wales (NSW) Australia. Since its inception, the employment matters of council staff was always politicized and under the current NSW Local Government Act (1993) councilors, who are elected officials, control the employment matters of the general manager who in turn controls the employment matters of other senior staff in consultation with the council. Control over employment matters not only includes control over such regular human resource matters as selection, promotion et cetera, but also annual performance evaluation. The Act has also separated councilors from the council staff in terms of their roles and made the later quite independent of the former. The councilors formulate strategies, policies of the council and ensure the accountability of council staff.

The council staff, on the other hand, provide advice to councilors and implement council policies. This increased politicization of council staff employment is likely to make the latter responsive. As Kimber and Maddox (2003, 63) elaborates: “By eroding senior public servants’ tenure and increasing politicization, making the position of senior officers personally dependent on the favor of ministers, those restructuring the public service could have compromised the conditions that enable public servants to provide ministers with impartial advice in a “frank and fearless” manner’. These changes have been introduced to the NSW local government more than two decades ago but quite surprisingly there is hardly any serious research that examined: First, what are the councilor preferences about the values of council staff, and second, what are the councilor experiences about the values that guide council staff in their actions?

This study fills the gap in our understanding by addressing these two abovementioned questions. This paper begins with a brief description of NSW local government and then proceeds to describe the method of data collection, profile of respondents and findings of the study. The paper concludes with a discussion section that provides an explanation of the findings.

NSW local government: The NSW local government is worth \$89 billion in assets and infrastructure which brings well over \$9 billion into the NSW economy every year and employs more than 50,000 people (Division of Local Government 2012, 6)

Local government in NSW is an elected system of government where between five and fifteen elected councilors hold office as ‘the council’ for four years. Each local government unit is a statutory corporation and provides a range of socio- economic services for a defined geographic jurisdiction. Councilors are expected to represent community views on council, provide leadership and ensure local needs are met (Division of Local Government, 2008a, 5-13). Councils are headed by mayors who can ‘either be popularly elected for a four year term or they can be elected by the councilors for a 12 month term’ (Division of Local Government, 2008b, 33). Councils, in Australia, traditionally are viewed as non-political and continuing with tradition many candidates stand for elections as ‘Independents’ but many others affiliate themselves with a registered political party (Division of Local Government, 2008a, 34).

Under the Local Government Act 1919, it was the councilors who appointed staff at such senior positions as the council clerk and council engineer. Only condition, however, was that applicants for the positions must have a prescribed qualification (s. 88). Under the current Local Government Act 1993, even this condition has been removed. Councilors are free to appoint anyone at the most senior position – the general manager- so long as the candidate fulfills the job requirements and the appointments are made based on merit after state-wide advertising (s.348). The general manager in turn appoints other council staff but they must consult the council when they appoint or dismiss other council staff (s.337). The general managers and other senior staff are appointed on performance based contract for the maximum period of five years (s.338).

The general manager, with the support of the council staff, implements council policies, assists council to develop its strategic direction , and ensures that ‘councillors are provided with information and the advice they require in order to make informed decisions and to carry out their civic duties’ (Division of Local Government, 2011, 10)

The current Act has attempted to make the staff independent of the council in terms of their tasks. For example, section 352 clearly states: ‘A member of staff of a council is not subject to direction by the council or by a councilor as to the content of any advice or recommendation made by the member’. While all council staff have a duty to carry out council decisions they are responsible to the general manager, not the councilors. Individual councilors cannot direct staff in their day-to-day activities. (Division of Local Government 2008a.14)

A publication of the state government of NSW is quite categorical separating the council staff from the councilors. Generally, requests for assistance or information should go through the general manager, except where he or she has authorised another council officer to undertake this role. Similarly, if a staff member needs to talk with a councillor or the mayor, approval should be obtained from the general manager or the appropriate authorised officer. Where authority is given to another council officer, it is the general manager’s responsibility to monitor, as far as practicable, that the policy is being observed. Individual councillors do not have the right to direct council staff in their day-to-day activities. Councillors must not contact a member of the council staff on council related business unless in accordance with the policy and procedures governing the interaction of councillors and council staff that have been authorised by the council and the general manager. (Division of Local Government, 2012, 30)

Methodology

In New South Wales, there are 1480 councilors distributed among 152 councils. The number of councilors per council varies from as many as 15 to as few as 6 (Division of Local Government 2014). Data for this study has been collected through an online survey using the Survey Monkey software. All councilors in NSW were sent an email informing them of the survey and requesting them to complete. Councilors were given a reminder after a month of the uploading of the survey. In total we have received 132 filled in questionnaires leading to almost 9 per cent response rate. This is quite a low response rate and thus the findings should be viewed as indicative only and extreme caution has to be exercised before making generalizations based on this data. Such a low response rate from online surveys is not unusual.

Manion and Sumich, (2013a, 2013b) conducted two online surveys. In one they had responses from 357 councilors (Manion and Sumich 2013a) and in the other they had only 91 responses (Manion and Sumich 2013b). We

will provide where possible data from a these two recent surveys conducted by Manion and Sumich (2013a and 2013b). However, we have also conducted interviews with seven councilors to increase the validity of the findings. Moreover we can also state that the responses of NSW councilors support very closely the responses we have, using very similar questionnaire, findings, from New Zealand (Haidar, Reid & Spooner 2011) and Victoria Australia (Pullin& Haidar 2004). This similarity of findings across two of the largest states in Australia and in across the Tasman in New Zealand further enhances the validity of finding from the current study.

Profile of respondents: Of our respondents 62 per cent belong to rural councils and the rest belongs to urban councils. More than 72 per cent responses for this study came from councilors who are aged 50 years and over and of which over 66 per cent were male. Little over 48 per cent of the responses came from councilors with more than seven years' experience and 43 per cent of the responses came from councilors with less than one years' experience. At least in terms of age, our respondents are typical councilors of NSW local government (Division of Local Government 2008b, 7).

Conceptual framework: Table 1 outlines the conceptual framework of the paper. The framework identifies four value patters based on three dimensions. Trustees are loyal to the community and this value pattern guides the action of council staff. Neutral managers are loyal to the law and their actions are guided by the council regulations. Responsive managers are loyal to councilors. While reluctant responsive council staff is loyal to councilors because they are under pressure from them the proactive responsive managers follow councilors on their own volition. For a detailed discussion of this framework, please see Haidar et al (2011).

Table 1: Dimensions and patterns of ideal type managerial values

Dimensions	Value patterns			
	Trustee	Neutral	Reluctant responsive	Proactive responsive
Object of obedience	The community interest	Councilors acting within the law	Councilors –under pressure	Councilors –own volition
Partisanship	To the community interest	Non-partisan	To Councilors – under pressure	To councilors – own volition
Anonymity	Non anonymous to the community interest concerns	Anonymous	Non-anonymous to the councilor interests – under pressure	Non-anonymous to the councilor interests – own volition

Results

This section of the paper describes the results of questionnaire survey about the preferences and experiences of councilors about values of council staff.

Table 2 clearly says that NSW councilors do not prefer senior staff to adopt the roles of trustees. In the experience of majority of councilors, senior staff does not adopt such a role either. In other words, majority of councilors do not believe that community interest should be the main consideration while senior staff advise them, implement policies and deal with confidential matters. However, the table also shows that while 18 per cent councilors believe that the council staff, in their advice, considers community interests, almost 35 per cent councilors prefer senior staff to consider community interest when they provide policy advice.

The responses reported in Table 3 are not as unequivocal as the responses of councilors expressed in Table 2but the responses are quite consistent. The message is quite clear. Councilors prefer neutral senior staff. Overwhelming majority of councilors prefer that senior staff should consider both community interests and political interests of councilors, maintain confidentiality and unquestionably implement all council policies that have been formulated following council approved procedures.

Table 2: Trustee

	Disagree		Undecided		Agree	
	Preference	Experience	Preference	Experience	Preference	Experience
T1. Make unauthorized public comment about council policies they believe are not in the	86.3	85.7	5.3	8.0	9.1	8.1
T2. Disclose unauthorized information when they believe it is in the community interest to do so.	74.2	78.8	13.6	8.8	12.1	12.4
T3. Hide official information when they believe it is in the community interest to do so.	92.3	75.2	3.8	8.8	5.4	15.9
T4. Only implement council policies they believe are in the community interest.	81.6	71.4	3.8	11.6	4.6	17.9
T5. Only consider the community interest when providing policy advice to council.	55.8	62.0	11.5	11.6	34.4	17.9

Table 3: Neutral

Questions	Disagree		Undecided		Agree	
	Preference	Experience	Preference	Experience	Preference	Experience
N1. Never make unauthorized public comment about council policies, even if they believe the policies are against the	16.1	14.3	2.3	12.5	82.5	73.2
N2. Never make unauthorized disclosure of official information.	13.2	17.7	7.0	9.7	80.6	72.6
N3. Hide information when the law requires them to do so.	29.5	25.9	17.1	22.3	53.5	51.8
N4. Implement all lawful council policies, even if they believe these policies are against the community	8.4	10.6	9.2	14.2	82.3	76.1
N5. Consider both the community interest and the political interests of councilors when providing policy	64.1	53.1	4.6	16.8	31.3	31.0
N6. Having provided their policy advice, leave councilors alone to accept or reject their advice.	18.5	23.9	6.2	6.2	75.4	69.9

However, these claims need to be qualified. Consistent with responses in T5 in Table 2, 31 per cent of councilors state that council staff currently considers and should consider both community interest and political interests of councilors while providing policy advice. Similar views also have been expressed by John Howard(1989)a former prime minister of the commonwealth government of Australia that public servants, while providing advice, should be politically neutral but not politically insensitive.

On N3,while almost 53 percent of councilors agree that the council staff hides information when law requires them to do so and a couple of per cent more councilors prefer them to hid information in such situations. Reponses on N5 shows that majority of councilors neither prefer nor experience senior staff considering both community interest and the political interest of councilors while providing advice. Senior staff providing advice combining these two elements should be acceptable to councilors but it is not.

These responses of councilors are quite consistent with their responses on the questions related to responsiveness which will be discussed soon. Reponses of councilors on N6 is quite clear. They prefer senior staff to provide advice and once they have done that councilors prefer to be left alone. They do not prefer to be persuaded by senior staff about their policy advice.

Table 4: Reluctant responsive

Reluctant responsive	Disagree		Undecided		Agree	
	Preference	Experience	Preference	Experience	Preference	Experience
RR1. Make unauthorized public comments when they are under pressure from councilors to do so.	92.3	83.8	5.4	7.2	2.3	9.0
RR2. Disclose unauthorized information when they are under pressure from councilors to do so.	92.4	80.1	5.3	7.2	2.3	12.6
RR3. Hide official information when they are under pressure from councilors to do so.	97.0	75.6	2.3	9.0	0.8	15.3
RR4.Implement unlawful requests from councilors when they are under pressure from councilors to do so.	96.9	82.7	1.6	7.3	1.6	10.9
RR5.Frame and limit their policy advice to suit the political interests of councilor’s when they are under pressure from councilors to do so.	97.7	80.1	1.5	5.4	0.8	14.4

Responses in Table 4 shows that councilors do not experience senior staff are under pressure to be responsive to councilor demands to comply with their unlawful demands to include political interests while implementing policies and while advising on policy and nor to make comment on policies. Almost no councilor prefers senior staff to be responsive to their party political demands neither in implementing nor in formulating nor in commenting on council policies. On RR3, it appears, although it is high majority, that is, around 15 percent find senior staff hiding council information when they are under pressure from councilors. This again seems to be linked to the existence of factions among councilors which will be addressed systematically later.

Table 5 shows that councilors' responses to proactive responsive questions are almost the same as those of the reluctant responsiveness. Almost no councilor prefer senior staff to be proactively responsive to their political interests in advising on council policies or in implementing council policies or in maintaining confidentiality of council matters. Although the percentage of councilors is lower roughly by 10 percent while they respond to their experiences but they are still well over 80 percent.

Table 5: Proactive responsive

Proactive responsive	Disagree		Undecided		Agree	
	Preference	Experience	Preference	Experience	Preference	Experience
Make unauthorized public comment in support of the political interests of councilors.	98.4	82.8	0.8	11.7	0.8	6.3
Disclose unauthorized information in support of the political interests of councilors.	99.3	83.7	0.0	4.5	0.8	11.8
Hide official information which could damage the political interests of councilors.	96.2	83.6	3.1	6.4	0.8	10.9
Only implement policies that promote the political interests of councilors.	96.1	84.6	2.3	9.9	1.6	5.4
Frame and limit their policy advice to suit the political interests of councilors.	98.5	84.8	0.8	5.4	0.8	11.6

Discussion

Results described above allow us to draw few general conclusions. They are: Councilors prefer council staff to be neutral and the latter do meet the expectations of the former in their actual behavior. Councilors do not prefer council staff to be trustees and council staff do not act as trustees in their actual behavior. Similarly, councilors do not prefer council staff to be responsive and the latter conforms to the expectations of the former. In other words, by and large, council staff conforms to the preferences and expectations of councilors.

Councilor staff does not need to be responsive to the interests of councilors because the councils are usually divided. Councilors come from arrange of political parties. Councils are not like cabinet in the state or at the federal government level where one party or a coalition commanding majority in the parliament forms the government. They are likely to have agreement on a broad set of issues. But that is not the case in the NSW local government. Although it does not happen quite often, but it is quite difficult for councilors to agree on making serious decisions about councils staff employment i.e. terminating the employment of a council staff. This political composition of councils makes them quite weak in relation to council staff and in making decisions on their employment matters. As one councilor puts it:

(In our council we have) six Labor, six Liberal, one independent, and two Greens. You have a hung parliament. There is more autonomy for the senior officers. GM has all the power. We have very weak mayors because they only get a year. (Before they can understand fully) their term is up. It takes them six months to get on top of it and six months to make a difference. And that is just the political reality of our council unfortunately. We get around that by

trying to do deals with other political parties. Sometime that works. Sometime it does not. That is something like power sharing arrangement...

Councilors do not prefer council staff to advise about what the councilors should do politically because councilors believe that it is their job. The job of council staff is to provide impartial advice based on a fair assessment of facts. As on councilors

In terms of the political side I do not really want them to advise me on that [political interests] but I would rather be advised my own party by and by my own intuition there. But, however, I would like them to be fully frank about the all the community feedback that they are getting. What they are getting in terms of objections to things or what they are getting through websites.

Councilors do not prefer council staff to adopt the roles of trustees because councilors believe is that their job to know, to be aware of and to represent community interest in councils. As one councilor says:

I see them as bureaucrats. They are technical advisers. I do not want them to give me what they think is the opinion of the community. That is my job. My opinion is they are pure bureaucrats, technical advisers. (That is what) they should be - they provide technical advice they provide engineering advice, and analysis of financial, social surveys. But not too much spin on what they believe to be the politics of the social consequences of what they do. So the technical is the simplest is way of saying it.

Councilors prefer managers to adopt neutral values because this set of values recognizes the distribution of power between managers and politicians (Maranto and Skelley 1992, Helco 1977). In local government, councilors are invested with power and council staff exercise power delegated to them by councilors. This distribution of power recognizes the fact that councilors, as representatives, formulate policies and remain accountable to their electors for their actions. This accountability requires, among others, that policies and strategies are adopted and implemented that reflect the wishes of the electors. It is quite natural that EMs would like to have advice that they are comfortable with and that reflects the wishes of their electors.

Council staff adopt neutrality values rather than the trustee or the responsive values even working under a politicized employment for a variety of reasons. The neutrality ethic is a prudent principle from the self-interest perspective of government managers. A manager with neutrality orientation can hold on to a job longer than a responsive manager or a trustee, as the neutral manager can continue working for many political groups while a responsive manager or a trustee can only work for a political group that agrees with his or her views and attitudes. Neutrality as an ideal is "more understandable and functional for career executives than other ideals such as 'public service' or 'public interest'" (Maranto and Skelley 1992, 184). Neutral managers by distancing themselves from identification with any particular group can "preserve their reputation for indispensable competence and fairness" (Caiden 1996, 21).

Conclusion

This study, based on a survey of well over one hundred councilors triangulated with interviews across urban and rural councils, finds that councilors perceive that the council staff is largely neutral which they expect them to be. Councilors do not prefer council staff to be responsive or trustee and, in the councilor experience, council staff conform to the councilors' preferences. It has been argued that it is in the interests of council staff to remain neutral and not to adopt the roles of trustees or responsive managers. Council staff can maintain this neutrality because although their employment relationship is politicized, councilors are too divided among themselves to take serious council staff employment decisions.

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Poverty alleviation through women's entrepreneurial activities in rural Andhra Pradesh, India

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Abstract

In India, despite continuous efforts to accelerate the economy, ensuring sustainable livelihoods and alleviating rural poverty remain serious challenges for policy makers. Various reasons including a lack of access to institutional/farm credit, a lack of innovative approach for agricultural development, steep increases in the prices of fertilizer, high indebtedness, and imperfect market conditions, etc. have become the major hurdles in ensuring livelihood security for the poor and excluded. In addition, a lack of institutional support often traps them into a cycle of perpetual debt and poverty. In extreme conditions, the rural poor are even deprived of access to food that leads to an increasing spate of suicides. In these circumstances, ensuring livelihood security of the poor through promotion of various small-scale entrepreneurial activities has received critical attention as a source of inspiration. Having recognized the need and the tools necessary to fill the gap, rural banks are entrusted with the responsibility to provide adequate and affordable credits to the rural people to improve their livelihood opportunities. In this context, Self-Help Groups (SHGs) have become instrumental in delivering tiny loans to the poor women through banks to promote various entrepreneurial activities. Particularly in Andhra Pradesh, a southern state, the SHG movement has been playing a pivotal role by bringing a radical change in the position of women from daily-wage laborers to self-employed entrepreneurs. Given this backdrop, as an empirical analysis, the paper critically examines the potentials of SHGs to emerge as institutions of rural entrepreneurship, and the possibilities of running various small-scale business ventures by poor women in Andhra Pradesh. Besides, the paper attempts to highlight the major operational challenges in functioning of SHGs against its claims.

Introduction

Poverty alleviation has consistently been one of the important development challenges since independence and recognized as an avowed objective in India's policy-making. Accordingly, Indian government has been initiating and implementing various development and welfare policies and programs from time to time since the first five-year plan to meet the desired objective. Despite the government's initiatives, budgetary allocations and commitment through above said policies and programs, the grassroots reality makes it clear that India still have a long way to go in alleviating poverty and ensuring acceptable minimum standards of living (Katsushi et al. 2009).

Some scholars have looked at poverty in gender perspective as well. Nussbaum (2000) elucidates the feeble conditions of women in most of the developing countries. Women are less well-nourished than men, less healthy, more vulnerable to physical violence, sexual abuse, lead a far from dignified life and are treated as '*second class citizens*'. It is argued that economic empowerment is one of the important ingredients in the process of women's empowerment. Women's access to market and their decision-making power within households not only leads to the reduction of poverty but also increases their productivity at the individual and household level. Indeed, it stresses the need for providing credit to women that allows them to take up income generating work (Morrison et al. 2007).

Given this context, women entrepreneurship through Self-Help Groups (SHGs) has been recognized as one of the alternative source to address the rural women unemployment and further to contribute for their economic growth. The basic purpose of the SHGs is to improve the conditions of the poor and marginalized sections, particularly those who are unable to obtain credit from money-lenders (Puhazhendhi et al. 2000, Rao 2002, Ramalaxmi 2003). The Nawaz (2009) says, involvement of rural women in various entrepreneurial activities through SHGs bestows them to empower themselves in different fields.

SHG as an institution of entrepreneurship, not only develops women's entrepreneurial capacity but also is a form of collective action (team work & collective decision-making), and strives for each and every individual's empowerment. In this regard, it is imperative to recognize that the provision of extending loans to the poorer sections in rural areas through the formal banking system, that is, by the SHG-Bank linkage Program model. In scripting the success of SHG movement, the case of Andhra Pradesh has become noteworthy. According to Society for Elimination of Rural Poverty, Government of Andhra Pradesh report (2013), as of 31st March 2013, there are 10,59,101 SHGs have been formed with more than 1,15,00,000 SHG members, the total savings stand at 4054.44 crores.

The objectives of the Study were to examine the role of Self-Help Groups in creating entrepreneurial activities to the women in rural areas; to assess the impact of SHGs on the rural poor women with reference to income, employment, asset creation and women empowerment in the selected three villages of Andhra Pradesh; and to critically find out the structural constraints in the successful functioning of the SHGs.

Methodology

The study is confined to assess the impact of SBLP model on poverty alleviation through promoting various small-scale entrepreneurial activities among the poor women. Considering the time and resource availability, the study is limited to the three districts of undivided Andhra Pradesh. Though the study is limited to only three districts, it represents all the three regions of undivided Andhra Pradesh i.e. East Godavari district from Andhra region, Chittoor from Rayalaseema region and Karimnagar district from Telangana region.

Sampling Procedures and Sample Size: As mentioned, the proposed three Districts (i.e. Karimnagar, Chittoor and East Godavari) have been purposely selected due to the above stated reasons. From each of these three districts, one village has been selected randomly. From each of these three villages, 50 respondents that is, the total sample frame is 150 (covering all the three selected villages) were selected by using stratified random sampling method. In this study, the researcher stratified the total sample frame into a number of non-overlapping sub-groups by using religion, caste, gender, model of financing and the suicides observed households etc.

The study employed different methods to collect both primary and secondary data. Questionnaire was administered to SHG members to collect the primary data. In the process of data collection, the researcher used different tools such as interviews with the SHG members and bank managers by using standard-structured questionnaires and Focus Group Discussions (FGDs) to elicit necessary information pertaining to the objectives and research questions of the study.

After the data collection, the completed questionnaires were scrutinized and edited in order to elicit an accurate data. The study used Excel sheet in order to transform the variables into a format suitable for analysis. The data also analyzed by calculating percentages and present in the form of tables, charts and diagrams. The data analysis was carried out using Statistical Package for Social Science (SPSS version 20). Descriptive statistical tools such as frequency distribution and cross tabulation have been used to describe the socio-economic and demographic profiles of the respondents.

Findings and Discussion

Rural Women Entrepreneurship through SHGs: Empirical Analysis

In recent times, SHGs are seen as instrumental in both women's empowerment and poverty eradication by creating various entrepreneurial opportunities with the help of micro-finance. In the field study it is observed that most of the rural women on an average were borrowed Rs. 50,000-60,000 from SHGs. It is observed that, before joining SHGs, most of these women were coolies and daily labors or housewives. They did not have access to capital to start a small business ventures.

If they got money from money-lenders, the interest rate used to be very high and they were unable to repay the money within the time-frame. That is the reason most of the women from poor households worked as coolies and daily wage labour. However, the instigation of SHGs and with the financial assistance from the SHG-Bank linkage the

scenario has changed, as it led to for a significant improvement in the economic conditions of the rural poor. The following table demonstrates the purpose of availing loan from SBLP model by the SHG women.

Table.1: Purpose of availing loan from SHG-Bank Linkage: Cross Tabulation

S.No	Purpose of Availing Loan	Total Respondents	Purpose of Utilization	Chinabonala	Diwancheruvu	Taduku
1	Daily Consumption	31	Non-productive purpose	14	8	9
2	Ceremonies	6		2	3	1
3	Emergencies	17		8	4	5
4	Agriculture and agri equip	26	Productive purpose (Self-employment)	7	14	5
5	Livestock rearing	22		5	6	11
6	Photostat centre	2		1	1	-
7	Tailoring	5		1	2	2
8	Weaving	7		7	-	-
9	Kirana Store	5		2	2	1
10	Bangle store	6		1	1	4
11	Chat Bandar	3		-	2	1
12	Vegitable/fruit shop	6		-	3	3
13	Basket and Broom Making	6		-	4	2
14	Beedi –making	8		2	-	6
15	Total	150		50	50	50

Source: Field Survey, January-March 2013.

The purpose of availing loan under SHG, as highlighted in the above table.1, falls under two categories: (i) productive and (ii) non-productive purpose. Based on their nature of work/occupation and usage, all the respondents have been divided broadly into either of this category. Of the 150 respondents, 96 (64%) have availed bank loans and utilized it for productive purposes. As far as particular occupation/business venture is concerned, the productive purpose category is divided into 11 sub-categories. Of the 96 respondents in this category, 26 (17%) are utilizing their loan to purchase agriculture related equipment and necessities activities such as seeds, fertilizers, and pesticides. Besides, livestock management is considered to be a valuable alternative source of livelihood in the rural areas of Andhra Pradesh with multiple utility. They purchase cows and buffaloes and sell milk in nearby dairy centres. The remaining 48 respondents (32%) in the productive purpose category utilize their loan for various self-employment activities.

The remaining 54 respondents, which compose 36% in the second category, namely non-productive purpose, use the loan amount in neither off-farm nor on-farm activities. The table 1 shows that 31 respondents (21%) use their loan for daily consumption, 6 (4%) put their loan amount for performing various social ceremonies and; 17 (11%) for emergency (medical) purposes. Geographically, Chittoor district in Rayalaseema region is largely drought prone and most of the rural population here depends on single crop cultivation. As a result, their incomes are meager. During off

seasons, the tenant farmers and seasoned laborers of this district are left with no secure income source. The sorrow gets multiplied in case of women. Left without any option, these women are compelled to depend upon the SHG loan to meet their basic daily necessities and other material needs such as constructing houses, performing social ceremonies and meeting medical and other emergencies. It is noteworthy to mention that the dependency on these loans is particularly high in case of women from Schedule Caste (SC) and Schedule Tribe (ST) background.

Table 2: Contributions to Family Expenditure

S. No	Contribution to Family Expenditure	Total Number of Respondents who utilize credit for productive purpose (N=96)
1	Basic Food	31
2	Children's Education	20
3	Buying electronic goods	15
4	Health Care	12
5	Constructing house	7
6	Repaying old debts	11

Source: Field Survey, January-March 2013.

Critical Observations

Self-Exclusion of the Rural Poor: One of the disappointments encountered in the field study was that some poor people are effectively excluding themselves from joining SHGs. Yadamma (37 years old), a widowed woman with three children, said that "I go for daily wage labor along with my elder son. The money I earn goes towards our daily expenses. When work is irregular, we cannot contribute regular savings. Without any savings, how can we join a SHG and use credit facilities?" She is also of the view that the repayment of the money within the time-frame is difficult.

Irregular Re-payments: It has been observed that the highest members in four SHGs are irregular in their repayment of loans. However, we need to notice here that, they are not irregular because of their laziness, nor do they intend to deliberately skip the repayments, but only because of inadequate income generation.

Vote-Bank Politics: During the time of elections, political leaders tend to use these groups as a channel for campaigning. They distribute saris, money and even silver ornaments to the group members. Since these group members are active in village developmental activities, they are asked by the politicians to distribute all these to the other village women also. Their interaction with politicians could have contributed to their political empowerment, but unfortunately, these women are being used for the wrong political methods.

Misuse of Micro-Credits: In many cases, women members hand over the money that they have got from the loans to their husbands. This means that some women are not using this credit for income-generating activities. Hence, misuse of micro-credits is one of the drawbacks observed in the field.

No Caste Homogeneity in SHGs: It is observed that most of the SHGs in rural areas are formed on caste lines and also some of the forward Caste groups have low estimation for BC, SC and ST groups. Similarly, BC SHGs have low estimation for SC and ST groups. This kind of low estimation is not desirable for the nurturing of the SHGs.

Conclusion

As a whole, the idea of alleviating poverty through various microfinance models and banking initiatives is a welcome step and deserves much appreciation. From the field-surveyed observation, it can be inferred that the provision of delivering tiny loans, particularly through SHG-Bank Linkage Programme (SBLP) has a positive impact on creation of various livelihood opportunities vis-a-vis alleviating poverty of the rural women. It has shown that utilizing their loans in various productive activities like buying agricultural equipments, livestock rearing and creation of various self-employment activities has made considerable progress in improving their income levels. The contribution of their

income for family expenditure like purchasing food items and electronic goods, children's education, health care purpose, house construction and repaying old debts has significant impact in reducing their vulnerability to poverty. It is inferred that through the entrepreneurial activities rural mass have an opportunity to transform from daily wage earner to self-employed entrepreneur, if the SHGs lend money to them with subsidized interest rates and simple procedures. However, there is an urgent concern to disburse the loans without long interventions. It is the time to look at the concept of SHGs in a long term perspective because these intermediaries have the potentiality to create various entrepreneurial activities to the rural unemployed poor women that not only paved for their all-round empowerment but also reduction of feminization of poverty as well.

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Employees' perception of female leadership effectiveness in the service sector in Sri Lanka

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Abstract

Though women are considered as a crucial factor in the labor force of all countries in the world, still their representation in managerial positions is considerably low. According to Carli & Eagly (2001), Heilman (2001), Maddock (2005), and Eagly (2007), the qualities of having a female gender role, the assumptions of women having less work experience and less education, perceiving women as lacking the necessary leadership skills and other prejudicial beliefs are expressed in the view of inappropriateness of women for leadership roles and their lack of effectiveness as leaders; such barriers to women deny them leadership positions and cause them to end up with less status and smaller salaries. Moreover, Florence (1993) revealed that such stereotypes were typically held by women against female leaders. Sri Lankan women represent more than 50% of the population and 35.6% (2013-2nd Quarter) of the total workforce and in contrast to other Asian countries they enjoy the social, educational and economical freedom of the country. For instance, the adult literacy rate in Sri Lanka for females is 97% and among the youth (15-24 years) the literacy rate is 99% (2013). Although they play a crucial role in the economy and are known as the backbone of many industries such as plantation, garment manufacturing and migrant work, still very few women are in leadership positions. This study discusses the question of to what extent a leader's behavior impacts the employees' perception towards women's leadership effectiveness? Do the selected demographic factors of respondents affect the perception of employees towards women leadership effectiveness? The sample consisted of 120 employees who had experienced working with women bosses in the service sector. The results show there is no statistically significant difference related to demographic factors (gender, age, educational level and length of service) in perceiving women leadership's effectiveness based on four leaders' behavioral aspects (communication skills, usage of power, decision making skills, personal character). Besides, there is a significant correlation between women leaders' behavioral features (communication skills, usage of power, decision making skills, personal character) and women leadership's effectiveness.

Introduction

Hence, most of the countries have been realized the worth of female labor force as a driving factor of their economies, they are introducing many policies and stimulus to attract more women to their workforces. But still regardless the country is developed or not the number of the females who are holding the leadership positions are apparently low. According to many scholars such as Carli & Eagly (2001), Heilman (2001), Maddock (2005), and Eagly (2007) the assumptions, prejudicial beliefs and the stereotypes against the women resist them from reaching the leadership positions and it makes cause them to end up with low salaries and low positions. For instance according to these scholars the prejudicial beliefs and assumptions such as females are having no adequate education, work experiences, and leadership skills as the leaders to deal with the subordinates stand against the female to reach the top levels.

On the other hand, female gender role does not allow them to possess the leadership qualities. For instance the territories of social roles prevent the female to act as rigorous leaders in the organizations. For instance the society believes that women should be less aggressive and assertive in their communication. But according to the findings of Oakley (2002), that behavior can create problems in while female leaders are carting out their duties. On the other hand the masculinity versions and practices available in the society related to the leadership leads to a cultural dilemma for the women who are in the leadership positions. This is supported by the findings of Still in 2006. More interestingly, as Florence (1993) described, females are having more stereotypes against the women than males of the females who are acting as the leaders in the society. This can be a result of the complexities which are facing by the females while they are dealing with this masculine society.

However, many organizations have been realized the worth of competent females as the leaders and they are making the efforts to attract and recruit the female leaders to their organizations. This is proved by the findings of the Burke & Cooper in 2004. According to them today's organizations are in need of more skillful and talented employees and as of their opinion women can fulfill themselves these requirements. This trend can be considered as the positive sign for the engagement of more female leaders in the organizations in the future.

Having all these contradictory conclusions, through this study it was expected to investigate how do the Sri Lankan employees in the service sector are perceiving their female leaders leadership effectiveness and what is the impact of demographic factors on the perceived female leaders' effectiveness.

Methodology

Quantitative research methodology has been used to conduct the research. Out of the total population of all the employees who are working in the service sector of Sri Lanka, 120 employees were selected based on the Purposive Sampling Method. The sample was consisted with 60 males and 60 females and they represented both the Public and Private sectors. Structured Questionnaire method has been used as the data gathering instrument and the questions were based on the Five Point Likert Scale. For the data analyzing, Package for the Social Sciences Version 16.5 (SPSS 16.5) has been used.

The Questions were based on the Four Leadership Qualities of decision making skills, communication skills, personal character, usage of power which has been introduced by Mirza (2003) that represents the Independent variable of the Study and the dependant variable of Perceived Leadership Effectiveness. T-Test Analysis, Pearson Correlation Analysis and the Analysis of Variance (ANOVA) have used to analyze the data to answer the questions of the difference of perceived female leadership effectiveness based on the respondents' gender, their demographic factors and to find out the relationship between female leaders' leadership skills and perceived female leadership's effectiveness. Moreover a pilot test has done to determine the consistency and the reliability of the questionnaire.

Discussion

According to the findings this study concludes that there is no statistically significant difference related to demographical factors (age, gender, length of service, and educational level) on perceived female leadership's effectiveness based on the selected four leaders' characteristics (decision making skills, communication skills, usage of power, personal character). Moreover, a significant correlation exists between female leaders' four leadership characteristics (decision making skills, communication skills, usage of power, personal character) and perceived female leadership's effectiveness.

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Ethical investment instruments for financial sustainability

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Abstract

This paper aims to investigate whether ethical investment instruments could contribute to stability in financial markets. In order to address the main issue, the study investigates the stability of return in seven conventional and Islamic equity markets of Asia, Europe and North America and in five major commodity markets starting from 1996 to June 2012. In addition, the study examines the unconditional correlation between returns of the assets under review to investigate portfolio diversification benefits of investors. Applying relevant methods, the study finds that investors may enjoy sustainable returns from their portfolios by investing in ethical financial instruments such as Islamic equities. In addition, it should be noted that most of the commodities, gold in particular, are either low or negatively correlated with equity returns. These results suggest that investors would be better off by investing in portfolios combining Islamic equities and commodities in general. The sustainable returns of ethical investments has important implications for the investors and markets since these investments can provide stable returns while the investors can avoid production of goods and services which believes to be harmful for human and the society as a whole.

JEL Classification: G01, G11, G15

Introduction

The United Nations 'world summit' in 2005 identified three major pillars of sustainability as economic development, development of society, and environmental protection (United Nations, 2005). The issue of financial sustainability, at both micro and macro levels, is a major concern for the stakeholders of enterprises since the 2008 Global Financial Crisis and 2010 Eurozone crisis when financial instability and capital mobility became prominent issues. In fact, macro and micro level sustainability could be bidirectional. Investors, doomed in losses from failed investments and bankruptcies, started to include ethical investment instruments such as Islamic equities and major commodities in their portfolios. This paper intends to investigate whether ethical investment instruments could lead to a stability of return in investments with an ultimate objective to achieve financial sustainability. A number of studies have investigated the issue of sustainability particularly in financial markets (Van Staveren 2013, Carnicer & Penuelas 2012, Renneboog et al. 2011, Graafland & van de Ven 2011, Abdelsalam et al. 2014, Fang & Foucart 2013, Nagaoka 2012, Rethel 2011, Kayed & Hassan 2011, Ahmed 2010). However, the findings of these studies are mixed and conflicting. Consequently, a few questions remain unanswered. Do ethical financial investments contribute to sustainability in financial markets? How far the ethical financial investments are better than conventional investments in stabilizing returns for investors? What would be the portfolio diversification benefits for the investors from portfolios combining ethical and conventional investments? This study attempts to answer these questions.

The objective of the study is significant since instability in financial markets and the consequent lack of investors' confidence on markets have raised the question of sustainability in global financial markets. Surprisingly, ethical investment instruments have gained momentum to ensure financial sustainability. Many experts and scholars also view that ethical equity based financial instruments would be a relatively safer investment for investors in general because of their unique features, such as low leverage ratio, risk sharing and genuine asset backing. Increased ethical and religious awareness of investors for society and searching for alternative investment instruments of conventional ones (so called "sin investments") during financial crises have raised the demand for faith based ethical investments in general and Islamic investments in particular. By principles, Islamic investments apply screening strategies to exclude firms producing harmful products (alcohol, tobacco, interest, gambling, pornography, weapon etc.) and issuing sin stocks. Sin stocks are dropped from investments to discourage production of the products and services which are

pernicious to human wellbeing, society and environment. Boasson et al. (2006) state, concerning the screens, that faith-based investments tend to maintain the highest and toughest ethical screening standards among all socially responsible investment types. Renneboog et al. (2008a) and others report that investors pay costs to follow and apply ethics in their investments. Despite the increased costs for ethics, Islamic financial industry has grown substantially over time and estimated to reach about USD 1.8 trillion by 2013 (GIFF, 2012). Investment in Islamic equities recently became popular among the investors and fund managers as an alternative to their mainstream investments due to more transparency and lower risks.

A few empirical studies examine the issue of sustainability even though it is an emerging area of research. Abdelsalam Et al. (2014) investigated performance persistence of Islamic and Socially Responsible Investment (SRI) mutual funds. The study finds stronger persistence of best Islamic funds than SRI funds. Similarly, Bennett and Iqbal (2013) investigated similarities and commonalities of both Islamic and SRI funds and identifies how both could benefit from each other. The study finds that Islamic fixed income securities market still remains under-developed while supply of SRI fixed income securities is still insufficient. Following the convergence of Islamic and SRI funds, the study further suggests developing a fixed income security which can appeal to investors of both SRI and Islamic investments. However, Nainggolan et al. (2013) examine the relationship between financial performance and ethical screening intensity of a special class of ethical funds that is rooted in Islamic values – Islamic equity funds (IEFs). Based on a large survivorship-free international sample of 387 Islamic funds, our results show that IEFs on average underperform conventional funds by 40 basis points per month, or 4.8% per year (supporting the *underperformance hypothesis*). While Islamic funds do not generally perform better during crisis periods, they outperformed conventional funds during the recent sub-prime crisis (supporting the *outperformance hypothesis*).

The study by Avery and Bergsteiner (2010) has found that Honeybee organizations, those that practice the principles of Sustainable Leadership, tend to perform better financially than those purely focused on generating profit. Following the same issue, Johnson (2012) tested the issue of sustainability at organizational level. The study evaluated the financial performance of three pairs of comparable organizations that operate in different industry sectors where each pair consists of a sustainable and a non-sustainable organization as defined by DJSI index membership in 2010. Findings of the study state that sustainable organizations are more financially stable and maintain a lower risk profile.

Renneboog et al. (2011) examine study the money flows into and out of socially responsible investment (SRI) funds around the world. The study finds that investors in SRI funds may be more concerned with ethical or social issues than with fund performance. Therefore, SRI money flows are less related to past fund returns. Ethical money is less sensitive to past negative returns than are conventional fund flows, especially when SRI funds primarily use negative or Sin/Ethical screens. Social attributes of SRI funds weaken the relation between money inflows and past positive returns. These results give evidence on the role of nonfinancial attributes, which induce heterogeneity of investor clienteles within SRI funds. The study, finally, finds no evidence of a smart money effect, as the funds that receive more inflows neither outperform nor underperform their benchmarks or conventional funds.

Most of these studies emphasize on the performance of ethical funds and explain how ethical funds are different from mainstream funds. Moreover, findings of these studies are mixed and inconclusive. Further, none of the studies address how ethical investments lead to sustainability in financial markets. Inconclusive results of the earlier studies and consequent existing knowledge gap regarding the nexus between ethical investments and financial sustainability motivate this study.

Contribution of the study over the earlier studies is threefold. *Firstly*, unlike other studies, this study investigates whether ethical investments such as investments in Islamic equities can contribute to achieving sustainability in financial markets. *Secondly*, this study covers a comprehensive dataset consisting of Islamic equities, conventional equities and major commodities. Portfolio managers, particularly in crisis periods, tend to invest in alternative assets like commodities and therefore, this study examines whether commodity investment can contribute to financial sustainability. *Finally*, this study investigates financial sustainability over two major crises periods.

An overall result of unconditional volatility is mixed. Results of the unconditional volatility shows that return volatility has soared in both Islamic and conventional equity markets due to 1997 Asian financial crisis and 2008 Global financial crisis. However, Islamic equity return experiences lower volatility than their conventional counterpart in most of the markets during the periods under review in general and during the crises in particular. These results suggest that investors may enjoy sustainable returns from their portfolios by investing in ethical financial instruments

such as Islamic equities. Among the commodities, gold return experienced lowest level of volatility. Conversely, natural gas price experienced the highest level of volatility. In addition, it should be noted that most of the commodities, gold in particular, are either low or negatively correlated with equity returns. These results suggest that investors would be better off by investing in portfolios combining Islamic equities and commodities in general.

The remaining part of the study is organized as follows: section two describes data and methodologies of the study. Section three presents analysis of results and findings of the study. Finally, the study wraps up with concluding remarks in section four.

Methodology

This study uses secondary data of equity indices (Islamic and conventional) and major commodities (cocoa, crude palm oil, crude oil, gas and gold) starting from January 01, 1996 to June 30, 2012 from Datastream and Bloomberg data bases. The study period is grouped into two major sub-periods (Jan 1996 – Dec 2003) and (Jan 2004 - June 2012) in order to take the two major financial crises: (a) 1997 Asian Financial Crisis and (b) 2008 Global Financial Crisis into account. In addition, owing to the operating time differences among the stock markets, we made required time adjustment following Universal Co-ordinated Time (UTC – 6.00 Hours) in order to maintain time homogeneity in data, which depicts the picture more accurately. Table 1 reports the data with notations and short description:

Table 1: Data description

Islamic Stock Indices	
Variables	Explanation
RCAIS	Return on Canadian Islamic Stock Index
REUIS	Return on European Islamic Stock Index
RGCIS	Return on GCC Islamic Stock Index
RJPIS	Return on Japanese Islamic Stock Index
RMYSIS	Return on Malaysian Islamic Stock Index
RTRIS	Return on Turkey Islamic Stock Index
RUKIS	Return on United Kingdom Islamic Stock Index
RUSIS	Return on United States Islamic Stock Index
Conventional Stock Indices	
RCA	Return on Canadian Stock Index
RGC	Return on GCC Stock Index
RMY	Return on Malaysia Stock Index
RJP	Return on Japanese Stock Index
RTR	Return on Turkey Stock Index
RUK	Return on United Kingdom Stock Index
RUS	Return on United States Stock Index
Commodity Price Indices	
RCOC	Return on S&P GSCI Cocoa Index Spot price index
RCPO	Return on Crude Palm Oil Price Malaysia
RCRO	Return on S&P GSCI Crude Oil Spot price index
RGAS	Return on S&P GSCI Natural Gas Spot price index
RGLD	Return on S&P GSCI Gold Spot price index

Return series of each asset is computed as follows:

$$\text{Asset Return} = 100 * \text{LOG}\left(\frac{P_t}{P_{t-1}}\right)$$

The main issue of the study is to investigate whether ethical investment instruments could lead to a stability of return in investments with an ultimate objective to achieve financial sustainability. This study applies dynamic conditional correlation (MGARCH-DCC) and Markowitz portfolio optimization technique in order to address the main issue of the study.

This study employs the well-established Dynamic Conditional Correlation (DCC) technique proposed by Engle and Sheppard (2001) and Engle (2002) in order to investigate dynamic conditional volatility of returns of the assets under review. Due to its time varying nature, dynamic conditional volatility can address the sustainability of returns of the financial assets in different time periods. In addition, the study uses Markowitz Portfolio Optimization technique in order to investigate how investors could be benefited by investing in portfolio of the assets under review instead of a single asset during the study periods. The study also examines unconditional correlation between returns of the assets as a precondition of forming portfolios.

Findings and Results

Dynamic Conditional Correlation (MGARCH-DCC) : With the DCC model, a member of the GARCH family, one can pinpoint precisely the timing and nature of plausible changes in the time series co-movement. For each time point, the DCC method gives a value that serves as the forecasted correlation between series for the next period. The estimation of DCC is broken into two stages, which simplifies the estimation of a time varying correlation matrix. In the first stage, univariate volatility parameters are estimated using GARCH models for each of the variables. In the second stage, the standardized residuals from the first stage are used as inputs to estimate a time varying correlation matrix. Following Engle (2002), H_t is a conditional covariance matrix of the returns on the assets (equities and commodities) and is:

$$H_t = D_t R_t D_t$$

Where, $R_t = k \times k$ time varying correlation matrix (R_t varies over time) and

$D_t = k \times k$ diagonal matrix of conditional, i.e. time varying, standardized residuals ε_t , that are obtained from the univariate GARCH models.

The log-likelihood of the above estimator can be written as:

$$\begin{aligned} L &= -\frac{1}{2} \sum_{t=1}^T (K \log(2\pi) + 2 \log |H_t| + r_t' H_t^{-1} r_t) \\ &= -\frac{1}{2} \sum_{t=1}^T (K \log(2\pi) + 2 \log |D_t R_t D_t| + r_t' D_t^{-1} R_t^{-1} D_t^{-1} r_t) \\ &= -\frac{1}{2} \sum_{t=1}^T (K \log(2\pi) + 2 \log |D_t| + \log(|R_t| + \varepsilon_t' R_t^{-1} \varepsilon_t)) \end{aligned}$$

Where, $\varepsilon_t \sim N(0, R_t)$ are the residuals standardized on the basis of their conditional standard deviations. First, the conditional variances for any individual asset can be obtained from the univariate GARCH (p, q) model as follows:

$$h_t = \omega_0 + \sum_{i=1}^p \delta_i h_{t-i} + \sum_{j=1}^q \gamma_j u_{t-j}^2 \text{ for } i = 1, 2, 3, \dots, k$$

Then proposed dynamic correlation structure is:

$$\begin{aligned} Q_t &= \left(1 - \sum_{m=1}^M \alpha_m - \sum_{n=1}^N \beta_n \right) \bar{Q} + \sum_{m=1}^M \alpha_m (\varepsilon_{t-m} \varepsilon_{t-m}) + \sum_{n=1}^N \beta_n Q_{t-n} \\ R_t &= Q_t^{*-1} Q_t Q_t^{*-1} \end{aligned}$$

Where, \bar{Q} is the unconditional covariance of the standardized residuals resulting from the univariate GARCH equation and Q^* is a diagonal matrix composed of the square root of the diagonal elements of Q_t , which is as follows:

$$Q_t^* = \begin{bmatrix} \sqrt{q_{11}} & 0 & \dots & 0 \\ 0 & \sqrt{q_{22}} & \dots & 0 \\ \vdots & \vdots & \vdots & 0 \\ 0 & 0 & \dots & \sqrt{q_{kk}} \end{bmatrix}$$

The typical element of R_t will be $\rho_{ijt} = \frac{q_{ijt}}{\sqrt{q_{ii}q_{jj}}}$ and the matrix R_t will be positive definite/constant. The K assets covariance H_t is thus a positive definite/constant and can be written as $H_t = D_t R_t D_t$.

Discussion

Unconditional Correlations of returns: Unconditional correlation and volatility of returns of conventional and Islamic equities are presented in table 2. The upper and bottom panels of the table report the correlation and volatility results for 1996 – 2003 and 2004 – 2012 sub-periods respectively. Diagonal elements of both table reports unconditional volatility and unconditional correlation coefficients are presented by the off diagonal elements of the tables. Results show that unconditional volatility of both conventional and Islamic equity returns during 1996 – 2003 is the highest in Malaysia, 2.1902 for conventional equities and 2.0926 for Islamic equities, indicating higher instability in Malaysian capital market. Comparing the volatilities in both conventional and Islamic markets, we observe that volatility of Islamic equity return is 4.66% lower than their conventional counterpart. Further, capital market in the United Kingdom experienced with lowest volatility during 1996 – 2003. Surprisingly, Islamic equity return seems to be more volatile than the conventional equity returns in the UK market. These results indicate that Islamic equity investment appears to be safer in Malaysia than the UK market even though Malaysian capital market was hit by the severity of 1997 Asian financial crisis.

Table 2: Conventional and Islamic Equities

1996 - 2003														
	RMV	RJP	RCA	RUK	RUS	RMV15	RJP15	RCA15	RUK15	RUS15				
RMV	2.1902	0.0573	0.0542	0.2264	0.0905	0.9006	0.1668	0.1339	0.1175	0.1819				
RJP	0.0573	1.6894	0.3232	(0.0765)	0.3437	0.1623	0.7878	0.2101	0.1620	0.2522				
RCA	0.0542	0.3232	1.5280	0.0439	0.7937	0.1350	0.2398	0.7059	0.1788	0.5261				
RUK	0.2264	(0.0765)	0.0439	1.2542	0.1571	0.0859	0.1829	0.1749	0.7632	0.2943				
RUS	0.0905	0.3437	0.7937	0.1571	1.4252	0.1634	0.2950	0.5124	0.3016	0.7972				
RMV15	0.9006	0.1623	0.1350	0.0859	0.1634	2.0926	0.1620	0.1402	0.1130	0.1944				
RJP15	0.1668	0.7878	0.2398	0.1829	0.2950	0.1620	1.5768	0.2777	0.2061	0.3514				
RCA15	0.1339	0.2101	0.7059	0.1749	0.5124	0.1402	0.2777	1.6964	0.1936	0.6222				
RUK15	0.1175	0.1620	0.1788	0.7632	0.3016	0.1130	0.2061	0.1936	1.2588	0.3514				
RUS15	0.1819	0.2522	0.5261	0.2943	0.7972	0.1944	0.3514	0.6222	0.3514	1.3772				
2004 - 2012														
	RMV	RJP	RGC	RTR	RCA	RUK	RUS	RMV15	RJP15	RGC15	RTR15	RCA15	RUK15	RUS15
RMV	1.0075	0.4006	(0.0197)	0.3700	0.3640	0.4007	0.4120	0.9229	0.4018	0.1605	0.3278	0.3483	0.3911	0.4023
RJP	0.4006	1.4290	0.0023	0.1914	0.4089	0.2432	0.4834	0.3557	0.9748	0.1244	0.1977	0.3692	0.2306	0.4766
RGC	(0.0197)	0.0023	1.0795	(0.0042)	(0.0161)	(0.0240)	(0.0219)	(0.0120)	0.0044	0.0027	(0.0131)	(0.0105)	(0.0126)	(0.0233)
RTR	0.3700	0.1914	(0.0042)	2.4341	0.1437	0.6269	0.2506	0.3397	0.2004	0.1091	0.8491	0.1468	0.5993	0.2429
RCA	0.3640	0.4089	(0.0161)	0.1437	1.6094	0.1408	0.7118	0.3625	0.4114	0.0958	0.1748	0.9571	0.1407	0.7192
RUK	0.4007	0.2432	(0.0240)	0.6269	0.1408	1.5536	0.2969	0.3617	0.2527	0.1362	0.4909	0.1420	0.9726	0.2866
RUS	0.4120	0.4834	(0.0219)	0.2506	0.7118	0.2969	1.9590	0.3790	0.5000	0.1323	0.2367	0.6426	0.2838	0.9813
RMV15	0.9229	0.3557	(0.0120)	0.3397	0.3625	0.3617	0.3790	1.0461	0.3583	0.1584	0.3011	0.3626	0.3580	0.3778
RJP15	0.4018	0.9748	0.0044	0.2004	0.4114	0.2527	0.5000	0.3583	1.3975	0.1159	0.2009	0.3734	0.2412	0.4962
RGC15	0.1605	0.1244	0.0027	0.1091	0.0958	0.1362	0.1323	0.1584	0.1159	1.4378	0.1274	0.0691	0.1231	0.1162
RTR15	0.3278	0.1977	(0.0131)	0.8491	0.1748	0.4909	0.2367	0.3011	0.2009	0.1274	1.5562	0.1753	0.4711	0.2295
RCA15	0.3483	0.3692	(0.0105)	0.1468	0.9571	0.1420	0.6426	0.3626	0.3734	0.0691	0.1753	1.9860	0.1552	0.6754
RUK15	0.3911	0.2306	(0.0126)	0.5993	0.1407	0.9726	0.2838	0.3580	0.2412	0.1231	0.4711	0.1552	1.5895	0.2830
RUS15	0.4023	0.4766	(0.0233)	0.2429	0.7192	0.2866	0.9813	0.3778	0.4962	0.1162	0.2295	0.6754	0.2830	1.2827

We observe during 2004 – 2012 that unconditional volatility of conventional equity return is the highest in Turkey (2.4341) followed by Canada (1.6094) and the lowest is in Malaysia (1.0075). Meanwhile, in Islamic market, highest return volatility is observed in Canadian market (1.9860) followed by UK market (1.5895). Lowest Islamic equity return volatility is observed in Malaysia (1.0461) while Islamic equity return volatility seems to much higher in Canada (1.9860), which is even higher than that of U.S. market (1.2827). Surprisingly, volatility of conventional equity return is higher in the U.S. market (1.3590). Therefore, volatility of Islamic equity return is almost 6.0% lower than their conventional counterpart in the U.S. market. Results reveal that Islamic equity return seems to be safer and more sustainable in the U.S. market even though 2008 crisis was originated in the U.S. market. Interestingly, Islamic equity return is 3.83% more volatile than the conventional return in Malaysia and 23.40% more volatile in Canada. This could be due to the impact of 2008 Global crisis, the center of which was severe default in real estate market and this is one of the major sectors included in Islamic equity indices (portfolios).

Unconditional correlations between all Islamic and conventional returns are positive during 1996 – 2003. However, Islamic and conventional equity returns are negatively correlated for GCC with other markets during 2004 – 2012, which could be due to severity of Dubai real estate crisis in 2010. This finding suggests for possible portfolio diversification benefits of investors during 2008 global crisis.

Unconditional correlation and volatility of conventional equity and commodity returns are presented in table 3. The upper panel of the table shows the correlation and volatility results for 1996 – 2003, the bottom panel presents the same for the 2004 – 2012 periods. Diagonal elements of both table reports unconditional volatility and unconditional correlation coefficients are highlighted by the off diagonal elements of the tables. Results reveal that unconditional volatility is the highest for the Malaysian equities (2.1902) and lowest for the UK equities (1.2542) during the 1996 – 2003 episode, which indicates higher stability and lower risk of the equity returns in the United Kingdom. This higher stability is perhaps because the UK equity market experienced no major downturn during this period. But the Malaysian equity market was affected by the 1997 Asian financial crisis, which is reflected in the higher volatility of the Malaysian equity market.

Among the commodities, the lowest volatility is observed for gold (0.8675) because of continuous increase in gold price starting from the first quarter of 2001 that reached the peak in the last quarter of 2011 due to a number of factors. These factors include increasing balance of trade deficit in the United States, low output of gold, sovereign debt crisis in Greece, Spain and Ireland, increase in gold reserve by the Reserve Bank of India (357.75 tons in 2009) and People Bank of China (1054 tons in 2009), volatile equity markets, sharp fall in deposit interest rates in the global market etc. Conversely, natural gas price experienced the highest level of volatility (3.4290), which could have been caused by the fluctuation in gas demand due to seasonality factors. In addition, it should be noted that most of the commodities, gold in particular, are either low or negatively correlated with equity returns. For instance, the correlation between US equities and gold return appears to be the lowest (-0.0993). This result suggests that most commodities, specifically gold would have been better diversifier for the equity investors during the 1996 – 2003 periods.

The bottom panel of the unconditional correlation and volatility table (for 2004 – 2012) reveals that the highest volatility (2.4315) is observed for the Turkish equity index. Conversely, volatility was the lowest (1.0095) for the Malaysian equity market. In fact, global financial markets have gone through two major crises during this period, 2008 global financial crisis and 2010 European sovereign debt crisis, which have shaped the major equity markets in terms of return and volatility. The Malaysian equity market was not hit directly by the 2008 global financial crisis but the downturn in Malaysian market was not as severe as the other equity markets such as USA, UK, Canada and Japan. In contrast, perhaps, both the 2008 global financial crisis and the 2010 Eurozone crisis jointly affected the Turkey equity market. Results indicate that GCC equity markets, surprisingly, are negatively correlated with other equity and commodity markets undertaken by the study. For example, the correlation coefficient between the GCC and UK equity markets seems to be the lowest (-0.0240). These results suggest that portfolio investors may obtain better diversification benefits by considering GCC equities in their portfolios.

Table 3: Conventional Equities and Commodities

1996 - 2003										
	RMV	RJP	RCA	RUK	RUS	RCOC	RCPO	RCRO	RGAS	RGLD
RMV	2.1902	0.0573	0.0542	0.2264	0.0905	(0.0310)	(0.0154)	0.0086	0.0091	0.0124
RJP	0.0573	1.6894	0.3232	(0.0765)	0.3437	0.0006	0.0038	0.0119	(0.0510)	(0.0297)
RCA	0.0542	0.3232	1.5280	0.0439	0.7937	0.0025	(0.0297)	0.0582	0.0331	0.0280
RUK	0.2264	(0.0765)	0.0439	1.2542	0.1571	0.0078	(0.0174)	(0.0182)	(0.0045)	(0.0012)
RUS	0.0905	0.3437	0.7937	0.1571	1.4252	(0.0084)	(0.0335)	0.0150	(0.0039)	(0.0993)
RCOC	(0.0310)	0.0006	0.0025	0.0078	(0.0084)	1.8908	(0.0202)	0.0157	0.0256	0.0969
RCPO	(0.0154)	0.0038	(0.0297)	(0.0174)	(0.0335)	(0.0202)	1.9632	(0.0418)	0.0394	0.0310
RCRO	0.0086	0.0119	0.0582	(0.0182)	0.0150	0.0157	(0.0418)	2.2051	0.2684	0.1121
RGAS	0.0091	(0.0510)	0.0331	(0.0045)	(0.0039)	0.0256	0.0394	0.2684	3.4290	0.0522
RGLD	0.0124	(0.0297)	0.0280	(0.0012)	(0.0993)	0.0969	0.0310	0.1121	0.0522	0.8675

2004 - 2012												
	RMV	RJP	RGC	RTR	RCA	RUK	RUS	RCOC	RCPO	RCRO	RGAS	RGLD
RMV	1.0095	0.4006	(0.0196)	0.3706	0.3642	0.4009	0.4122	0.1005	0.1363	0.1644	0.0575	0.1521
RJP	0.4006	1.4314	0.0025	0.1928	0.4094	0.2436	0.4832	0.1163	0.0939	0.1667	0.0313	0.0445
RGC	(0.0196)	0.0025	1.0818	(0.0038)	(0.0162)	(0.0240)	(0.0218)	(0.0027)	(0.0112)	(0.0083)	0.0220	(0.0033)
RTR	0.3706	0.1928	(0.0038)	2.4315	0.1424	0.6270	0.2518	0.0067	0.0358	0.0142	0.0061	0.0518
RCA	0.3642	0.4094	(0.0162)	0.1424	1.6117	0.1394	0.7122	0.2919	0.3015	0.5127	0.1697	0.3162
RUK	0.4009	0.2436	(0.0240)	0.6270	0.1394	1.5555	0.2968	(0.0022)	0.0014	0.0300	0.0385	0.0124
RUS	0.4122	0.4832	(0.0218)	0.2518	0.7122	0.2968	1.3612	0.1806	0.1584	0.3312	0.0913	0.0357
RCOC	0.1005	0.1163	(0.0027)	0.0067	0.2919	(0.0022)	0.1806	1.9207	0.1489	0.2171	0.0788	0.2199
RCPO	0.1363	0.0939	(0.0112)	0.0358	0.3015	0.0014	0.1584	0.1489	1.7751	0.2489	0.0873	0.1513
RCRO	0.1644	0.1667	(0.0083)	0.0142	0.5127	0.0300	0.3312	0.2171	0.2489	2.2838	0.3253	0.3065
RGAS	0.0575	0.0313	0.0220	0.0061	0.1697	0.0385	0.0913	0.0788	0.0873	0.3253	3.0278	0.0922
RGLD	0.1521	0.0445	(0.0033)	0.0518	0.3162	0.0124	0.0357	0.2199	0.1513	0.3065	0.0922	1.2729

What if investors could consider Islamic equities instead of conventional equities to form portfolios with commodities? Would it be a potentially better portfolio? Unconditional correlation and volatility of Islamic equity returns and commodity returns are presented in the next table 4. The upper panel of the table displays correlation and volatility for 1996 – 2003 periods, whereas, the bottom part of the table presents correlation and volatility for 2004 – 2012 periods. Results reveal that, in line with conventional equities, volatility is highest in the Malaysian Islamic equity market (2.0926) and lowest in UK Islamic equity market (1.2588) during 1996 – 2003 periods. Interestingly, Islamic equities account for relatively lower volatility (2.0926 vs. 2.1902) in Malaysian market during the same period. What happens to UK Market? Volatility level remains almost the same in both mainstream and conventional equity markets in the UK during the same time period. On the other hand, for the commodities, highest volatility and lowest volatility are observed in natural gas (3.4290) and gold market (0.8675) respectively, which is in line with the previous results. Results also indicate that commodity returns, in most cases, are reversely (or low) related with equity returns, with the lowest correlation (-0.0961) observed between gold and US equity return.

During 2004 – 2012, the highest volatility is observed in the Canadian Islamic equity market (1.9883), which could be due to a series of events, Enron scandal, the internet bubble busting, September 11 attacks and 2008 global financial crisis. Similar to the previous finding, volatility seems to be the lowest in the Malaysian Islamic equity market (1.0481), as compared to 1.0095 for the conventional equity market in Malaysia during the same tenure, which indicates that volatility has marginally increased in the Islamic equity market of Malaysia during the same period. Among the commodities, highest (3.0278) and lowest (1.2729) volatilities are observed in the natural gas and gold markets respectively, which is in line with the previous findings. Results further reveal that commodity returns are, in most cases, inversely (or low) related with the Islamic equity returns, which is similar to the findings of the conventional counterpart during the same tenure. In addition, GCC equity return seems to be negatively correlated with most other equities' and commodities' returns. This finding is also in line with the finding of its conventional counterpart during the same episode.

These findings indicate that Islamic equity market is relatively safer and sustainable than their conventional counterparts in most of the markets. Findings further suggest that commodities, gold in particular, could be better diversifier for the potential investors and portfolio managers both in Islamic and conventional equity markets. Moreover, findings are crucial for Portfolio managers for diversifying their investment and setting the portfolio strategies as real benefit of portfolio diversification depend on co-movement of the assets in the portfolio. Benefits of

portfolio diversification can be obtained when the assets in the portfolio are negatively correlated or at least positively correlated with lower degree. Above all, prudent portfolio managers should carefully look at the marginal contribution of any asset before taking into the portfolio, which is again indicated by the correlation coefficient between individual asset's return and the return of the existing portfolio.

Table 4: Islamic Equities and Commodities

1996 - 2003										
	RMYIS	RJPIS	RCAIS	RUKIS	RUSIS	RCOC	RCPO	RCRO	RGAS	RGLD
RMYIS	2.0926	0.1620	0.1402	0.1130	0.1944	(0.0259)	(0.0179)	0.0035	0.0023	0.0167
RJPIS	0.1620	1.5768	0.2777	0.2061	0.3514	(0.0225)	(0.0031)	(0.0004)	(0.0660)	(0.0753)
RCAIS	0.1402	0.2777	1.6964	0.1936	0.6222	(0.0050)	(0.0470)	0.0708	0.0327	0.1205
RUKIS	0.1130	0.2061	0.1936	1.2588	0.3514	(0.0101)	(0.0204)	0.0287	0.0001	(0.0025)
RUSIS	0.1944	0.3514	0.6222	0.3514	1.3772	(0.0225)	(0.0494)	0.0181	(0.0163)	(0.0961)
RCOC	(0.0259)	(0.0225)	(0.0050)	(0.0101)	(0.0225)	1.8908	(0.0202)	0.0157	0.0256	0.0969
RCPO	(0.0179)	(0.0031)	(0.0470)	(0.0204)	(0.0494)	(0.0202)	1.9632	(0.0418)	0.0394	0.0310
RCRO	0.0035	(0.0004)	0.0708	0.0287	0.0181	0.0157	(0.0418)	2.2051	0.2684	0.1121
RGAS	0.0023	(0.0660)	0.0327	0.0001	(0.0163)	0.0256	0.0394	0.2684	3.4290	0.0522
RGLD	0.0167	(0.0753)	0.1205	(0.0025)	(0.0961)	0.0969	0.0310	0.1121	0.0522	0.8675

2004 - 2012												
	RMYIS	RJPIS	RGCS	RTRIS	RCAIS	RUKIS	RUSIS	RCOC	RCPO	RCRO	RGAS	RGLD
RMYIS	1.0481	0.3585	0.1581	0.3024	0.3627	0.3580	0.3782	0.1159	0.1670	0.1958	0.0891	0.1608
RJPIS	0.3585	1.3997	0.1160	0.2033	0.3744	0.2410	0.4961	0.1118	0.0875	0.1677	0.0281	0.0373
RGCS	0.1581	0.1160	1.4407	0.1281	0.0688	0.1229	0.1164	0.0427	0.0343	0.0868	0.0096	(0.0243)
RTRIS	0.3024	0.2033	0.1281	1.5497	0.1735	0.4717	0.2314	0.0141	0.0792	0.0485	0.0225	0.0770
RCAIS	0.3627	0.3744	0.0688	0.1735	1.9883	0.1539	0.6761	0.2976	0.3055	0.5575	0.2163	0.4083
RUKIS	0.3580	0.2410	0.1229	0.4717	0.1539	1.5914	0.2824	(0.0054)	(0.0010)	0.0490	0.0511	0.0228
RUSIS	0.3782	0.4961	0.1164	0.2314	0.6761	0.2824	1.2846	0.1905	0.1774	0.3654	0.1172	0.0700
RCOC	0.1159	0.1118	0.0427	0.0141	0.2976	(0.0054)	0.1905	1.9207	0.1489	0.2171	0.0788	0.2199
RCPO	0.1670	0.0875	0.0343	0.0792	0.3055	(0.0010)	0.1774	0.1489	1.7751	0.2489	0.0873	0.1513
RCRO	0.1958	0.1677	0.0868	0.0485	0.5575	0.0490	0.3654	0.2171	0.2489	2.2838	0.3253	0.3065
RGAS	0.0891	0.0281	0.0096	0.0225	0.2163	0.0511	0.1172	0.0788	0.0873	0.3253	3.0278	0.0922
RGLD	0.1608	0.0373	(0.0243)	0.0770	0.4083	0.0228	0.0700	0.2199	0.1513	0.3065	0.0922	1.2729

Stability in equity returns: Figure 1 shows conditional volatility of all conventional equity returns under review during 1996 – 2003 and 2004 – 2012 periods. Highest level of conditional volatility is observed in the Malaysian equity market during 1996 – 2003 periods and the lowest conditional volatility is observed in the UK market. However, during 2004 – 2012, highest volatility is observed in Turkish market while the lowest volatility is observed in Malaysian market. We identified the same findings from the unconditional volatility results.

Figure 2 demonstrates conditional volatility of all Islamic equity returns under review during 1996 – 2003 and 2004 – 2012 periods. Highest level of conditional volatility is observed in the Malaysian equity market during 1996 – 2003 period and the lowest conditional volatility is observed in the UK and US markets. The level of volatility in Malaysian market jumps during 1997 – 1998 perhaps due to the Asian Financial crisis.

However, during 2004 – 2012, highest volatility is observed in the Canadian markets while the lowest volatility is observed in the Malaysian market followed by the U.S. market. In the U.S. market, Islamic return volatility jumps during 2008 Global crisis.

Figure 1: Conditional volatilities of conventional equities

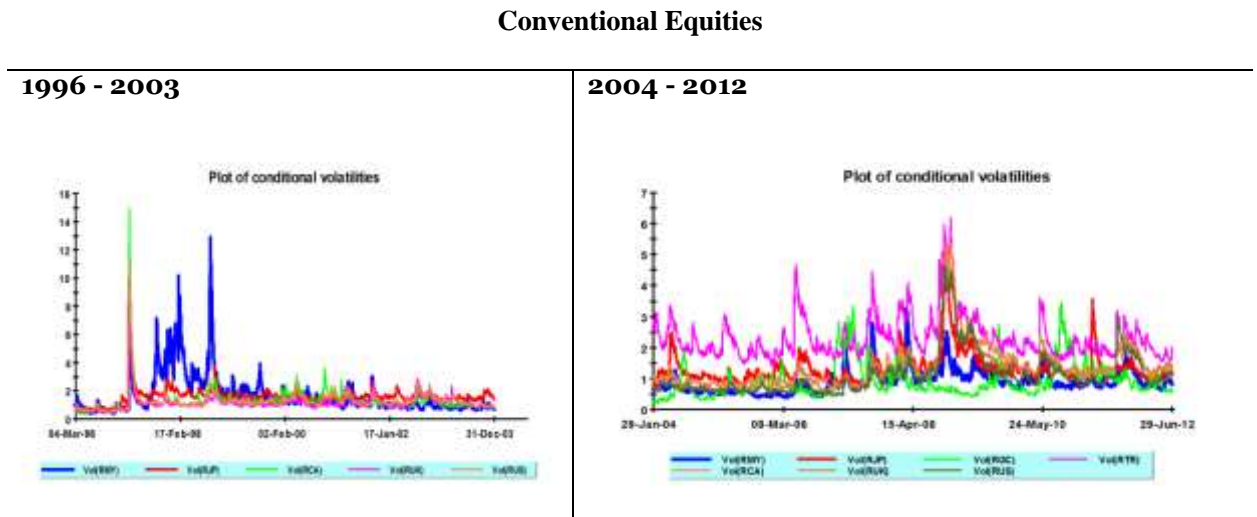


Figure 2: Conditional volatilities of Islamic equities

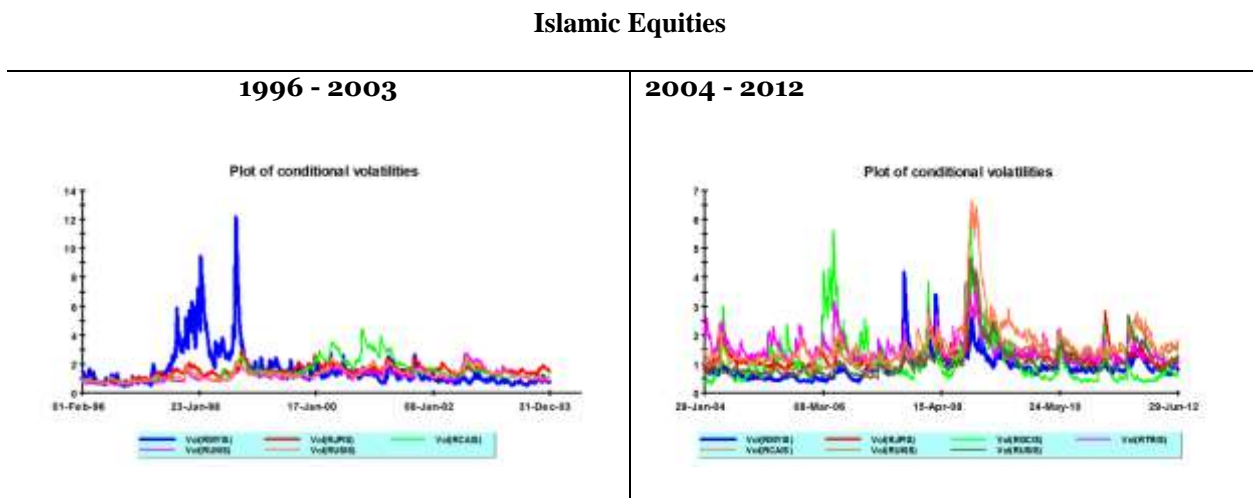
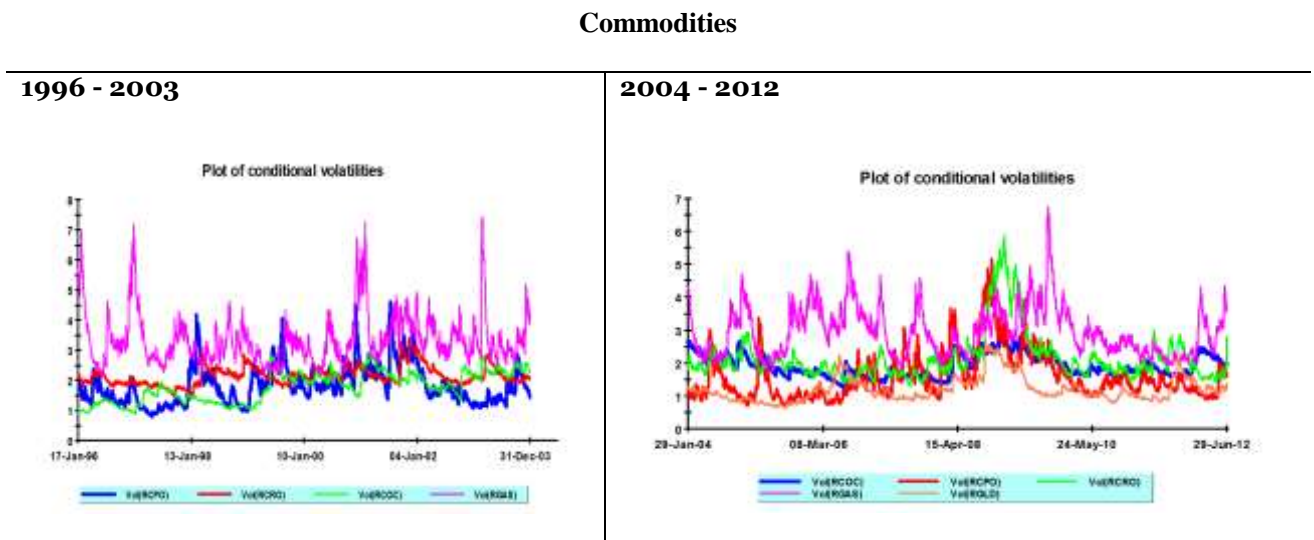


Figure 3 shows conditional volatility of all commodity returns under review. We can observe that return volatility is the highest from investment in natural gas during 1996 – 2003 and 2004 – 2012. This happens perhaps due to cyclical demand of natural gas in the global market. This finding suggests that investment in natural gas is highly speculative. Results also suggest that return from cocoa investment is the most stable followed by the stability of crude oil during 1996 – 2003. Investment in Gold seems to be the safest during 2004 – 2012 periods as indicated by the lowest level of volatility. Consequently, large number of investors allocated a significant portion of their portfolios in gold, which triggered gold price to shoot up.

Figure 3: Conditional volatilities of Commodities



Conclusion

This paper intends to investigate whether ethical investment instruments could contribute to stability in financial markets. In order to address the main issue, the study investigates the stability of return in seven conventional and Islamic equity markets of Asia, Europe and North America and in five major commodity markets starting from 1996 to June 2012. In addition, to investigate to portfolio diversification benefits of investors, the study examines the unconditional correlation between returns of the assets under review.

An overall result of unconditional volatility is mixed. Results of the unconditional volatility shows that return volatility has soared in both Islamic and conventional equity markets due to 1997 Asian financial crisis and 2008 Global financial crisis. However, Islamic equity return experiences lower volatility than their conventional counterpart in most of the markets during the periods under review in general and during the crises in particular. These results suggest that investors may enjoy sustainable returns from their portfolios by investing in ethical financial instruments like Islamic equities. Among the commodities, gold return experienced lowest level of volatility because of continuous increase in gold price starting from the first quarter of 2001 that reached the peak in the last quarter of 2011. Conversely, natural gas price experienced the highest level of volatility, which could have been caused by the fluctuation in demand for natural gas due to seasonality factors. In addition, it should be noted that most of the commodities, gold in particular, are either low or negatively correlated with equity returns. These results suggest that investors would be better off by investing in portfolios combining Islamic equities and commodities in general.

Findings of the study have several implications for investors, portfolio managers and market regulators. Portfolio managers generally set investment and asset allocation strategies in order to maximize investors' return while most of the investors are less concerned about the quality of investments but more concerned about quick and smart return. Should well trained portfolio managers listen to majority of the investors and target quick, risky and high returns? Or should portfolio managers prefer long-term steady and stable return for the investors? Preference of the earlier one would lead to achieving individual benefits while the preference of the later would lead to achieving benefits for the society and long-run growth of the economy as a whole. Accordingly, portfolio managers should allocate funds in ethical and non-ethical investment instruments. Regulators, on the other hand, prefer investor's safety and financial stability, which would be more interested in developing ethical investments. Besides, financial crises over the decades, several nuclear mishaps around the world, Bhopal gas tragedy in December 1984, increasing rate of alcohol related cancer etc. incur heavy social cost, which may lead to imposition of high tax rate and shifting financial burden to future generations. Policy makers and regulators may consider these facts while deciding upon developing and supplying financial instruments in the markets.

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Consumers' preferences for bundling by a multiproduct monopoly in a competitive market

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Abstract

In this article, we analyse the incentive of pure bundling by a multiproduct firm which is a monopoly in one market but competes in another market, under two situations: product specific preferences and firm specific preferences. We show that under consumers' product specific preferences, the multiproduct firm always prefers individual pricing and the rival never leaves the market. However, under consumers' firm specific preferences, the multiproduct monopoly will use bundling so that the rival will leave the market when consumers' reservation value is high enough. Firm specific preferences, e.g., brand royalty or reduced cost due to one stop shopping plays an important role in the different outcomes of interacting product and firm specific preferences.

Introduction

There has been a discussion about the incentive of bundling for a multiproduct monopoly which is a monopoly in one market but competes in another as a tool to foreclose the competitive market. In the previous works usually bundling is not preferred (see Whinston, 1990). However, in our result, we find that there are occasions that bundling is preferred. We intend to analyze the incentive of pure bundling for a multiproduct monopoly on product specific preferences and firm specific preferences. We extend the model of Matutes and Regibeau (1988) for product specific situation by adding the consumption selection of a single product. We intend to build a model for firm specific preferences which is similar to Thanassoulis (2007). However, we provide a graphic model so that the market configurations according to the level of consumers' reservation value could be shown clearly.

Methodology

Suppose there are two products, product 1 and product 2. Product 1 is solely produced by firm A while product 2 is produced by firm A and firm B. We assume the marginal cost of either product for both firms is zero. Consumers purchase at most one unit of each product. Therefore consumers are able to access to five consumption combinations if firm A does not bundle: AA, AB, A1, A2, B2, or buy nothing, where AA means buying product 1 and product 2 from firm A, A1 means purchasing only a single product 1 from firm A for example. A consumer purchasing one product will have a reservation value of C. Firm A has two strategies to select: pure bundling and independent pricing. In principle both the individual products and firms could be differentiated.

We intend to analyze each of the situations separately. In each situation, we examine the firm A's choices of pricing schemes, employing two stage games. In stage one, firm A collectively chooses the strategy and deciding its pricing schemes. In stage two, firms independently set their prices.

Product specific preferences: In this situation, firms are identical while the goods they sell are differentiated. Therefore consumers should be uniformly located in a Hotelling unit square with firm A located at (0, 0) and firm B located at (1, 1). The horizontal interval represents product 1 and the vertical interval represents product 2. As a consumer located further away from firm A, he holds less taste preference towards firm A's products but more taste towards firm B's products.

Under an independent pricing scheme, a consumer located at (d_1, d_2) buying product 1 from firm A and product 2 from firm B will get a surplus of $2C - \lambda d_1 - \lambda(1 - d_2) - p_{1A} - p_{2B}$, where λ is the strength parameter of differentiation. Similarly,

a consumer purchasing only a single product will get a surplus $C-\lambda d_m-p_{mj}$, $m=1,2$, $j=A,B$. When firm A bundles, a consumer buying the bundle will earn a surplus $2C-\lambda(d_1+d_2)-p_A^*$, where p_A^* is the bundle price.

Firm specific preference: The products they sell are not differentiated but the firms themselves are differentiated. Consumers are uniformly distributed along a Hotelling unit interval with length of 1. Firms are located at either corner. For the case of independent pricing, a consumer located d_1 far away from firm A purchasing one product from firm A will enjoy a surplus of $C-\mu d_1-p_{mA}$, $m=1,2$, where p_{mA} is the price of a certain product of firm A and μ is the strength parameter of differentiation. If a consumer buying two products from two firms, he will obtain a surplus of $2C-\mu \times 1-p_{1A}-p_{2B}$.

However, if a consumer located d_1 far away from firm A purchasing both products from firm A, he will get a surplus of $2C-\mu_1 d_1-p_{1A}-p_{2A}$, where $\mu \leq \mu_1 \leq 2\mu$, meaning a reduced cost for one stop shopping. The reduced cost may stand for the repeated contract cost, cost of collecting information or transportation cost. For the case of pure bundling, a consumer located d_1 far away from firm A purchasing the bundle from firm A will get a surplus of $2C-\mu_1 d_1-p_A^*$, where p_A^* is the firm A's bundle price.

The result under product specific preferences shows regardless of the level of C , independent pricing is always the dominant strategy for firm A. In addition, firm B can never be kicked out of the market. Under firm specific preferences, bundling is preferred when $1.5 \leq C \leq 1.74$, otherwise independent pricing is preferred. When $C \geq 4$, bundling becomes the dominant strategy, where the price of firm B becomes to zero and firm B is kicked out of the market.

Discussion

This paper has sought to understand how the multiproduct firm monopolizing in one market and competing with another firm in another market changes its incentive of pure bundling according to the different level of reservation value (market configurations) under firm specific preferences and product specific preferences. Under product specific preferences, for the different tastes toward products, there are consumers purchasing single product from firm A, such as A1 and A2.

However, under firm specific preferences, because of the reduced cost of one stop shopping or brand royalty to the firm, there is no purchasing of single product from firm A. In addition, under product specific preferences, there always existing consumers who prefer firm B's product 2, firm B will never leave the market. Comparatively, under firm specific preferences, products are not differentiated thus the increasing reservation value of consumers and reduced cost for one stop shopping cause firm B leave the market.

Let us now consider the Microsoft case in Japan. Japan Fair Trade Commission recommended that Microsoft should cease bundling Excel, which was dominant position in a spreadsheet market, and Word, which was under competition with Ichitaro. If consumers have product specific preferences towards Word and Ichitaro, Microsoft did not have an incentive to bundle. If consumers have firm specific preferences, however, Microsoft could have an incentive to bundle to foreclose the word processor market.

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Development of a model for the North-South intellectual property rights conflict in the pharmaceutical industry

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Abstract

First included in the Uruguay Round of the GATT trade negotiations (1986-94), 'intellectual property rights' (IPR) have emerged as a source of conflicts between the developed (North) and the developing (South) countries in the world. The conflicts have become more acute and frequent particularly in the pharmaceutical industry. This study is to develop an extended North-South model to analyze the IPR conflict with possible policy implications for the pharmaceutical industry. In this empirical model, innovation from the North, followed by imitation in the South (India, Bangladesh, China and other select East Asian countries) and foreign direct investment (FDI) are treated as endogenous. We find that tighter IPR benefit the North and South due to a large market structure. It seems that in an oligopolistic market induced by vertical innovation, tighter IPR may hurt both economies; while in a monopolistic competitive market induced by horizontal innovation, tighter IPR may benefit both economies as long as the degree of IPR protection is appropriately chosen. Thus we argue for an optimal degree of IPR protection in the South, which may help differentiate it from that in the North.

Introduction

The divide and the debate between the North (developed economies) and the South (developing economies) regarding the enforcement and tightening of IPRs in the pharmaceutical industry is well-known. In this case, the North refers to the group of all industrial countries, which are mostly located in the Northern hemisphere, while the South refers to the group of South Asian Countries such as India, Bangladesh and Pakistan, in the context of the Pharmaceutical Industry. The US is a typical and the largest country in the North group, while South Asia is a typical and the largest Southern region. Interestingly many models of North-South trade have been built, such as Grossman and Helpman (1991), Helpman (1993), Lai (1998), Glass and Saggi, (2002), among others.

The US companies, for example, have been arguing on strengthening India's commitment to enforce its intellectual property laws. Conventionally, IPRs tend to be seen primarily as an economic or legal issue, embodied in the rights to 'ownership' and thus to the exclusive use of innovation. But there is also an argument that there is a broader 'human rights' dimension, illustrated by the fact that the right of inventors to the 'moral and material interests' resulting from their scientific, literary and artistic production is recognized in the 1948 Universal Declaration of Human Rights (UDHR). Although the US companies insist on pushing India to strengthen its IPR regime, it is arguable if the concerned countries with sharp differences in GDP per capita and technology capability should adopt the same, similar or different standards on protection of IPRs. Moreover, before reaching any conclusion, closer research on the effect of IPRs on market structure, technology diffusion, FDI, imitation and innovation needs to be done. This is extremely important in the context of the pharmaceutical sector whose output is not merely an economic good but is vital for the physical well-being of the population.

Literature Review: The Agreement on Trade-Related Aspects of IPRs (TRIPs) stipulates that all members adopt a set of universal minimum standards on IPR protection. The focus of the debate is now whether the South should harmonize its IPR standards with those of the North. On the one hand, opponents of tighter IPRs argue that by conferring monopoly power on the creators of intellectual property which are large companies based in industrial

countries, it affects the ability of local firms to experiment with and assimilate advanced foreign technologies at low cost, and hence slows down the rate of global technological diffusion (Helpman 1993, Maskus 2000, Ordober 1991, Maskus & McDanniel 1999, Westphal, Kim and Dahlman 1985, McCalman 2001, 2004, 2005a, 2005b, Glass & Saggi 2002, Chaudhuri *et al.* 2006). By contrast, proponents of tighter IPRs argue that it may actually enhance the industrial development process in the South. Since the provision of greater security for IPRs in the South will encourage Multinational Corporations (MNCs) to shift production to the South, and encourage innovation from which all the regions of the world benefit (Lai 1998, Lai & Qiu 2003, Branstetter *et al.* 2007, Glass and Wu 2007).

Interestingly, early literature focused the effects of IPRs on innovation and diffusion in the closed economy (Siebeck *et al.* 1990). Recently, there have been various attempts to model the long-term effects of IPRs on the product innovation, economic growth and terms of trade in the international product cycles. Based on Vernon's (1966) original vision of product cycle, Chin and Grossman (1988), Diwan and Rodrik (1991), and Deardorff (1992) examine the effects of IPRs on the North and South in a static partial equilibrium framework, and provide valuable insights. Helpman (1993) further develops a North-South dynamic general equilibrium model in which all innovation takes place in the North. In this model, tighter IPRs in the South significantly retards Southern industrial development, reduce the South's share of global manufacturing and the rate at which the production of recently invented goods shifts to the South, worsening Southern terms of trade.

Tighter IPRs expand the North's share of global manufacturing – at the expense of the South – but cause the rate of innovation to decline in the long run, relative to the weak IPRs equilibrium, because more Northern resources are tied up in production rather than on innovation. Under Helpman's assumptions, the negative effects of tighter IPRs on both sides contribute to an overall negative welfare effect of tighter IPRs on the South. Even in the North, the decline in the rate of innovation can offset static welfare gains. Lai (1998) builds a dynamic general equilibrium model of the international product cycle, allows the level of FDI in the South to respond endogenously to changes in the tightening of Southern IPRs protection, and overturns Helpman's (1993) conclusions. He finds that the effects of tighter IPRs in South depend crucially on the channel of production transfer from North to South. Tighter IPRs in South increases the rate of product innovation, production transfer and Southern relative wage if FDI is the channel of production transfer, but has opposite effects if production is transferred through imitation. He concludes that tighter IPRs can be more broadly interpreted as an incentive to encourage Northern FDI.

Glass and Saggi (2002) provide a product cycle model in which innovation, imitation, and FDI are all endogenous. They discern two distinct imitations – one that targets the products of Northern firms and the one that targets the products of MNCs, and formalize this idea by assuming that the costs of imitating an MNC's product are lower than costs of imitating a Northern firm's product. They find that tighter IPR protection keeps MNCs safer from imitation, but no more so than Northern firms. Instead, the increased difficulty of imitation generates resource wasting and imitation disincentive effects that reduce both FDI and innovation.

More resources absorbed in imitation leads to reduced FDI and subsequent reduction in innovation, which apparently conflicts with Lai (1998)'s finding. Glass and Wu (2007) try to explore why theories vary about the effects of IPRs protection on FDI and innovation. In their models, Northern firms innovate to improve the quality of existing products and may later shift production to the South through FDI. Southern firms then imitate the products of MNCs. They conclude that the effects of IPR protection depend on the nature of innovation. Tighter IPRs encourage FDI and innovation when innovations are new varieties, but has opposite effect when innovations are quality improvements. Hence, tighter IPRs, by reducing imitation, may shift innovation away from improvement in existing products toward development of new products. The overall effects on innovation and FDI are then unclear. The above-mentioned models are very suggestive; however, there are three drawbacks: first, they don't study the nature of innovation and the resulting market structures; second, the nature and conditions of Southern imitation have not been examined; third, no North-South strategic behavior is considered.

Research Questions and Objectives: Based on the existent literature and the debate on the effect of tighter IPRs on innovation and FDI, we have studied an extended North-South product cycle model based on select pharmaceutical firms (MNCs and Local) located in select South Asian Economies. In our model, North may be considered as (US and Europe) innovation-based, South Asian Economies may be considered as imitation-based, and Foreign Direct Investment (FDI) are all endogenous.

Our objective is to realize whether tighter IPRs benefit the North or South depends crucially on the market structure. In an oligopoly market induced by vertical innovation, tighter IPRs hurt both economies; while in a monopolistic competition market induced by horizontal innovation, tighter IPRs benefit both economies as long as the degree of IPR protection is appropriately chosen. In addition we study the existence of an optimal degree of IPR protection in South Asia, which may differentiate it from that in the North.

Methodology

Our approaches are closely intertwined. The first is to attempt to develop a theoretical model of the pharmaceutical sector that captures the effects of innovation, imitation, FDI and market structures particularly in the context of North-South economic relations. This requires a synthesis of different models available in the published literature as well as introducing new elements and relationships likely to be uncovered from the second approach.

The second approach involves collection of information and data from various secondary sources on the pharmaceutical sector of two South Asian economies such as India and Bangladesh (This study is part of the larger study on the topic). At the primary level, we examine the effects of tighter IPRs on contribution of the firms to their national economies. Likewise, we also collect information from Bangladesh in order to understand the impact under a less tight IPR regime. In addition, by taking into account the possibility of endogenous innovation encouraged by tighter IPRs in South, we explain different performance in technology upgrading and stages of development. Similarly, the effects of Northern and/or Southern tariffs, technology transfers by licensing agreements, and international labor migration also be studied using this framework.

Discussion

We discuss the issue to contribute to the literature in the areas of policy making in four critical ways: First, we introduce different market structures according to the nature of innovation, and discuss the effects of tighter IPRs on the strategic behavior between the North and South. Second, we may study two imitative activities: the horizontal vs. vertical imitation (Lazonick and Mass 1995, Lazonick 2004). Third, we discern the horizontal FDI activities from the vertical one. Four, we illustrate the possible policy implications on the North-South IPR policy conflict, which may also hold in the context of IPR conflict between any industrial country and developing country.

The framework developed in this study is quite tractable. We have analysed useful issues and also provided important policy implications. First, we have examined the effects of tighter IPRs on welfare of the North (US) and South (India). Second, by extending the model to allow for low and high-skilled labour, we are able to understand how tighter IPRs may affect inequality within and across nations. Third, by taking into account the possibility of endogenous innovation encouraged by tighter IPRs in South, we are able to show that in a position to explain different performance in technology upgrading and growth in the South. Four, the effects of Northern and/or Southern tariffs, technology transfers by licensing agreements, and international labour migration are important aspects in this framework.

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Energizing development: towards energy sustainability in Japan

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Abstract

Japan is the third largest economy as well as energy consumer in the world. Presently it consumes about 500 MTOE (million tons of oil equivalent) of energy per year and is projected to consume nearly the same amount of primary energy annually till 2030. However, meeting energy demand has always remained a challenge for Japan as it is one of the weakest nations in energy security among the developed countries, having only 4 percent of energy self-sufficiency (excluding the nuclear power). It lacks significant domestic reserves of oil, coal, natural gas and other energy resources, including uranium. The river based hydroelectricity production is not plenty. So Japan has to rely on imports of these resources to power the nation. This dependence on foreign resources makes Japan's energy sector fragile and exposed to contingent risks and structural risks. While the former may happen in the form of political events in supplier countries like wars, riots, embargo, terrorist acts or accidents, the latter impacts through structural change or imbalance at the demand side and/or supply side, exemplified by the 2011 tsunami in Japan that forced a nationwide shutdown of nuclear power plants. In the present paper the authors introduce the contingent and structural risks in energy sector in Japan. This paper argues that to maintain and energize its overall development and reduce energy dependence on others, Japan has to explore non-conventional and renewable energy options like wind energy, ocean energy, geothermal energy, photovoltaic energy and biomass energy along with the skillful utilization of solid waste energy and energy cascading possibilities. Towards the goal of energy sustainability, nuclear energy may play an important role in Japan in the foreseeable future.

Introduction

Post-WWII Japan achieved a rapid industrial growth into the 1990s which was accompanied by an increase in demand for energy consumption as well. Indeed, Japan's energy consumption doubled every five year during the period, even outpacing the growth of GNP of the nation. By 1976, Japan was consuming 6 percent of global energy supplies with only 3 percent of the world's population (Dolan and Worden, 1994). Presently, Japan is the third largest economy and energy consumer in the world. It consumes about 461 Mtoe of energy per year and is projected to consume nearly the same amount of primary energy annually till 2040.

But achieving energy security has become a vital challenge for Japan over time. By energy security we mean to "secure adequate energy at reasonable prices necessary for the people's lives, and economic and industrial activities of the country" (Toyoda, 2012). Unfortunately, Japan is one of the weakest nations among the developed countries in terms of energy security, having only 19 percent of energy self-sufficiency (15 percent from the nuclear power) before the 2011 Fukushima accident.

The situation looks grim by the fact that Japan lacks significant domestic reserves of oil, coal, natural gas and other energy resources, including uranium for energy production. The river based hydroelectricity generation is not plenty. So Japan has to rely on import of these resources to power the nation. This dependence on foreign resources makes Japan's energy sector fragile and exposed to two kinds of risks - contingent risks and structural risks. While the former may happen in the form of political events in the supplier countries like wars, riots, embargo, terrorist acts or accident, the latter impacts through the structural change or imbalance at the demand side and/or supply side. The 2011 earthquake and tsunami caused damage to nuclear reactors forced a nationwide shutdown of all plants due to fear about the release of radioactive material, exposing further the energy vulnerability of Japan.

So developing a self-sufficient energy infrastructure to generate and supply energy to sustain its economic development has remained a strategic concern for Japan. To maintain and energize its overall development and reduce energy dependence on others, Japan has to explore the non-conventional and renewable energy options like wind energy, ocean energy, geothermal energy, photovoltaic energy and waste and biomass energy. Towards the goal of energy sustainability, nuclear energy will play an important role in Japan in the foreseeable future.

This is a descriptive study that has six more parts to achieve the objectives. Part two has been devoted to examine the link of economic growth with energy consumption. This also looks at the sectoral demand of energy. Part three identifies various risks Japan faces towards its energy security. Part four deals with the energy scenario of Japan for next few decades. Part five examines the growing role of different renewable energy sources in that future. Part six discusses energy cascading process. Part six concludes the paper.

Economic Growth and Energy Use and Supply Scenario in Japan: Like any other economy in the world, Japanese economic growth led to a massive rise in demand for energy. In other words, the economic growth in Japan needed the support of the energy over a long period of time. Japan is the third largest economy and energy consumer in the world. In 2010, Japan was still consuming 510 Mtoe of total energy per year. But the earthquake and tsunami that struck Fukushima Atomic power plant affected the energy scenario in Japan and energy use has come down since then to 487 Mtoe and 481 Mtoe in 2011 and 2012, respectively. But Japan saw the peak of energy use in 2007 when total energy use reached 525 Mtoe.

In the line of our objective, let us see the relationship of GDP growth and use of total energy in Japanese economy covering a period of 38 years, from 1975 to 2012. Though Japan achieved the status of the second economy in 1968, the economic growth in the 1970s and 1980s made it one of the spectacular post-war success stories. The economic success of Japan was duly supported by the energy sector during this period. Figures from 1 to 4 have been prepared to show the amount of GDP Japan attained against the amount of total used and total amount of energy supplied for that economic accomplishment. The GDP figure has been expressed in Japanese ¥ trillion and energy in 10^{13} kcal for the period.

The size of the economy from 1975 to 1990 increased by ¥216 trillion, from about ¥225 trillion to ¥441 trillion. Unsurprisingly, this growth in economic size was matched by the growth in energy use as well, reaching from 466 (10^{13} kcal) from 343 (10^{13} kcal) during the period. But since then both the pace of economic growth and growth of energy use declined substantially mainly due to the price bubble burst in the economy in the 1990. However, Japanese use of energy reached the peak in 2004 with 543 (10^{13} kcal) and continuously declined after that. The Tsunami and earthquake in 2011 brought the use of energy further down and in 2012 Japan used 484 (10^{13} kcal) of energy, nearly matching the position of 1992.

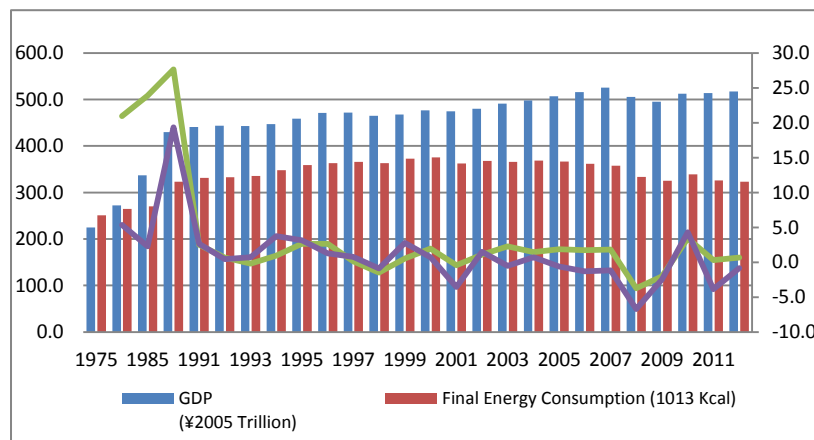


Figure 1. This shows the real GDP in aggregate and use of energy used for that (1975-2012). (Source: Constructed from data of the Energy Conservation Center, EDMC- Handbook of Energy and Economic Statistics, 2014.)

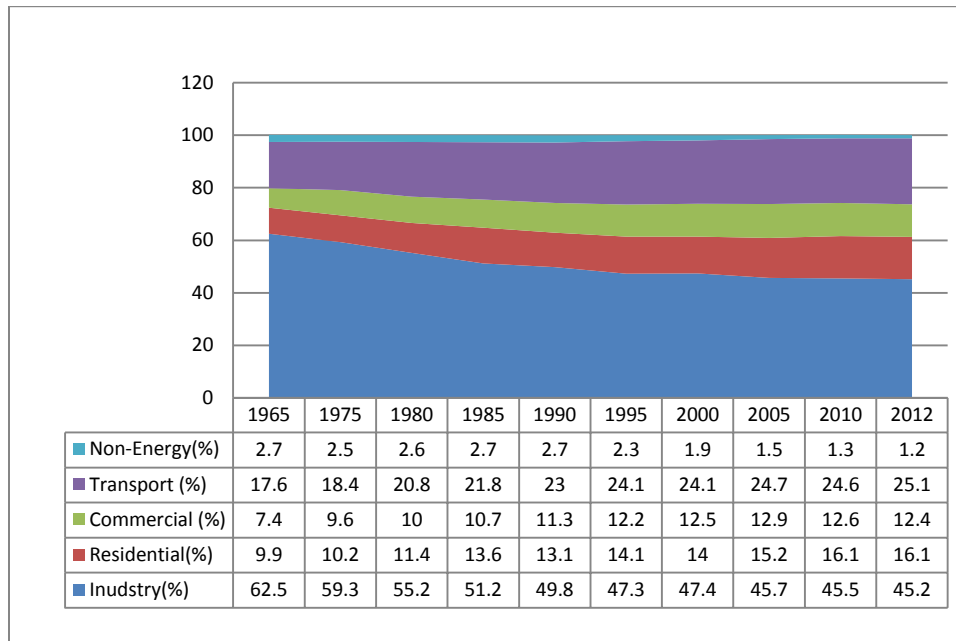


Figure 2: Sectoral share of energy consumption (1965-2012). (Source: Constructed. Data from The Energy Conservation Center, EDMC- Handbook of Energy and Economic Statistics, 2014.)

Figure 2 depicts the share of energy consumption by the important sectors in the economy from 1965 to 2012. During this period, an important development has taken place in the structure of energy consumption, may be indicative of the changes in Japanese economic activities. Figure 2 shows that the industry sector has been ceding its share of energy consumption over the years, and the share has substantially dropped downward to 45.2 percent in 2012 from a high of 62.5 percent in 1965.

In aggregate terms, industry consumed a peak of 178 (10^{13} kcal) in 2000 to mark a big decline at 146 (10^{13} kcal) in 2012. A critical examination highlights that during this period a large number of Japanese manufacturing industries has been relocated to China, Malaysia, Thailand and other countries which may offer a partial explanation of this decline. On the other hand, the transport sector has grown with the consumption share, from 17.6 percent to 25.1 percent during the period. Similarly, the massive urbanization of Japan has led to higher consumption of energy by the residential users as well.

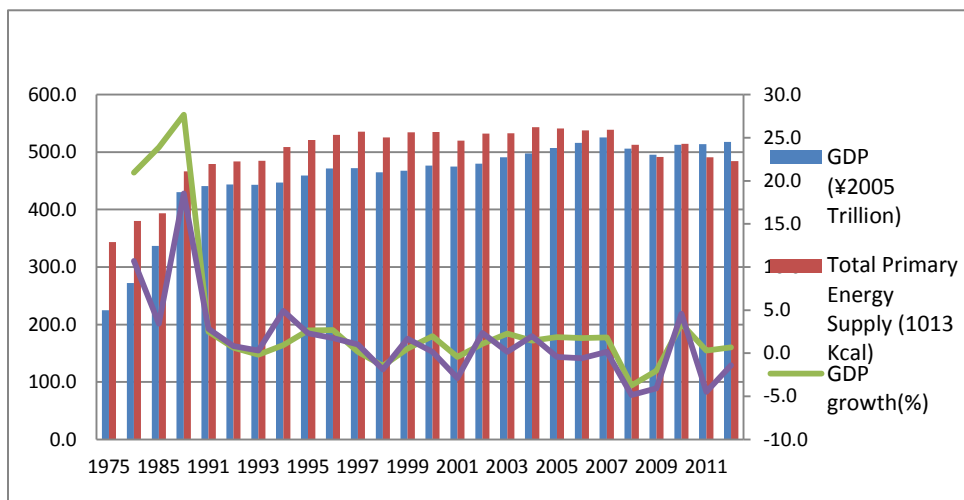


Figure 3: GDP and Domestic Supply of Primary Energy of Japan (1975-2012) (Source: Constructed. Data from The Energy Conservation Center, EDMC- Handbook of Energy and Economic Statistics, 2014.)

The supply side also has seen changes during the period of our discussion. In line with the increase in GDP, supply of primary energy fluctuated over time. After a continuous rise in supply up to 1996, the supply side saturated and from 2004 aggregate supply line of energy has been declining. A number of factors might have affected this including a bleak prospect of any real growth of demand from any individual sector. The population figure could be an important barometer in this regard. Unfortunately with the problem of rapid aging and graying, the absolute population of Japan is declining, with no sign of reversal in the sight. The link between population with economic and production activities, consumption of everything, use of infrastructural facilities, various services and utilities is unmistakable. The energy sector can't be an exception.

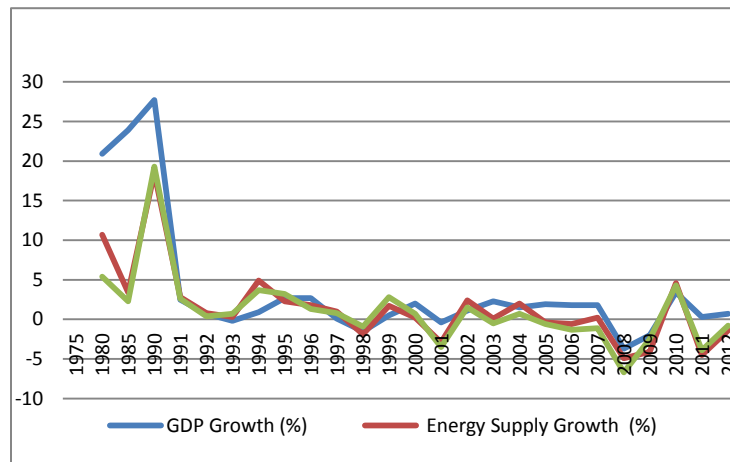


Figure 4: Growth of GDP, Energy Supply and Energy Use (1975-2012). (Source: Constructed. Data from The Energy Conservation Center, EDMC- Handbook of Energy and Economic Statistics, 2014.)

The overall growth rates of GDP, primary energy supply and final energy consumption in Figure 4 reinforces the observations we have already made in this section of the discussion. The trend lines are sloping downward for all of them.

Energy Dependency and Insecurity - Contingent and Structural Risks to Energy Supply: The discussion done in the previous section does not reflect one important feature of Japanese energy sector - its massive dependency on external countries for meeting the domestic need. Unfortunately, Japan is one of the weakest nations among the developed countries in terms of energy security. It never reached more than 21 percent of energy self-sufficiency, that too back in 1998. As an aftermath of the 2011 tsunami and earthquake that forced Japan to shut down all nuclear power plants, the local share of energy production nosedived to 11 percent, making Japan more dependent on foreign resources for energy production. To matter worse, Japan lacks significant domestic reserves of oil, coal, natural gas and other energy resources, including uranium that are used for production of energy. The river based hydroelectricity production is not plenty. So Japan has to rely on import of these resources to power the nation. Figures 5 to 8 have been used to highlight the energy insecurity position of Japan. This also gives us a way to identify the various risk factors towards its energy security.

Figure 5 shows share of various sources of primary energy supply of Japan. Coal, oil and natural gas have emerged as the important sources used for primary energy production. Evidently, Japan has to depend on external sources for all these resources and has to pay a huge bill for energy generation every year to import them. Indigenous resources like river based hydraulic power, nuclear energy and renewable energy sources are also used for energy production. Another figure (Figure 6) has been included to get an idea on the individual contribution of all these sectors to energy supply in 2011. This reinforces the Japanese dependency on others for energy production for its development. Oil is the single largest source for energy supply, constituting about 39 percent of all, followed by natural gas (23.3 percent) and coal (22 percent). Sources like hydraulic power (3.4 percent), nuclear energy (4.2 percent) and renewable energy sources (7.8 percent) are contributing the rest.

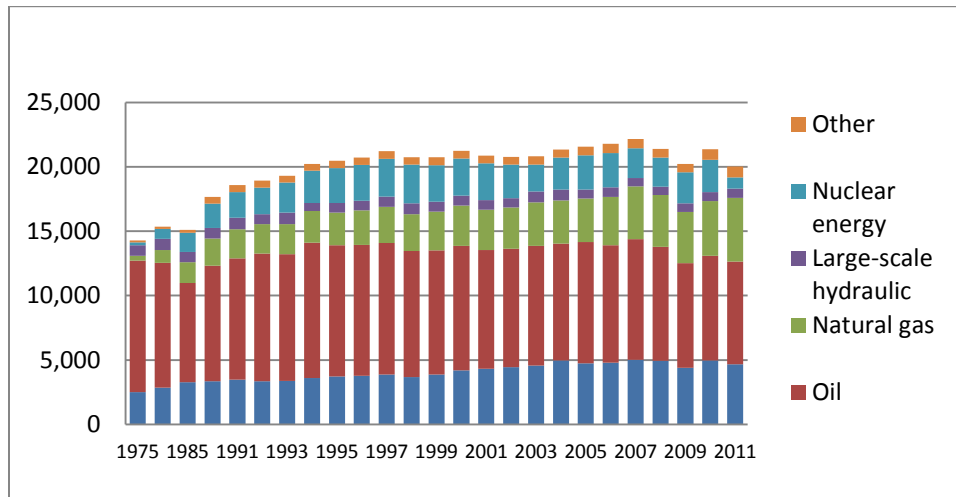


Figure 5: Share of Various Sources in Primary Energy Supply, 1975-2011 (In petajoules). (Source: Constructed. Data from Statistical Yearbook of Japan, 2013)

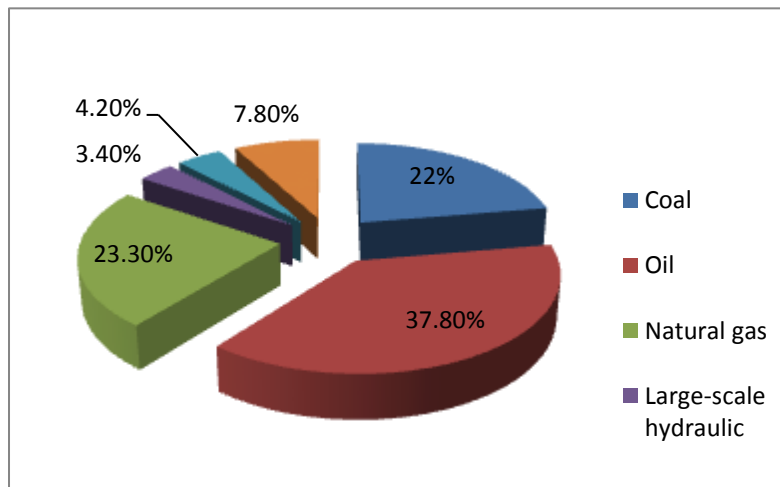


Figure 6: Share of Sources in Primary Energy Supply, 2011; (Total Production 21,147 Petajoules) Constructed from data of Statistical Yearbook of Japan, 2013

That just makes the importance of external factor for energy sector of Japan. Since 1975, Japan never could achieve more than 21 percent of its energy supply (1998) domestically. Though the position improved a bit in the 1980s, Japan never could show the promise that it would achieve a satisfactory level of self-reliance in the energy supply. The setback of 2011 left Japan further behind in the goal for achieving energy security.

That brings to the fore the possible risks an economy like Japan may face when it is so much exposed to external sources for energy supply. In fact, Japan holds strategically a fragile position as it faces both contingent risks as well as structural risks emanating from various sources of energy. Both these risks can trigger a crisis to the supply chain of resources that are used for energy generation, particularly to Japan. Indeed, the risk factors are increasing in terms of number, scale and complexity.

As we know, contingent risks emerge from the events like wars, revolutions, riot and terrorism (the Middle East countries are now sitting on all these potentials like in the past). Political actions by consumer nations are another source of this risk. The long ridding oil sanctions on Iran and the uncertain state of sanctions on Russia are examples of this risk. The third source can be any accident and disruption in the supply chain, one of which may be evolving in the South and East China Seas. Looking at the list, these risks appear to have potential to affect the Japanese energy sector directly through supply cut or price escalation any time.

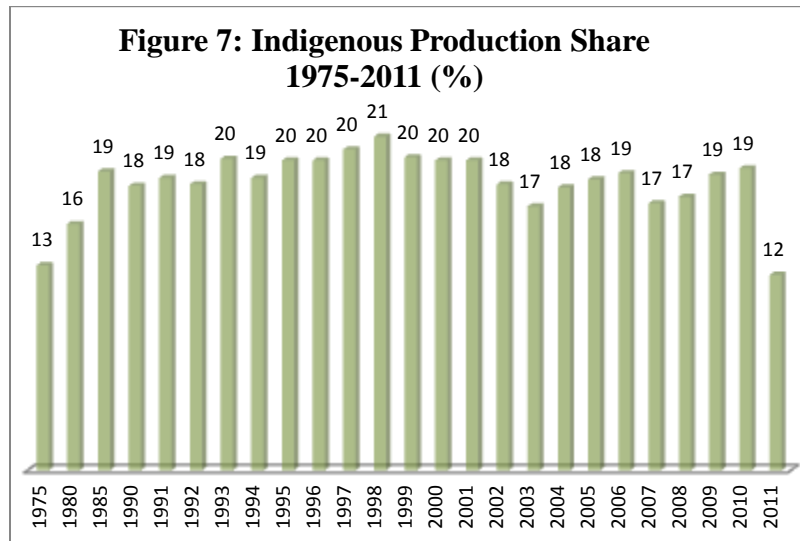


Figure 7: Indigenous Production Share 1975-2011 (%). (Source: Constructed from data of Statistical Yearbook of Japan, 2013)

Similarly, various structural factors of economic and political origins can affect both the demand and supply sides of energy resources of importance to Japan. The demand scenario of energy resources is changing rapidly because of the emergence of China, India and other energy deficient countries as the competition for energy is getting stronger. The supply side can also develop reluctance to sell needed materials, as the stoppage of sale of rare earth by China to Japan soon after the East China Sea island dispute vitiated the political atmosphere between them. Moreover, energy resources that are important to Japan are depleting fast at their origins.

In fact, Japan has, thus far, remained nearly an eternal case of energy insufficiency since its economic march began after the WWII. The Great East Japan earthquake and nuclear power point accident in 2011 have further aggravated the future energy scenario. To overcome this situation, Japan should draw next plan to ensure energy supply to sustain its economic progress as well as make itself significantly self-reliant.

Future Energy Requirement Scenario: Japanese energy scenario for the future indicates that consumption has already reached a plateau and there is little possibility of going it further up till the mid of the 21st century. In fact, the demand for energy is going to decline in all future projections. This is in the line of emerging industrial context and population estimation. Japan seems to have passed its economic prime and is facing a process of hollowing out of the manufacturing sector because of their overseas relocation and closing down. Moreover, its population is declining at an accelerating rate.

Table 1: Primary Energy Consumption of Japan and Some Selected Countries (In Mtoe)

Country	Reference Scenario					Advanced Technology Scenario				
	Historical		Projection			Historical		Projection		
	1990	2011	2020	2030	2040	1990	2011	2020	2030	2040
Japan	439(5.0)	461(3.5)	466(3.1)	449(2.6)	425(2.2)	439(5.0)	461(3.5)	446(3.1)	402(2.5)	361(2.1)
China	871(9.9)	2728(20.8)	3433(22.6)	4009(22.9)	4423(22.5)	871(9.9)	2728(20.8)	3212(22.2)	3499(22.1)	3649(21.6)
India	317(3.6)	749(5.7)	1011(6.6)	1403(8.0)	1896(9.7)	317(3.6)	749(5.7)	918(6.4)	1202(7.6)	1585(9.5)
S. Korea	93(1.1)	260(2.0)	290(1.9)	309(1.8)	310(1.6)	93(1.1)	260(2.0)	284(2.0)	292(1.8)	282(1.7)
Indonesia	99(1.1)	209(1.6)	301(2.0)	413(2.4)	547(2.8)	99(1.1)	209(1.6)	306(2.1)	416(2.6)	534(3.2)
World (100)	8782	13113	15216	17517	19642	8782	13113	14449	15825	16910

Source: Constructed from data of the Energy Conservation Center, EDMC- Handbook of Energy and Economic Statistics, 2014.

Table 1 has been constructed to highlight two scenarios of energy consumption of a number of countries, viz, Japan, China, India, South Korea and Indonesia. In both the situations - Reference Scenario and Advanced Technology Scenario - Japan is the only country projected to experience decline in energy consumption in the coming decades. On the other hand, China, India and Indonesia are going to face increasing demand for energy as their economies are expected to grow during the time. Ironically, the Japanese decrease in energy consumption, though not indicative of economic expansion or development, may bode well towards the goal of energy security by attaining a satisfactory level of domestic energy generation. That could only be possible by formulating and implementing an energy policy to attain the desired level of self-sufficiency in the future.

Exploration of Renewable Sources for Energy Security: The promise for self-sufficiency in energy in Japan lies in the development of a vibrant new and renewable energy sector. At the same time, it has to go for energy cascading and integration. As compared to other OECD nations, electricity and other end-use energy prices in Japan seem to be the highest in the region thereby energy efficiency and energy cascading options are countless.

Table 2: Electric Power Generated By New and Renewable Energy, 1990-2011 (in Terajoules).
(Source: Constructed. Data from Statistical Yearbook of Japan, 2013)

Fiscal Year	Total	Natural Energy			Geothermal power generation	Refuse use	
		Photovoltaic cell generation	Wind power generation	Biomass power generation		Refuse fired power generation	Industrial wasted electricity recovery use
1990	107,385	12	-	-	16,246	16,861	74,266
1995	144,510	2.2	12	-	29,416	25,987	89,094
2000	167,414	16	968	-	29,868	41,984	94,578
2005	196,282	11	15,409	-	28,335	60,056	92,471
2008	188,523	100	25,663	-	23,950	59,549	79,262
2009	184,593	131	31,166	-	24,880	58,929	69,487
2010	300,647	190	34,290	116,241	22,784	48,684	78,458
2011	316,049	526	39,659	122,545	23,284	52,125	77,911

Table 2 reveals that between 1990 and 2011 electricity power generated by new and renewable energy sources nearly trebled. Major sources among them have remained the biomass power generation, industrial wasted electricity recovery use, refuse fired power generation, wind power generation and geothermal power generation. Photovoltaic cell generation is a minor source in this category.

Energy Cascading and Integration: In a simplified general equilibrium model Goto (1995) has researched cost-effective technical options currently available or possible ones into the future. In this model least cost technologies are adopted as they become economically feasible. Energy savings take place as soon as the technology is replaced with a new one. In a conventional power plant, the power generation efficiency is about 38 percent, and the remaining 62 percent of thermal energy is thrown to the ambient. Heat is the final formation of energy that flows from high temperature to low temperature.

To utilize 100 percent energy of primary energy sources, it is inevitable to introduce the cascaded energy utilization concept in the energy sector. A schematic diagram of the cascaded energy utilization concept (Kashiwagi et al. 2001) excluding the nuclear option is shown in Fig 8. Cascaded energy utilization involves fully harnessing the heat produced by fossil fuel combustion, from its initial 1700°C down to near ambient temperatures, with a thermal ‘down flow’ of heat analogous to the downward flow of water in a cascade. In order to foster the energy cascading option, Hayakawa et al. (1999) investigated the regional energy saving potential by cascaded use of waste heat in energy intensive industries, taking into account the actual local industrial Structure in Japan.

Results showed that the energy consumption can be reduced up to 71 percent in Mie prefecture by heat cascading. According to the energy flow in the optimized combination in Mie prefecture, high-temperature waste heat in the ethylene industry is effectively supplied to electricity demand in the cement industry through condensing turbines. The high energy saving potential in Mie prefecture may be attributed to the fact that ethylene is the dominant industry in Mie prefecture. But if we look at the total energy requirement of Japan, these sources are still insignificant. So the role of nuclear power seems to have not ended yet. Indeed, Japan has to utilize nuclear power as a bridging source and at

the same time invest more on the renewable energy sources. The alternative options open to Japan for its drive for energy self-sufficiency as it miserably lacks the conventional resources that are generally used for energy generation.

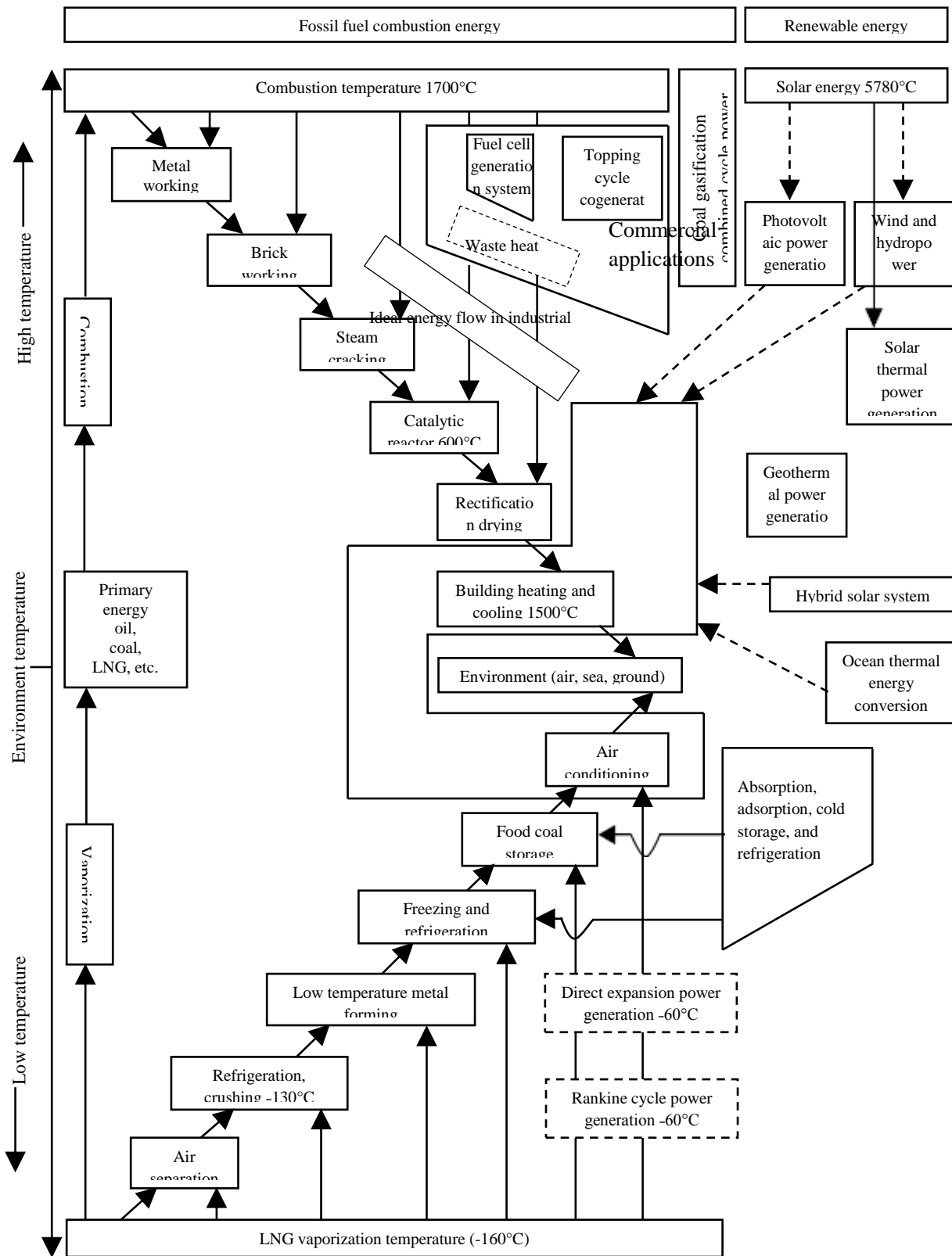


Figure 8. Conceptual diagram of cascaded energy utilization.

Conclusion

Based on the picture of Japanese energy future, it becomes easier to design and implement an energy plan that is formulated on available engineering and rich technology. Creating them as viable alternatives or replacements of the process that is heavily dependent on external resources would help Japan in a number of ways.

Firstly, it will save an enormous amount used to for importing resources used for energy supply and thus will reduce any trade deficit due to their imports.

Secondly, Incentive to the local production should create a big vibrant economic sector, contributing to the production and employment. Though initial investment requirements could be high, the long term nature of the demand of the energy service should adequately compensate for the investment.

Thirdly, given the contingent and structural risks involved to the energy fragility, Japan can and should strive for energy security, and that could be achieved by developing alternative domestic sources of energy generation.

Last, but not the least, to sustain and even to further the level of economic development Japan has already achieved, it needs uninterrupted sources of energy supply. Dependency at the present rate can't ensure that sustainability. A satisfactory level of self-reliance may ensure that economic future for Japan.

So any Japanese energy sufficiency should be based on the development of a vibrant new and renewable energy sector. The sooner Japan achieves the goal, the better.

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The use of feed-in tariff (FiT) policy to promote renewable energy use in Oita prefecture, Japan

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Abstract

Renewable energy has been strongly promoted for the development of a sustainable society. Feed-in tariff (FiT) is a very effective policy mechanism designed to accelerate investment in renewable energy development. The FiT obligates an electric power company to purchase the electric power generated by renewable sources at a fixed price above the market price during a fixed period at the time of the installation of the system. In fact, the FiT has accelerated the investment in renewable energy and has enhanced the development of renewable energy in European countries including Germany and Spain. The FiT policy was introduced in Japan in July 1st, 2012 to promote renewable energy production, following which the Photovoltaic (PV) systems rapidly increased. The PV domestic shipments reached 8.5 GW expanding 2.2 times from the previous year. The renewable energy business including PV business is rapidly expanding in Oita prefecture. These are good news for energy sustainability. However, there are some problems, such as the monopoly of PV systems. The PV system has a monopoly on renewable energy with 95.7% of the accredited system numbers at the end of March, 2014. The other problems include ‘last-minute’ accreditation, etc. These issues related to sustainable energy promotion by the feed-in tariff (FiT) policy are analyzed in the case of Oita prefecture and in Japan.

Introduction

For a sustainable society and for environmental sustainability, the steady increase in global greenhouse gas (GHG) emissions must be reduced. One way to reduce GHG emissions is to use renewable energies. However, in many cases, the costs of electricity produced by renewable energies are higher than that of grid power, which is mainly generated by using fossil fuels. Renewable energies have the “price gap” of electricity between renewable energy and grid power. This means that most of the renewable energies have not yet achieved “grid parity”, which means no “price gap.” Thus, government policies are important in order to lead to “grid parity.”

Japan implemented several incentive policies since it began researching and developing solar cells in 1955 and first applied them to a lighthouse. The “Sunshine Project” was launched in July 1974 following the first oil crisis in 1973 to promote R&D for solar cells. Japanese companies researched and developed many kinds of solar cell technologies. As a result, Japanese companies became world leaders in the production of solar cells by this government policy.

Feed-in tariff (FiT) is a very effective policy mechanism designed to accelerate investment in renewable energy (Klein 2008, Mendonca 2007). The FiT obligates an electric power company to purchase the electric power generated by renewable energy at a fixed price above market price during a fixed period at the system installation time. As the installation time falls behind, this FiT price is reduced. Therefore, the FiT policy has the effect for investors to decrease the uncertainty and to encourage making an investment at an early stage. The electric power companies shift the additional cost above market price to all consumers and share the cost widely as the surcharge.

In fact, the FiT accelerated investment in renewable energy and enhanced the instauration of renewable energy in Europe, such as in Germany and Spain (Oshima 2007, Frondel et al. 2008 & 2010, Álvarez 2010). For example, photovoltaic (PV) systems using solar cells were rapidly installed in Germany and Spain. Then, it finally caused an increase of consumer burden and economical confusion because of rising of electricity prices and suppressing the PV market in Europe (Oshima 2007, Frondel et al. 2008 & 2010, Álvarez 2010).

In Japan, FiT for surplus electricity, which is a kind of FiT, was introduced from November 1, 2009. This system buys the surplus electric power excluding self-consumption from the solar cell at about twice the market price; the domestic market expanded more than twice as a result of its introduction. Furthermore, the general FiT, in which all electric power is from renewable energy and bought at above market price, became effective from July 1st, 2012. Chairman of the FiT assessment committee has presented the FiT in April 25, 2012. It almost accepted the industrial request. Thus, many companies welcome the FiT. This means that the FiT price is high similar to Germany price of 2 years ago.

As described above, the renewable energy is strongly expected for sustainable society. But, it strongly depends on the policy because of the “price gap.” Therefore, there is an awareness of the issues as follows. Could the renewable energy contribute to establishing a sustainable society by FiT? The situation of sustainable referable energy promoted by feed-in tariff policy is analyzed here in case of Japan and Oita prefecture.

Literature review: Klein investigated different FiT designs applied in Europe to promote electricity generation from renewable energy sources and discussed two basic FiT designs including fixed FiTs, which are paid a fixed price above market price to generator during a fixed period, and premium FiTs, which are paid an added price based on the market price; also, the distribution of the costs was assessed (Klein 2008). Mendonça (2007) investigated FiT based on the cases of Europe and USA and mentioned the implementation of FiT design in the future.

Oshima (2007) analyzed the framework and characteristics of FiT in Germany and the reason for Germany success to promote the renewable energy by FiT policy. Frondel et al. (2008) researched the problem of FiT in Germany and recommended the reduction of FiT, and argued the renewable energy policy in Germany needed to ensure a viable and cost-effective introduction of renewable energies into the country’s energy portfolio (Frondel et al. 2010). Álvarez et al. (2010) analyzed the effects of FiT policy on employment from the case of the bubble which happened in Spain by the solar cell.

Couture et al. (2010) categorized FiT models and examined the advantages and disadvantages of different FiT models. Yamaguchi (2011 a, b) researched the results and problems of Spain and Germany. Schallenberg (2012) compared fixed feed-in tariff and premium feed-in tariff based on Spain case and clarified the advantages and disadvantages. Del Rio (2012) built a theoretical framework for dynamic efficiency analysis and assessed the dynamic efficiency properties of different design elements of feed-in tariffs.

In addition, there are some simulation approaches to calculate the optimum FiT. Zahedi (2009) developed an economical model to determine a feed-in tariff for grid-connected solar PV electricity in Australia. Wand et al. (2011) examined potential effects of Germany’s FiT policy for small roof-top solar PV systems installed between 2009 and 2030 using simulation model. Takehama analyzed the case of Germany and simulated the cost and the effect introducing into Japan (2010). Ayob et al. explored Japanese energy policies and develop simulation model to calculate the tariff for Japanese case (2012).

Based on the above literature review, there are some researches on environmental policies, photovoltaic energy policies and FiT focus on specific policies and specific countries in recent years. However, there is no research of the track of photovoltaic energy policies over a long period of time.

Methodology

Yin (1984) defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used.

In this paper, the case study method was taken to investigate a contemporary issue of the photovoltaic energy within its real-life context. The research question is what the appropriate track of the renewable energy policies is over a long period of time. This research question is broken down into the following two research questions. Could renewable energy contribute to establishing a sustainable society by FiT?

Thus, the situation of sustainable energy promoted by feed-in tariff policy is analyzed in case of Japan and Oita prefecture. The case of photovoltaic energy policies in Japan was selected, because Japan is the pioneer of photovoltaic technology and has a long history of photovoltaic policies after the “first oil crisis” in 1973. The case of photovoltaic

energy policies in Japan is appropriate to research the track of the renewable energy policies over a long period of time. The data was collected through field research in Kansai and Kyushu in Japan. Also, the data of International Energy Agency (IEA), Japan Photovoltaic Energy Association (JPEA), Agency for Natural Resources and Energy in Japan and PV News etc. were collected and analyzed.

Findings and Discussion

R&D Support Policy: The world's first solar cell was invented by D. M. Chapin, C. S. Fuller and G. L. Pearson of Bell Laboratories in USA in 1954 (Chapin et al. 1954). They demonstrated that sunlight could be converted directly into electrical power with a conversion efficiency of about 6 % by using a p-n junction in a single crystal silicon (Si). Moreover, W. E. Spear and P. G. LeComber (1975) achieved initial success in p-n control of an amorphous silicon in 1975 and D.E. Carlson and C. R. Wronski (1976) of RCA developed the world's first amorphous solar cell with a conversion efficiency of 2.4 %.

Japan began the R&D of the solar cell after the invention of the world's first solar cell, and the business started for a niche market of electric power supply at remote places, such as a radio relay station and a lighthouse. However, the "first oil crisis" broke out in 1973 and the threat of the oil exhaustion was exposed. So the "Sun Shine Project" was started by Japanese government in July, 1974 (NEDO 2007). The R&D of the solar cell was done as an alternative to the usual electric power as one of the new energy sources. Its target was to reduce the price by 1/100. By the "second oil crisis" in 1979, the "Sun Shine Project" was accelerated and the New Energy Development Organization (NEDO) was established in 1980.

To promote the diffusion of the solar cell, not only a price reduction but also exclusion of the obstacle by government policies is required. It is necessary to connect the solar cell system to the electric power grid in cooperation with electric power companies to overcome the problem of the fluctuation of the sunlight and to reduce the battery cost. The experiment of the grid connection was conducted in Rokko Island from 1986. The Ministry of International Trade and Industry (MITI) relaxed the regulation of the photovoltaic system in 1990. The photovoltaic system can connect to the electric power grid and can sell the surplus electric power at the same price as an electricity-sales-to-utilities price.

Subsidy Policy: Moreover, the New Energy Foundation (NEF) began the "solar cell system monitor project for residences" as a "subsidy system" which would pay a subsidy for installation of the solar cell system for residences in 1994. Thus, Japan was able to industrialize and promote the solar cell by technical development and support from the Japanese government.

The Japanese government implemented programs to support various R&D projects and subsidized the installation of PV system. As a result, Japanese companies became world leaders in the production of solar cells with 50% production share in 2004 (PV News). However, Japanese share is rapidly declining after 2004, to 17% in 2008 (International Energy Agency 2012).

Net Metering: Japan took the system of "net metering" for promoting the use of renewable energy sources. However, Japan brought back the subsidy as national policy in January 2009.

Study of Japanese policies after FiT: In case of the installation of PV system in a single fiscal year, Germany passed Japan in 2004 by introduction of the FiT and rapidly increasing the installation (Agency of Natural Resources and Energy 2011b). Thus, Japan considered the introduction of FiT. FiT for surplus electricity, which is a kind of a FiT, was introduced from November 1, 2009. Japanese FiT of renewable energy was passed by Japan Diet in August 26, 2011 (Agency of Natural Resources and Energy 2011a, b). This law obliges an electric power supplier to buy the electricity generated by the renewable energy sources (solar power, wind power, water power, geothermal power and biomass) at a fixed price during a fixed period. It became effective from July 1, 2012. All consumers pay the additional cost, which results from the purchase of renewable energy at FiT by the electric power supplier, as the surcharge.

Although FiT for surplus electricity applied only to the surplus electric power of PV system for household use, the new FiT was expanded to apply not only to solar power but also to wind power, water power, geothermal power and the biomass by this law. However, the FiT for PV household use sustained the application to only surplus electric

power as before. The Minister of Economy, Trade and Industry (METI) determined the FiT price and period, based on the opinions of the neutral independent FiT assessment committee, according to the classification of the source of renewable energy, an installation mode, a scale, etc. Moreover, to determine the FiT price, the law considered the profits of the supplier of renewable energy electricity for three years after the enforcement, in order to promote renewable energy. The FiT assessment committee heard the requests from the renewable energy industries. Then, the chairman of the FiT assessment committee presented the FiT proposal in April 25, 2012.

The FiT of Japan in 2012 is almost accepted by industries. Thus, many companies welcome the FiT. The FiT price of PV is as high as Germany price of 2 years ago. The FiT provides more incentives for investors as compared with the current FiT in Europe.

Accreditation of PV system: To obtain the FiT, the renewable energy system needs to be accredited. The data of the accredited renewable energy system are published by Agency for Natural Resources and Energy in Japan [27]. The trend of accredited renewable energy systems was analyzed using the data of Agency for Natural Resources and Energy from July 2012 to March 2014 (Japan Photovoltaic Energy Association, JPEA). The change of accredited output power is shown in Fig. 1. To get the advantageous price, a lot of companies rush into application to get the accreditation until the end of March 2014. Especially the accreditations of PV systems more than 1MW and 10 kW-1MW were rapidly increasing before the end of March of Japanese fiscal year. This means a lot of companies rush into the “last-minute” accreditations until the end of March 2014.

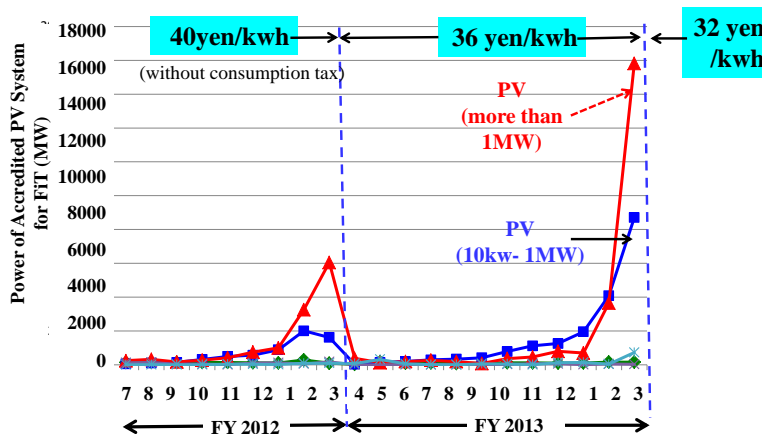


Fig. 1 Change of accreditation PV system power (author made from [27]).

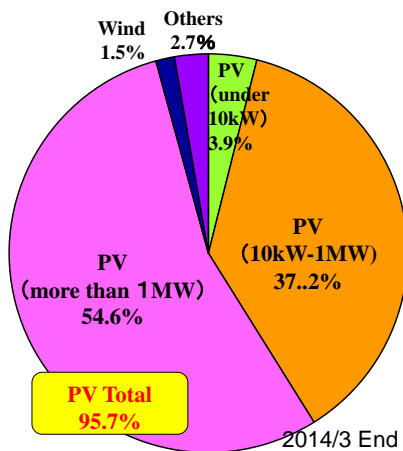


Fig. 2 Ratio of accredited total power in Japan (author made from [27]).

The PV system has a monopoly on renewable energy with 99.9% of the accredited system numbers. In the case of output, the output ratio of the accredited renewable energy system in March 2014 is shown in Fig 2. Total PV output accounts for 95.7%. It can be broken down to 54.6% by the mega solar system 1MW or more, 37.2% by 10-1000kW, and 3.9% by 10kW or less. Wind power accounts for 1.5%.

Solar cell output is accurately predictable from the solar radiation data; so environmental assessment is less stringent. In case of wind power, data of wind speed is required; so environmental assessment is strict. Therefore, it takes two or three years to prepare. In case of geothermal and small hydro power, it takes some time for the investigation and the negotiations. For this reason, in the first year, the PV system shows a monopoly. The other renewable energies are expected to grow in the following years.

Effect of Expanded Japanese PV market: After getting the accreditation, PV system is constructed after buying the solar panels. Figure 3 shows the total shipment of solar cell by Japanese PV companies. The PV domestic shipments rapidly expanded from 1400MW in FY2011, to 3800MW in FY2012 and 8625MW in FY2013, representing 6.1 times increase in two years. This large increase of PV shipments comes of the effect of the FiT. PV export shipments are reduced from 1281MW in FY2011, to 562MW in FY2012 and 79MW in FY2013, because European PV market shrank. This is clear evidence that the FiT expanded Japanese PV market.

Progress towards “Solar Island Kyushu”: Kyushu established many industrial clusters to promote the business. There is a “Silicon Island Kyusyu” for semiconductor industry and “Car Island Kyusyu” for automobiles. In addition, the PV cluster “Solar Island Kyushu” has been established to promote the photovoltaic industry in Kyushu.

Solar Frontier: Solar Frontier in Miyazaki prefecture is the second-largest PV maker in Kyushu. It is a 100% subsidiary of Showa Shell Sekiyu, began research in solar energy in 1978 and commercial production of crystalline silicone modules began in 1983, and research on CIS (Copper Indium and Selenium) technology began in 1993. It is producing the compound thin film solar cell of CIS. The new plant in Miyazaki, Japan operated in 2011. Total production capability is 1000 MW/year.

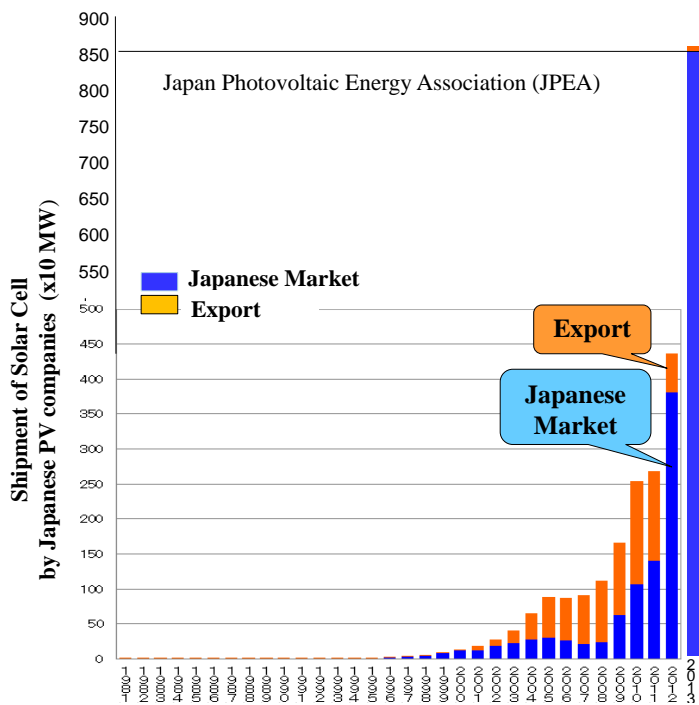


Fig. 3 Total Shipment of Solar Cell by Japanese PV Companies



Fig. 4 JGC Mega solar system with 26MW at Oita industrial zone (Author shot)

Mega Solar Systems: The largest class mega solar system with total 26.5MW operated from 1 ay, 2013 at seaside industrial zone in Oita prefecture. The industrial zone developed in 1960s, and it lied idle. But, the industrial zone is utilizing for mega solar system because the FiT was introduced. JGC Corporation constructed and is operating the mega solar system with 26MW as part of the total system at the land of 350 thousand m² as shown in Fig. 4.

In addition, the mega solar system with 82MW has operated by Marubeni Corporation. It is located next to JGC mega solar system. In other words, the mega solar with virtually 108.5MW is operating in Oita prefecture. This is the largest operating PV system in Japan.

Denken: Denken is one of small and medium enterprises (SME). They are doing semiconductor equipment business, creating it from the core technology. They have expanded the business to photovoltaic business using the core technology and taking the good timing of FiT as shown in Fig.5. This is a success case by expanding the business for SME.

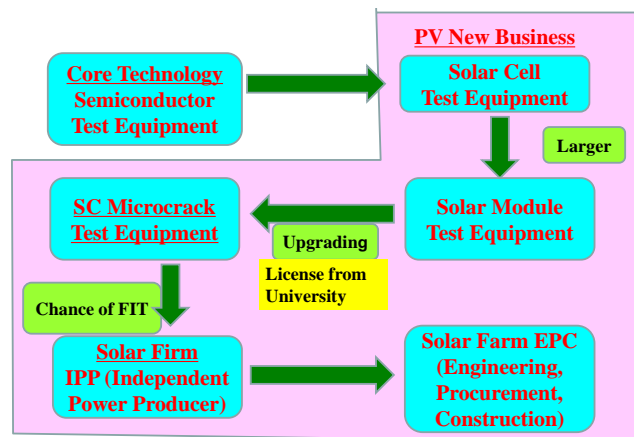


Fig. 5 Expanding process of DENKEN's business

Conclusion

Renewable energy is strongly expected for sustainable society. The FiT is a very effective policy mechanism designed to accelerate investment in renewable energy. Research question is “Could the renewable energy contribute to establish the sustainable society by FiT?”

The FiT policy introduced in Japan from July 1st, 2012 to promote the renewable energy. The Photovoltaic (PV) systems rapidly increased. However, there are some problems, such as monopoly of PV system. The PV system has a monopoly on renewable energy with 95.7% of the accredited system numbers at the end of March, 2014. The other

problems are “last-minute” accreditation etc. However, the FiT clearly expand the PV introduction and PV business. Thus, it was found that the FiT is very effective policy to establish the sustainable society from the case study of FiT in Japan and Oita prefecture.

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