

**Master's Thesis**

**The Effects of Denial Messages on Consumers Behavioral Intention toward a Rumored Product: *An Experimental Study of Ajinomoto Umami Seasoning, in Abidjan Cote d'Ivoire***

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## **List of Abbreviations**

AAO	: Ajinomoto Afrique de l'Ouest
CEO	: Chief Executive Officer
CRS	: Chinese Restaurant Syndrome
FAO	: UN Foods and Agriculture Organization
FDA	: Foods and Drugs Administration
JECFA	: Joint FAO/WHO Expert Committee on Food Additives
MSG	: Mono Sodium Glutamate
TRA	: Theory of Reasoned Action
TPB	: Theory of Planned Behavior
USFDA	: United States Foods and Drugs Administration
WILLBUY	: Willingness to Buy
WILLTRANS	: Willingness to transmit
WILLRECOM	: Willingness to Recommend
WOM	: Words of Mouth
WHO	: World Health Organization
WASCO	: West Africa Seasoning Company

## **CERTIFICATION PAGE**

I, ATTA KouassiAkora ID (Student ID 52117678) hereby declare that the contents of this Master's Thesis are original and true, and have not been submitted at any other university or educational institution for the award of degree or diploma.

All the information derived from other published or unpublished sources has been cited and acknowledged appropriately.

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ATTA Kouassi Akora

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## **ABSTRACT**

The aim of this study is to analyze the effects of rumors denial messages on consumers' behavioral intention especially their willingness to buy, to recommend the product, and to share the denial message. The study used the case study of rumors on Ajinomoto seasoning and took place in Abidjan, Cote d'Ivoire, West Africa.

Four types of denial messages including the guide message, the outright refutation message, the sarcastic message, and interrogatory message, were tested.

The methodology used in this study consisted of a field experiment followed by semi-structured interviews with former consumers of the product who stopped buying it because of the rumors that surround it. The collected data have been analyzed using descriptive statistic and narrative analysis approach.

The results show the main rumors about Ajinomoto seasoning in Cote d'Ivoire, and the real causes of the persistence of these rumors which are generally, the lack of communication from the company, the lack of product knowledge by consumers, and the product distribution strategy that goes against market norms.

The results also prove that the rumors denial as strategy for combating rumors, generally, has impact on consumers' behavioral intention whatever the type of messages.

Moreover, the guide message which implies the involvement of the consumers in the fight against the rumors through a "call to action" appears to be the most effective to reduce consumers' belief in the rumors and to influence positively their behavioral intention. Indeed, the guide message influences highly the consumers' willingness to buy, and recommend the product, and their willingness to share the denial message as well.

The most important management recommendations from this study are that, rumors management must be made part of the marketing functions, and companies especially those that are exposed to potential high safety risks perception must designate rumor monitoring and control officers, who will identify risks of rumors and develop a rumor management plan. When it comes to rumors denial, managers should not be contented to simply deny rumors about their products, but should go further by involving consumers and the public in this fighting against the rumors.



## **I- Introduction**

### ***1.1 Research background***

Companies are becoming more and more vulnerable to the phenomenon of rumors resulting in customer's defection, a declining of their brand perception, additional expenses of communication, and even withdrawals of brands and products from the market (Nga-Nkouma, 2009). Rumors can significantly affect companies' financial performance, since they create fear and mistrust among consumers. For example, that was the case of the rumor in 2008 that alleged that the CEO of Apple, Steve Jobs was hit by a heart attack. Although the rumor was found to be false, the rapid transmission of the information caused the company to lose \$ 9 billion in market value (Dubois and Rucker, 2011). In reality, the concerned person did not suffer any heart problem at that moment.

Rumors can also affect consumer's behaviors and lead to the boycott towards a company, brand or products. That happened to Procter and Gamble in 1994 when rumors alleged that the company is promoting the Satanism. According to the rumors, the company logo is related to Satan; therefore buying PandG products was supporting the worship of Satan. Moreover, the rumors called for the boycott of the company products. After, investigation the company found that the rumors were spread by competitors and the company received \$ 19 million in damages (Glenn, 2008).

The phenomenon of rumors has become more pronounced with the development of new information technologies, and especially the advent of social media that is known to be a conducive framework to the rapid spread of rumors. Recently, the company H&H faced by rumors on social Medias alleging that its product Lausanne Jack n Jill biscuit was toxic and harmful. The rumors severely tarnished the company image among the consumers in the West Africa market, and forced the company to spend considerable amount of money in denial campaign (Gyasi, 2017).

One of the proper examples of rumors damages on Company businesses is the case of a Japanese foods manufacturing and amino acids world leader AJINOMOTO Group. Indeed, ten years after its creation, Ajinomoto began to face rumors and allegations about the harmfulness of MSG the core ingredient of its product. For instance, in 1968, one of these rumors was about Chinese Restaurant Syndrome (CRS). The origin of this allegation began from a letter published in the New

England Journal of Medicine in which the author described that he suffered some symptoms like numbness, weakness, and palpitations (Wang and Adhikari, 2018). Many people accused MSG although the existence of other possible sources. Since then, there have been numerous allegations and rumors about MSG. This paper discusses the case study of Ajinomoto's Umami seasoning in Cote d'Ivoire.

As shown above, any company is likely subject of the adverse effects of rumors. Therefore managers must be armed with relevant strategies to prevent and combat this phenomenon. Research has revealed strategies used for combating corporate rumors (Koller, 1992; Dubois, 2011; Difonzi et al., 1994). Among these strategies, the most widely used by companies is outright denial when combating rumors spread on their companies, brands, or products (Dubois, 2011). For example, concerning the rumor about the toxicity of its biscuit the company H&H reacted by denying through the following statement: "The management of H&H would like the general public to know that Lausanne Jack n Jill biscuit among others is one of the finest products produced in Thailand by Universal Robina Corporation (URC) and the product has gone through the entire necessary requirement and has been registered with all the necessary authorities in Ghana with FDA registration number FDA/BK 15-111" (Gyasi, 2017).

Nevertheless, the evidence of the effectiveness of denials as a tactic against rumor is not unanimously attested. Bordia, et al. (2005) identified three variables that influence the effectiveness of rumors denial, personal relevance, source, and characteristics of the message. The study showed that denial indeed reduces the beliefs and fears attached to the rumor; moreover, the effect is stronger with high quality of the message (Bordia et al., 2005). Therefore, message quality matters when company is denying rumors about its products or brands.

### ***1.2 Reason for the research***

Although there are many studies about the market rumors, their effects on companies, products or brands, and strategies for combating them, there is relative deficit of interest about the effectiveness of the tactics and strategies for combating rumors (Kimmel and Audrain-Pontevia, 2010). For example, how consumers react to a denial of market rumor seems to be insufficiently explored topic.

The present study aims to contribute to the discussion about the effectiveness of rumors denial as a strategy for combating the negative effects of rumors. The study focuses on the effects of rumor denial messages types on consumers' behavioral intention, such as their willingness to buy the rumored product or to recommend it and their intention to spread the rumors denial message.

Therefore; it will contribute to the academic discussion about strategies for combating the adverse effects of rumors upon firms. Mainly, about the effectiveness of denial strategy; and the finding can be used as a guide when firms are considering defining their strategies.

### ***1.3 Research questions***

In marketing context, the rumor about company, product, or brand can lead to consumer defection as discussed by Kimmel and Audrain-Pontevia (2010). Therefore, the expected outcomes from denying rumors are to reduce consumer defection, and recover the defected ones.

In that sense measuring the effects of rumor denial message on consumers' behavioral intention, can help to define an effective denial and ensure positive outcomes. Using the case study of Ajinomoto Umami Seasoning in Cote d'Ivoire, this research thenceforward, aims to answer to the following question:

- Which types of rumors about Ajinomoto Umami seasoning?
- What are the strategies of Ajinomoto to manage these rumors?
- What are the effects of denial messages on Ajinomoto consumer's willingness to buy and recommend the product?
- Using the case of Ajinomoto which type of denial messages are most likely to be transmitted by consumers?
- Using the case of Ajinomoto which type of denial message is most effective to combat commercial rumors?

## **II- Theoretical framework**

### **2.1. Rumors**

#### ***2.1.1 Definition***

“Rumor is a specific (or topical) proposition for belief, passed along from person to person, usually by word of mouth, without secure standards of evidence being present” (Kimmel and Pontevia, 2010). It is also defined as unverified information transmitted from a person to others primarily for belief. Rumors are some kinds of untrustworthy allegations because they are not accompanied by supportive evidence (Difonzo, et al., 1994). Although the rumor is a very old concept, the scientific approach is recent. Indeed, it is only during the Second World War that human sciences became interested in the concept of rumors (Anonymous, 2004). Because of its importance in society, numerous researchers have discussed the topic of rumors (Difonzo, Rosnow, and Bordia, 1994; Buckner, 1965; Bordia, and DiFonzo, 2004).

Despite the various studies on the topic, there are different points of view on the concept depending on the field of interest and the problem addressed. Indeed, different research approaches exist regarding rumors including sociological, psychological, communicational, legal, marketing, crisis management application, in the context of the company's relations with its partners and relations between its customers, as well as only from the angle of narrative (Nga-Nkouma, 2016)

In this paper, the rumor approach adopted is the marketing and business management in the context of the company's relations with its partners and relations between its customers known as commercial rumors. *Commercial rumors* “are public communications, usually embellished by allegations or attributions based on circumstantial, unverified evidence that reflect consumers’ assumptions or suspicions about the marketplace” (Kimmel and Pontevia, 2010).

#### ***2.1.2 Rumors generation and transmission***

Given the many contexts in which rumors may take place, it is difficult to find a simple explanation for why rumors emerge, and why people transmitted them (Kimmel, 2004). Psychological and Sociological experts have identified four main factors influencing rumors generation and transmission. These factors are: (1) ambiguous or uncertain situation, (2) the importance or

relevance of the issue (Allport and Postman, 1947), (3) personal anxiety, and (4) the belief or trust in the rumor encompasses (Pezzo and Beckstead, 2006). These factors are supposed to be the main variables for influencing rumor formation and diffusion.

Allport and Postman (1947) presented the mathematical formula for rumor transmission. According to their study, “the flow of rumors varies with the significance of the issue to the persons concerned times the ambiguity of the facts about the subject”. “Whenever a rumor is spreading in a community or a group, some persons will have heard it once, some will have heard it more than once, and others will not hear it at all” (Buckner, 1965). In the book Rumors transmission theory, Buckner (1965) identified two variables that are susceptible to retard or to promote the transmission of rumors. According to the author, the structure, and the level of interest in the topic of the group are the main variables that determine the transmission of the rumors. Indeed, closer the group is, more rumors are likely to be transmitted and vice-versa, and more the group is interested in the topic, more the members are likely to transmit rumor to each other.

Until recently, rumors were spread through conventional mass media (TV, press, radio) and by word of mouth. “Rumors have thus found a new compelling means of spreading” (anonymous, 2006). The advent of the internet and new information and communication technologies, have accelerated massive dissemination of information and rumors (Kimmel, 2004). Indeed, “Internet is a powerful network where circulate doubtful information and, as a result, the rumors. The fact that everyone can send anything on the internet without censors, or filters makes the internet a powerful mean for spreading potentially damaging rumors and information globally (Pete and Karthik, 2003), using social media, micro-blogs, discussion forums, and other emerging carriers. Even so, mass media, especially the Newspapers, and Word of Mouth, still have an important role in the starting and spreading of rumors.

### ***2.1.3 Negative effects of rumors on businesses***

The fact that rumors have adverse effects on consumer behavior has been discussed by many researchers (Nga-Nkouma, 2009; Kobinah, 2013; Difonzo, Rosnow, & Bordia, 1994; Kimmel, & Audrain-Pontevia, 2010). “Rumors can drain productivity, reduce profits, create stress in the workplace, or sully a company's image. Some rumors tear at a company's credibility, with both personnel and customers. Others have catapulted firms into financial disaster” (Koller, 1992)

## **2.2. Rumors combating strategies**

Regardless, insufficient attention shown to exploring the effectiveness of particular rumors combating strategies, some important exceptions can be cited (Kimmel and Audrain-Pontevia, 2010). Kimmel (2004), proposed that managers should include rumors management as day to day business operations, rather than facing them in crisis situation, thus suggested 4 strategies to prevent from rumors harmfulness: (1) Engage in credible public relations (PR) efforts, (2) Be vigilant (consider rumors as the norm rather than the exception), (3) Designate rumor monitoring and control officers, and (4) Develop a rumor crisis management plan.

Tormala, Rucker, and Dubois, (2011) highlighted the effects of three market rumors combating strategies on consumers' behavior: (a) denial strategy consisting of refutation of the rumors by the targeted company; (b) re-association strategy implying the connection of the target of the rumor with positive features; and (c) questioning strategy suggests to ask consumers how certain there are the rumor is true. By using an experimental approach about a rumored restaurant, the authors showed how each strategy could affect the consumer expressed certainty, behavioral intentions, and willingness to transmit the information. Their results showed a high certainty in denial and re-association condition than questioning, and participants were more likely to eat in the restaurant in questioning condition than denial and re-association condition; and less likely to transmit the rumor in questioning condition than the two others conditions (Tormala, Rucker, and Dubois, 2011)

Koller (1992) suggested three rumor rebuttal strategies. The first is no response strategy, consisting of doing nothing to combat the rumors. The argument behind this strategy is that some rumors drive away over time and do small real damage. Therefore, by ignoring the rumor, it avoids the repeating of the rumors. Difonzo, Rosnow, and Bordia (1994) referred to this strategy as the weakest one, and recommended assessing the plausibility of the rumor before considers using such a strategy. The second strategy is Re-association: consisting of associate the target of the rumor with positive features, such as the company's traditional commitment to quality, excellence and consumer satisfaction (Koller, 1992). The last strategy consists of public refutation or denying: denying is the simplest and most forceful strategy. In this strategy, the company names the specific rumor and discredits its usefulness and the credibility of its source through an advertisement

campaign, a press conference, or highly publicized event. This technique has been effective in making people disregard those still interested to pass the rumor along (Adebowale and Funmilayo, 1994).

### ***Rumor denial strategy:***

Rumor denial is statements refuting a rumor. It is a commonly used approach to refute a false rumor. According to Bordia (2005), it is proficient at diminishing people's trust in the rumors. The rumors denial message "to be effective should be based on truth, with internal consistency, with an appropriate spokesperson, with an understandable message, without repeating rumor, and using town meeting format" (Difonzo, Rosnow, and Bordia 1994). Bordia (2005) identified three variables that influence the effectiveness of rumors denial message, by reducing beliefs and anxieties associated with the rumors: personal relevance of the message, source of the message, and characteristics of the message.

However, while researchers discussed the effectiveness of rumors denial for reducing the beliefs and anxieties associated with rumors, its effects on the consumers' behavior are less developed. This study is expected to make contributions to the relationship between rumors denial and consumers' behavior.

### **2.3 Consumers behavioral intention**

Consumer behavior "is the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires" (Solomon, Bamossy, Askegaard, and Hogg, 2006). "It refers to all the thought, feelings, and actions that an individual has or takes before or while buying any product, service or idea" (Khaniwale, 2015). Consumer behavior is affecting by factors such as culture, society, personal, and psychological factors.

Due to the critical roles that play consumers in the marketplace, the interest in consumer behavior fields has been grown, in the field of marketing (Solomon, et al., 2006). Most consumer behavior theories believe that the best way to predict the consumers' behavior is basically through their intention to engage in that behavior. The most recognized of these theories are the TRA (Theory

of Reasoned Action), and the TPB (Theory of Planned Behavior) (Fishbein and Ajzen, 1975). Therefore, in the incapability of being able to predict the actual behavior of consumers, the measurement of consumer intention is the most credible alternative for marketers and researchers.

The intention is defined as how hard persons are willing to try and how much determinations they are planning to perform an actual behavior (Mamman, Ogunbado, and Abu-Bakr, 2016). The consumer Behavioral intention refers to a probability that the consumer will perform some behavior (Fishbein and Ajzen, 1975). Turhan and Özbek(2012) showed that brand satisfaction is a driving factor for three consumer behavioral intention outcomes including the willingness to buy, willingness to pay more, and willingness to recommend.

This study also is focused on three consumer behavioral intention outcomes including willingness to buy (WILLBUY), willingness to recommend the rumored product (WILLRECOM), and willingness to transmit rumor denial message (WILLTRANS).

### ***2.3.1 Willingness to buy***

Jahangir, Parvez, and Bhattacharjee (2009) defined consumers' willingness to buy as the behavioral intention of the customers to pay for a product, and showed that the product quality, the consumers' price sensitivity, and the product promotion are the factors that highly influenced the consumers' willingness to buy. Phau et al. (2009) explained the fact that willingness to purchase and purchase intention are used as a substitute in marketing research to predict the actual consumers' behavior. Kim and Pysarchik (2000) quoted by Ahasanul, et al. (2015) have demonstrated the existence of a strong correlation between consumer willingness to buy and consumer actual behavior.

Therefore, studying Willingness to buy became one of the main methods accepted by marketing managers to understand the actual consumers' behavior. Pandey and Soodan (2015), in their study, have shown the significant role that beliefs have in forecasting consumers' buying behavior. According to their study, the consumers' intention to buy depends on their beliefs regarding the quality, the delivery, the price, and the availability of the product which they intend to buy. The positive beliefs from consumer about a product will lead to constructive willingness to buy, and negative beliefs will affect negatively his/her willingness to buy.



**Kosfeld (2005)** showed that rumors could affect beliefs of the consumers, and have a direct impact on market outcomes. In other words, if the consumer is exposing to negative rumors and forming anxieties and negative beliefs toward a product, this will damage the product image and further influence their willingness to buy. A denial message which intends to reduce the anxieties and the negatives beliefs associated with the rumors will affect the consumer behavioral intention toward a rumored product positively.

In this research consumers' willingness to buy refers not only the consumers' likelihood to pay for, but also their inclination to consume the product.

### ***2.3.2 Willingness to recommend the product***

The willingness to recommend is the proportion of surveyed customers who point out that they would recommend a good to friends. It is a significant metric related to consumers' satisfaction, because a satisfied customer with a brand is likely to recommend it to friends, relatives, and colleagues (Bendle, et al. 2016). The high percentage of customers, who are willing to recommend a company, is an excellent metric of strong business performance and growth (Korneta, 2014).

As seen above, the willingness to recommend is used to access the consumers' satisfaction. However, in this research, the consideration of willingness to recommend aims to assess how much consumers have been convinced by a rumors denial message about a product, to the point of recommending it to friends and relatives; by assuming that these consumers were previously used to the product, but had to stop consuming it because of rumors.

### ***2.3.3 Willingness to transmit denial message***

In the way that, consumers transmit false rumors about products or companies by word of mouth (WOM), in the same way, they also transmit knowledge and product information or messages. WOM is "an exchange of information between consumers (source and receiver) about their experience with a product or service (López and Sicilia, 2014). In this conversation, the fact that the source has no commercial interest makes the communication process more credible than companies generated information. In fact, WOM marketing is based on this principle as revealed by Bansal S. and Bansal I. (2018): "Word-of-mouth marketing has always been an important

ingredient of promotional strategies of the marketers, and has been considered as non-biased and most trusted form of promotion”. The principle of WOM marketing is to influence the consumers through their personal experience with the product or advertising so that, they would transmit such experience or advertising information to others.

Just like advertising aims to reach larger audience, the expected outcomes of rumors denial message is also to get to the larger audience. Therefore the transmission of the rumors denial message by consumers through a WOM is a performance indicator for the company that denied the rumors.

## **2.4 A case study of Ajinomoto Umami Seasoning in Cote d’Ivoire**

### ***2.4.1 History of Ajinomoto***

In 1908 Dr. Kikunae Ikeda, a Japanese Chemical scientist, and Professor at Tokyo University, discovered Umami taste. Indeed, “Dr. Ikeda was convinced that there was another taste different from four known tastes (sweetness, saltiness, sourness, and bitterness). As a researcher, he started research intending to find means to improve the nutrition of Japanese people”. From his research, he discovered that Umami taste comes from amino acids monosodium glutamate (MSG) (Ajinomoto, 2012). In 1909, with the support of a businessman Suzuki II, they started up a business to sell AJI-NO-MOTO Umami seasoning.

Since its creation, Ajinomoto has grown to become one of the world leaders in manufacturing food products and producing amino acids. The Company is now globally expanding in variety of business fields, and operates in 30 countries and regions, and its products are sold in 130 countries.

### ***2.4.2 Overview of Ajinomoto Group***

Ajinomoto Group is a Japanese world leader in manufacturing food products and producing amino acids which is headquartered in Tokyo, Japan. The company is globally expanding in diverse business fields, including Seasoning and processed foods, Frozen foods, Amino-Sciences Business, Coffee products, Umami seasoning for processed food manufacturers and sweeteners,

Chemical products, Animal nutrition, and Healthcare and Life Support. The following figure shows the company’s mission, vision, shared value and principles.

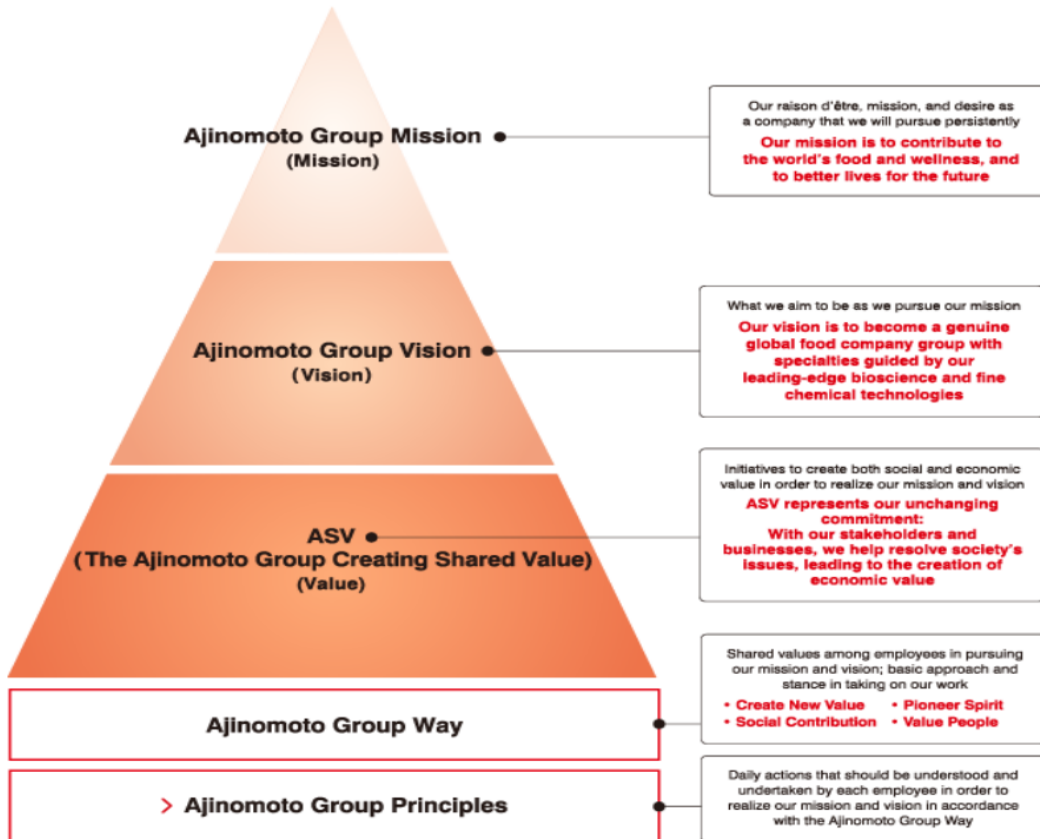


Figure 1: Ajinomoto mission, vision, and shared value

Source: [www.ajinomoto.com/en/aboutus/vision/](http://www.ajinomoto.com/en/aboutus/vision/)

The group has its operations in 30 countries and regions, and its products are sold in 130 countries.



Figure 2: Ajinomoto sales per business fields

Source: Ajinomoto, 2016

### 2.4.3 Allegations and Rumors about MSG

The company faced several challenges regarding rumors and allegations around its main product (MSG). Indeed, less than a decade after the launch of the AJI-NO-MOTO Umami seasoning in Japan, Ajinomoto Co. has faced its first rumor. One way or another, somewhere, a person has spread a terrible rumor about this product, saying that it was made from snakes. Where did this idea come from? Nobody knows it. However, like all rumors, this idea has spread from word of mouth in Japan. Of course, the AJI-NO-MOTO product was not and never been made from snakes. Actually, at that time, it was made from wheat (Ajinomoto.com, 2018).

In 1968 another allegation spread about AJINOMOTO's MSG was about Chinese Restaurant Syndrome (CRS). The origin of this allegation began from a letter published in the New England Journal of Medicine (Kwok, 1968) in which the author described that he suffered some symptoms like numbness, weakness, and palpitations. Many people blamed MSG despite the existence of other potential and probable causes. Since then, many publications reported the potential health risks of MSG like migraine, obesity, and brain damage (Wang and Adhikari, 2018).

Despite, mainstream sources like the USFDA which declare since 1958 the safety of MSG and the Joint FAO/WHO Expert Committee on Food Additives (JECFA) that has published a series of

articles on the safety of the MSG in 1987; there are tons of controversies surrounding MSG among natural health community. These controversies have made MSG one of the most studied food additives in history around the world (Wang and Adhikari, 2018). Regardless of these controversies, MSG remains one of the most foods added in the world, and AJINOMOTO Co. continued to grow, diversify and expand around the world, always responding with scientific evidence to the safety of its products (Report Ajinomoto, 2012).

#### ***2.4.4 History of Ajinomoto Afrique de l'Ouest SA. (AAO)***

In 1991, Ajinomoto group established West African Seasoning Company Limited (WASCO) a subsidiary of AJINOMOTO Co., Inc in Nigeria, specialized in packaging and sale of *AJI-NO-MOTO* Umami seasoning in the domestic market and some African Countries. In 1995, WASCO opened a representative sales office in Cote d'Ivoire (ajinomoto.com.ng, 2019). The company was successful in Cote d'Ivoire, and the sales went up to 300 tons as monthly average sales by the years 2009 and therefore decided to open a subsidiary in Cote d'Ivoire (AAO Sales report, 2017). In January 2012, Ajinomoto Co. established AJINOMOTO Afrique de l'Ouest SA (AAO), in Côte d'Ivoire and began selling *AJI-NO-MOTO* Umami seasoning in the domestic market. The company was considering 11 countries in West Africa as a single area that includes the countries surrounding Côte d'Ivoire, among which trade is increasing, and will work to expand its operations in the area (Ajinomoto Press release, 2013).

According to a marketing staff member of AAO, the commercial rumors about AJINOMOTO Umami Seasonings started from the mid 2000s when the company showed its intention to establish a factory in Côte d'Ivoire. From then onwards, several rumors have been spread in Cote d'Ivoire and the surrounding countries as well. These rumors significantly damaged the image of *AJI-NO-MOTO* Umami seasoning and negatively impacted the company's sales performance as shown the finding of this study. After staying a long time doing nothing about the rumors, in 2016, AAO finally started denying these rumors.

Therefore, the researcher has chosen AAO as a case study because it is an actual case of effects market rumors and also the company access was facilitated thank to JICA office in Cote d'Ivoire.

## 2.5 Research Model

As the objective of this paper is to test the effects of rumors denial messages on consumer's behavioral intention, the study used the counter rumors messages on social media identified by GOH, CHUA, SHI, WEI, WANG, and LIM (2017). These counter-rumors messages types include:

- **Outright Refutation message.** refers to the message that provides evidence to refute the rumor
- **Guide message:** refers to the message that goes beyond providing evidence of the false rumor and included a call to action for stopping its dissemination
- **Sarcastic message:** refers to the message that ridicules those that support the rumor and poured scorn on those that believed it
- **Interrogatory message:** refers to the message that asks critical questions about the rumor in order to show the limits of the argument that support the rumor

Based on the above denial messages types, the following figure shows the proposed theoretical framework, illustrating the effect of rumors denial messages on the behavioral intention of consumers who have been pre-exposed to rumors about Ajinomoto.

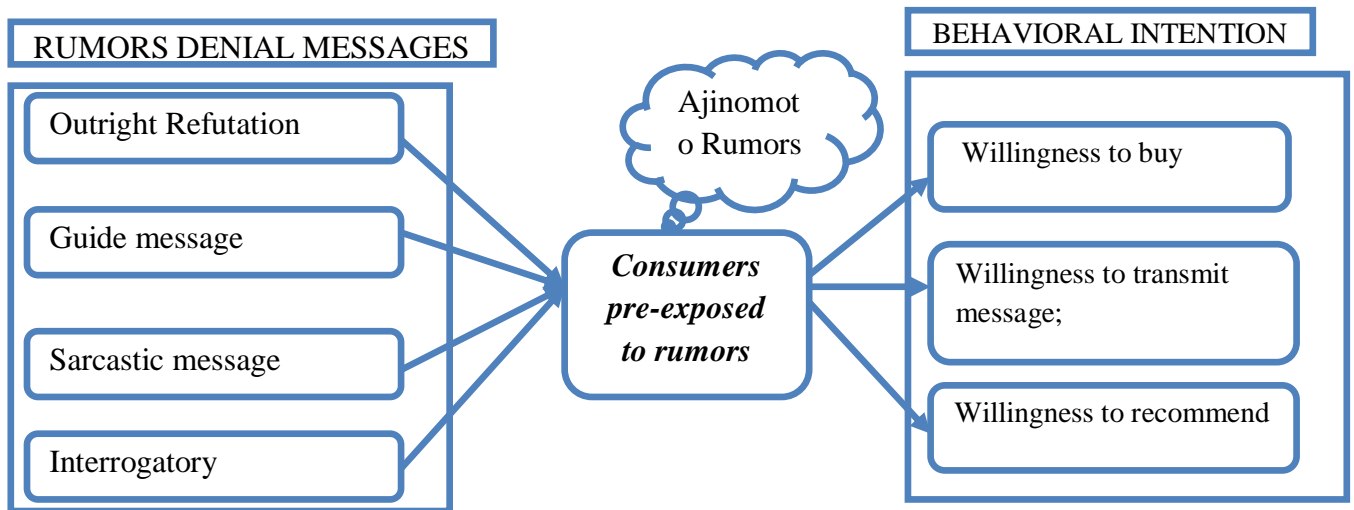


Figure 3: Theoretical Framework

## III- Research Methods

As this research intends to review the effect of rumors denial message on consumers' behavioral intention, the researcher adopted an experimental approach, because it is claimed to be one of the most effective ways to measure effect's test (Bryman and Bell, 2011; Christensen, 2004). The research approach also included conducting interviews with the participants to get in details their awareness of rumors about the product, the personal experiences, their beliefs, and reasons for such beliefs. Moreover, the researcher conducted interviews with company staff to understand the company strategy towards the rumors.

### **3.1 Experimental approach: concepts**

Bryman and Bell (2011) explains that experimental research is frequently used because it engenders considerable confidence in the robustness and trustworthiness of causal findings. Gay (1992) stated that the experimental method represents the most logical approach and the only research approach that can truly assess cause-and-effect relationships. According to Christensen (2004), while other approaches exist, the experimental research approach is the primary one when it comes to investigating causality because of its characteristics. Thus, using this approach supposes that the researcher has a good understanding of the meaning of causality and how to identify causal relationships. Cash, et.al (2016) when quoting Nesselroade and Cattell (2013), defined experimental research as: "a recording of observations, quantitative or qualitative, made by defined and recorded operations and in defined conditions, followed by examination of the data, by appropriate statistical and mathematical rules, for the existence of significant relations" (Cash, et.al 2016)

From the literature review there are four different main types of experimental designs as shown in the table below:

**Table 1: Experimental designs types**

<b>Types</b>	<b>Setting</b>	<b>Group assignment</b>	<b>Dependent Variable measurement</b>
<b>1.Laboratory experiment</b>	Laboratory	a)Random, or b) Systematic	Quantitative
<b>2. Field experiment</b>	Field	a) Random or b) Systematic	Quantitative
<b>3. Classic design</b>	Field	a) Random or b) Systematic	Quantitative
<b>4. Quasi-experimental</b>	Field	Naturally occurring	Quantitative or Qualitative

Source: adapted from Ryals and Wilson, (2005)

### ***Laboratory experiments versus field experiments***

Depending on the experiments setting used, there are two different types of experimental design including the laboratory experiment, and the field experiment. The laboratory experiment takes place in a laboratory or a contrived setting, whereas field experiments occur in real-life settings, such as in workplaces or retail spaces (Bryman and Bell, 2011; Christensen, 2004). Valli et al. (2017) explain that the laboratory experiment is set in an unreal environment in which the researcher is allowed to control the other potential factors that may affect the results; also the participants may not represent the target population as a whole; therefore, the findings might not be generalized. Whereas, field experiment has to be in an everyday life situation, often the exact same setting where the findings from the experiment will be deployed (Gerber and Greene, 2012).

According to Ryals and Wilson (2005), the laboratory experiment presents a high internal validity for identifying cause effects relationship; however, it can suffer severely from weaknesses in ecological validity. “This criterion is concerned with the question of whether or not social scientific findings are applicable to people’s everyday natural social settings” (Bryman and Bell, 2011). Moreover, field experiments come to address this weakness of ecological validity of laboratory experiments by allowing real insight to be gained into customer reactions and commercial implications that continues beyond the experiment.

Therefore, the latter is the most suitable experiment design for the business researcher, since it happens in the real business place where the finding can be used. Bryman and Bell (2011)



highlighted the fact that field experiments are the most likely types that touch on areas of interest to business and management researchers. It occurs in real-life settings, such as in workplaces or retail spaces.

For that reason, the field experiment was the experimental design used in this study, since it is about business and marketing.

### ***Classic experiments versus Quasi-Experiments***

Depending on the way of experimentation, there are two different experimental design including classical experiment design, and quasi-experiment design. The difference between these two is that the latter does not have to meet all criteria or requirements of the former (Campbell and Stanley, 1963). Indeed, classical experiment is basically a quantitative approach; therefore, it has to test hypothesis or assumptions previously defined (Niedrich and Swain, 2003; Soman and Cheema, 2011), and must obey to some statistical rules such as random selection of participants and assignment of control and subject groups (Campbell and Stanley, 1963).

However, there are many instances where the researcher cannot use the classical or true experiment design or meet the criteria for its utilization (Lennon-Dearing and Neely-Barnes, 2013). In that case, the use of quasi-experiment design becomes more suitable. According to Lennon-Dearing and Neely-Barnes (2013), there are countless varieties of quasi-experiment design depending on the situation. For instance, there are some situations where the researcher cannot meet criteria for randomization technique; e.g. when randomization fails to produce groups that are precisely equivalent in terms of characteristics that may be important to the outcome of the study (Lennon-Dearing and Neely-Barnes, 2013).

### ***Quasi-Experiments qualitative approach***

There are many circumstances, where the researcher wishes to get insight into the impact of a specific management approach without making a prior assumption of what that impact might be (Ryals and Wilson, 2005). Ryals and Wilson, introduce the quasi-experimental qualitative approach which applies the logic of the experiment to this situation. In their study, which aims to assess changes in customer strategy that might be occurring during a specific project, they used a

quasi-experimental qualitative approach. The participant and control groups were assigned as in the classical experiment approach. However, the post-test measurement was carried out qualitatively, typically through interviews or focus group discussion, and not quantitatively. Reinhard (2010) explains that experiment is not always linked to quantitative method; instead, it is a way to organize the collection of data. Therefore, the experiment provides the framework, in which collecting data can be done through quantitative methods, such as surveys and physiological recordings, or qualitative methods, such as interviews and participant observations.

This research has used the quasi-experiment qualitative approach, since the participants were selected systematically, and the group members were allocated according to their living home. However, the experimental treatment or intervention to be given to each group was selected randomly. Besides, the researcher carried out the post-test measurement through interviews.

### **3.2 Interviews: concepts**

Mathers et. al. (1998) define interview as an important data collection technique relating verbal communication between the researcher and the subject. According to Bryman and Bell (2011), the aim of business research interview, is to elicit from the interviewee or respondent, all manner of information such as interviewees' own behavior or that of others, attitudes, norms, beliefs, and values. Interviews are used in quantitative research (survey designs) as well as in qualitative research (exploratory and descriptive studies). There is a variety of approaches to the interview, ranging from totally unstructured in which interviewees are allowed to speak freely about whatever they want, to a highly structured form in which interviewees are limited to answering direct questions (Mathers et. al.,1998). There are three main types of interviews depending on the degree of structure imposed on the interview: structured or standardized interview, semi-structured and unstructured or qualitative interview.

The interview type used in this study is the *semi-structured interviews*: this is a term that covers a wide range of instances. It typically refers to a context in which the interviewer has a series of questions that are in the general form of an interview schedule but can vary the sequence of questions. They are similar to structured interviews in the sense that the interviewer prepares the topics or questions in advance, but instead of using closed questions, the interviewer uses open-ended questions in semi-

structured interviews. The questions are frequently somewhat more general in their frame of reference than that typically found in a structured interview schedule. Also, the interviewer usually has some latitude to ask further questions in response to what he notices as significant replies (Bryman and Bell, 2011). Semi-structured interviews are useful for collecting information on attitudes or when it is impossible to establish a list of possible pre-codes because the domain in question is poorly understood

### 3.3 Research environment itself

#### 3.3.1 Designing of the Experiment

The design of the experiment involves the practical steps that the researcher has followed. Those steps include the selection of participants, dividing and the assigning participants in groups, the experimental intervention or treatments, and the data collection.

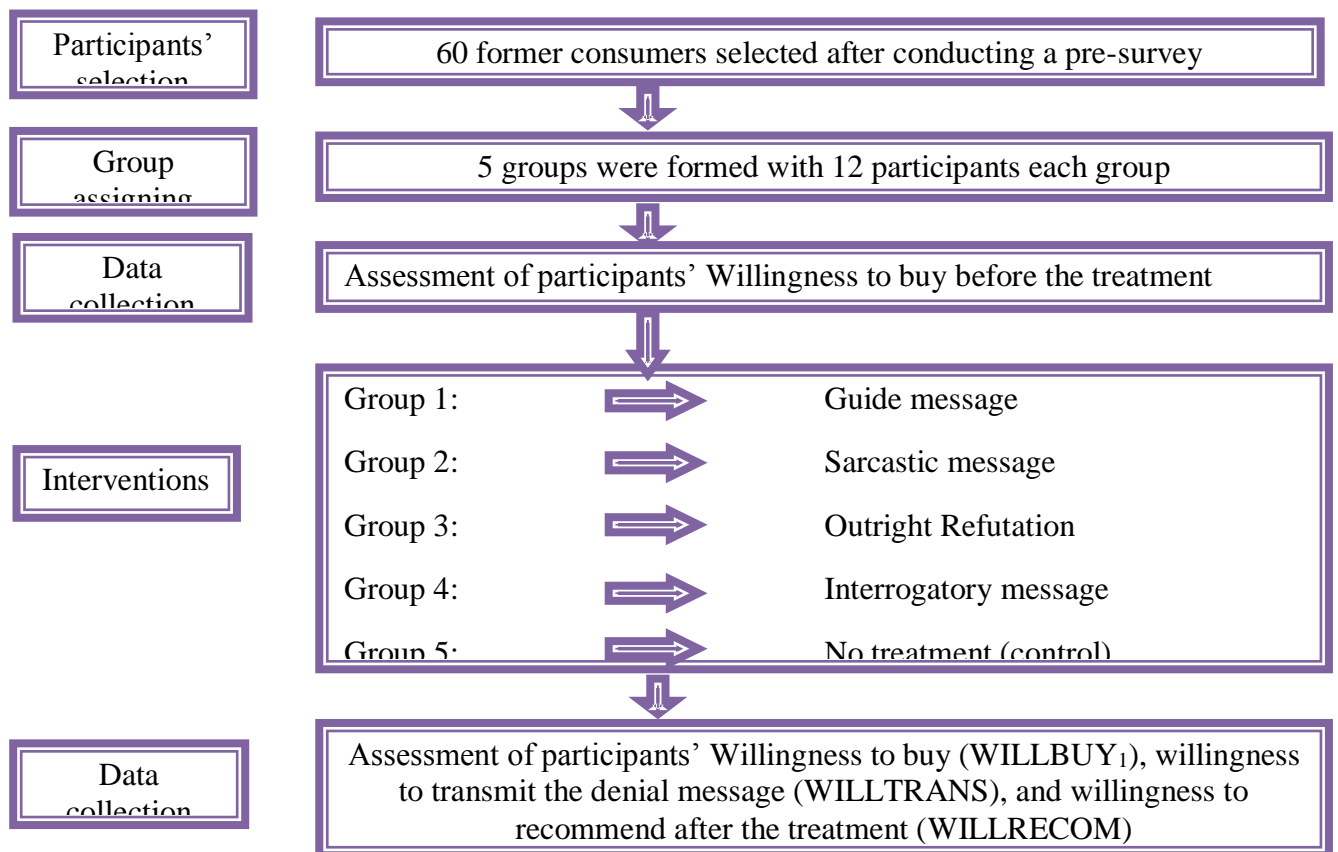


Figure 4: Experimental research design

#### Experimental participants

Since the purpose of this study is to assess the effect of rumor rebuttal messages on consumers, this study targeted those who had previously been exposed to rumors about AJINOMOTO Umami seasoning and stopped consuming the product because of these rumors. Therefore, it was essential to carry out a preliminary survey to identify potential targets for the experiment. This survey was conducted in the commune of Yopougon, the largest municipality of Côte d'Ivoire and which groups all the Ivorian populations in their ethnic diversity. Given the limited time available it was necessary to get help by hiring an experienced surveyor who did the survey two weeks prior the research trip in Cote d'Ivoire, with the questionnaire sent to him by email.

The survey involved a total of 82 people, including 20 men and 62 women. The collected data included the identity, phone numbers, living location, the knowledge of the products, the awareness of the rumors on the product, the willingness to buy or recommend the product, and finally the readiness to participate in an information session about the Ajinomoto seasoning. The responses got from the survey were used to identify and select participants for the experiment according to the specific criteria. These criteria include having consumed the product, having heard rumors about the products, having stopped consuming the product because of these rumors, and being available to participate to an information session about the product. In order, to avoid any bias in the participants' responses or attitudes they were hidden the fact that they were participating in an experiment. The survey led to the selection of 60 respondents who met the criteria for participating in the experiment.

### ***3.3.2 Group assignment***

With the selected participants, five groups were formed including four groups to be given the treatments and one control group. The control group is used to compare with the experimental group to check the effectiveness of the intervention. In other words, a change in the experimental group does not imply whether the intervention or treatment caused the outcome or a simultaneous other factors did. Therefore, only if the outcome of the experimental group significantly differs from that of the control group, it can conclude that the intervention caused the effect (or more exactly, that the effect produced was not accidental) (Dehue, 2005).

This study used control group to be sure that the post-treatment outcome is really caused by the intervention and not any other factors. The members of each group were assigned based on the

proximity of their home or working place. In this experiment, group means participants who have received the same intervention since for logistical reasons gathering the participants in the same place was not possible.

### ***3.3.3 The experimental interventions or treatments***

The experimental interventions or treatments are the different procedures or independent variables that the researcher wants to compare (Oehlert, 2010). In this study the independent variables are the different types of denial messages to be communicated to the participants. The message types to be communicated to each participant group were selected by random draw and the result gave the following distribution:

**Table 2: Experimental interventions**

<b>Groups</b>	<b>Treatments/interventions</b>	<b>Location in Yopougon town</b>
<b>Group 1:</b>	Guide message	Bel-air
<b>Group 2:</b>	Sarcastic message	Nouveaux bureau
<b>Group 3:</b>	Outright Refutation	Koweit
<b>Group 4:</b>	Interrogatory message	Wassakara
<b>Group 5:</b>	No treatment (control)	mix Location

The experimental interventions phase took place from March 12<sup>th</sup> to 15<sup>th</sup>, 2019, and consisted of individual visits to participants at home or in their workplace. The used language is French, since it is the national and official language in Cote d’Ivoire. Before communicating the message, the participant was asked to express their attitude toward Ajinomoto seasoning, either they will buy the product or recommend it to others, and list the known hearsays about the product, whether or not they believe in these hearsays and why.

### ***Characteristics of the denial messages contents***

Each type of message contains a brief presentation of the product and information about the origin of the product as the following:

*“In fact, a Japanese researcher named Dr. Ikeda discovered the product. This researcher investigated on what is called the 5th taste after the sweet; salty, bitter; sourness. For example if you eat meat without salt, you will realize a taste that is different from these four tastes mentioned above, this taste is called Umami. Dr. Ikeda has found a way to make this taste from the amino acids called monosodium glutamate (MSG). This compound is naturally present in many foods such as meat, mushrooms, etc. Glutamate is the amino acid found most in breast milk”.*

### ***Guide message***

The Guide message basically, provides some evidence about the safety of the product by highlighting some studies, certifications and agreement about MSG from mainstream organizations and public foods regulators. These organizations include

- the Japanese Ministry of Health, Labor, and Welfare that attested the healthfulness of MSG;
- the US Foods and Drugs Administration that declared the safety of MSG,
- a Joint Committee of Experts on Food Additives (JECFA), formed by the World Health Organization and the Food and Agriculture Organization of the United Nations that published series of articles on the safety of MSG,
- And local government that certified and authorized the sale of Ajinomoto seasoning in Cote d’Ivoire.

The message also shows the fact that, unlike other Seasonings which are only been consumed in Africa, Ajinomoto seasoning is consumed in more than 130 countries around the world.

Finally, the Guide message main characteristic is that it invites the participants to not participate in the spread of the false rumors about the Ajinomoto seasoning; instead they should denounce those who are spreading such rumors and act as the product ambassadors or defenders.

### ***Sarcastic message***

The sarcastic message explains to the participants how people used to spread false information in Cote d'Ivoire. It also shows that those who are spreading the rumors about Ajinomoto seasoning are ridiculous; and what is said about the product is rubbish and does not make any sense.

### ***Outright refutation message***

The outright refutation message uses the same message as in guide message, but unlike the latter, it does not invite participants to get involved in the fight against the false rumors about Ajinomoto Seasoning.

### **Interrogatory message**

The interrogatory message consisted of asking of series of non-response questions to arouse the critical thinking spirit of the participants. Some of these questions are:

- Do you believe in these hearsays around the product? How much do you believe?
- Have you checked if these hearsays are true or not?
- Do you have any evidence of the harmfulness of Ajinomoto seasoning?
- Have you experienced yourself or a member of your family, or an acquaintance, the negative effects related to the consumption of Ajinomoto seasoning?
- Do you think that a harmful product can get certification and approval from mainstream institutions such as WHO, and governments of the most developed countries in the world (Japanese, American, Australian, European, etc.)?

#### ***3.4.4 Data collection***

Foremost, data come from the preliminary survey and interviews prior the intervention. Then, data come from the post-intervention interviews. It was personal telephone interviews with each of the participants. The type of interview used was semi-structural interviews, as described above, and focused on the following questions

- What do you think about the information we gave you last week?
- Have you transmitted or intended to transmit the information you received? Why?
- Did you buy or willing to buy Ajinomoto seasoning from now? Why?
- Did you recommend or intend to recommend Ajinomoto seasoning from now? Why?

- Do you have any other comments?

The phone interviews took place on March 18<sup>th</sup> – 21<sup>st</sup>, 2019. The time spent on each interview was between 5 and 8 minutes. Finally, there researcher conducted some unstructured interviews with some marketing staff members of the Company. The language used for all interviews and transcripts was French, but the transcripts have been translated into English for the purposes of this thesis.

### 3.5 Data analysis method

Data collected from the pre-survey, semi-structured interviews with the experiment participants, and unstructured interviews with the company staff have been analyzed using descriptive statistic and narrative analysis approach. Bryman, A. and Bell, E. (2011), described narrative analysis as particularly useful in situations when the researcher is attempting to understand the complex processes whereby people make sense of their organizational reality.

## IV. Research finding

### 4.1 Rumors about Ajinomoto Umami Seasoning

#### 4.1.1 Different types of rumors

Interviews with the company’s marketing staff and consumer surveys revealed that the Ajinomoto seasoning is targeted not only by a single rumor, but rather by a multitude of rumors that are different from the usually known allegations upon the MSG. These rumors can be summarized as follows:

**Table 3: Rumors on Ajinomoto Seasoning in Cote d’Ivoire**

Rumors	Percentage
The product is used to wash dead bodies and cut the umbilical cord of babies	7%



The product is a poison for hair lice	10%
The product is a detergent used to whiten pots and clothes	63%
It is a toxic product that perforates the intestines	12%
The product is the cause of diseases such as nausea, diabetes, hypertension and kidney disease, diarrhea, cancer, men sexual impotence, etc.	62%

The table above shows that the most persistent rumors among consumers in Cote d'Ivoire is that *the product is a detergent used to whiten pots and clothes*. Indeed, 63% of the participants of the experiment said they had heard this rumor. Common expressions by the participant were that the product: “is not consumable”, “it is used to whiten pot”, “it used to soak towels”, “it used to whiten jewels”.

*“I have heard that we use it in whitening pots and clothes, so I tell myself something that can whiten the pots and clothes; I can imagine what will be its effect in my body. So I stopped using it in my sauces”* (Odette, from Yopougon Belair, 2019/03/12).

The second most common rumor expressed by 62% of participants is that *the product is the cause of several diseases*, as expressed in the following statement:

*“According to people, all the common diseases that arise nowadays such as hypertension, diabetes, kidney failure and even male impotence come from the consumption of this product. For that reason, I do not use it anymore, and I even stopped eating in restaurants because I also heard that women use it in their restaurant to improve the taste of their meals”* (Valdo, from Wassakara, 2019/03/15).

Alongside these two main rumors, come three other minors such as: *the product is a toxic product that perforates the intestines* (12%), *the product is a poison for hair lice* (10%), *the product is used to wash dead bodies and cut the umbilical cord of babies* (7%)

In general, whatever the form of these rumors, they express the consumers' concerns about the potential dangers of the product on their health.

#### **4.1.2 Reasons for Consumers' beliefs in the rumors**

By asking whether they believe or not the hearsays about Ajinomoto, over 57% said they believe it. The remaining 43% said they did not have an opinion on the veracity or falseness of the

information they received. However, they stopped using the product by precaution.

*“Otherwise, I used to consume the product before without problem, but when the information began to circulate on the danger of the product, I did not know what to believe. But as we never know, for the sake of precaution I stopped consuming it because, prevention is better than cure”* (Akissi, from Bel-air, 2019/03/12).

Those who believe in the rumors gave several reasons for their beliefs. The common expressions to explain the reasons for their beliefs are:

***“There is no smoke without fire”:***

Just as smoke indicates the presence of fire, so there is no effect without a cause whatever is done to hide it. According to them, the rumor cannot emerge alone without any wrongdoing. So, if the rumors have emerged and persisted, it is because there is something wrong with the product. Another way of saying that is "We do not fear the wolf if he is not in the countryside" or “a public noise is not entirely unfounded”. This reason shows that the company failed actually to communicate about the product and that opened the door for rumors.

***The company did not deny the rumors***

For some participants, the fact that the company never denied publicly the rumors, means they are somehow real.

*“It has been long times since these information are circulating, so if they were false the company would have denied them since then”* (Koffi, from Nouveau- bureau, 2019/03/13).

***The company does not use the normal distribution channel as its competitors.***

Some participant expresses the fact that the company is not using the normal distribution channel as the competitors do in Cote d’Ivoire, means that it is hiding something from consumers.

*“In Cote d’Ivoire, normal goods follow the distribution channel that goes from wholesalers to retailers before reaching consumers. We can find every consumable product in all the neighborhoods shops, then why Ajinomoto seasoning is not available in such shops? Why is it sold directly to the consumer by the salespersons through the traditional markets?”* (BADJE, from Yopougon-Koweit, 2019/03/14)

These were the concerns raised during the interviews by a 41-year-old male, participant in the “Yopougon-Koweit”. According to him and those who think the same way, the fact that Ajinomoto does not follow the normal distribution channel of consumers’ daily goods in Cote d’Ivoire, tarnish the credibility of Ajinomoto seasoning. Indeed, Ajinomoto's distribution strategy in Cote d’Ivoire consists of having several teams (about seven teams) distributed throughout the country and selling the product directly on the traditional local markets. This strategic choice has contributed to the birth and spread of rumors that tarnished the image of its flagship product. Moreover, according to the information gathered through the interviews, it is from these traditional local markets that the competitors insidiously introduced the rumors about Ajinomoto seasoning. However, this issue will not be developed in this document, due to the lack of sufficient data to support the argument.

***“I have never seen the Company advertising”***

According to some interviewees, one reason for believing in the rumors is that the company does not advertise on TV as their competitors do. For them, because the company does not advertise on TV means something is wrong with the company. Indeed, the seasoning market in Cote d’Ivoire is so competitive, that to win market share, companies like NESTLE (with its brand Maggi), SIPROCHIM (with Aromate), EUROLAIT (with Maxigout), GB FOODS (with Jumbo), and PATISEN (with Adja) bombard consumers with advertising every day. The key period for the TV commercials is between 19h and 21h where the audience is high due to their favorite TV shows and Tele-novellas movies. Ajinomoto Afrique de l’Ouest, meanwhile, shines by its absence in terms of television advertising. This situation actually, has reinforced the belief in rumors by several consumers.

*“I see on TV advertising of Maggi, Jumbo, Maxigout, and others seasoning, but I have never seen an advertisement of Ajinomoto seasoning, so I tell myself that there is something wrong that's why they do not advertise”* (Djolou, from Nouveau-bureau, 2019/03/13).

The seasoning industry just as some daily used products is advertising based industry; otherwise, it remains challenging to gain a market share; and the other competitors understood this well, unlike Ajinomoto.

## **4.2 The company strategies for combating rumors**

### *The company's initial strategy: "no response strategy"*

According to the interview with the marketing staff members of the company, the strategy adopted against the outbreak of rumors in Cote d'Ivoire was 'no response strategy', as described by Kotler (1992), which consists of doing nothing to combat the rumors. This strategy avoids the repeating of the rumors. By doing so, the Company expected the rumors to stop over time and do small actual harm. As a result of this strategy, the company refrained from any action to deny the rumors, in the way that, in 2014, when a daily newspaper called "Le Démocrate" titled in its issue No. 867 of the 2014/20/1, "Ajinomoto a silent killer", the company did not deign to bring any denial while there was matter to do so. Indeed, in the article, the author has clearly denigrated the company without, providing any evidence of his allegations; worse, in the same article, he was promoting the competitor NESTLE as being the leader of seasoning in Africa and accusing Ajinomoto of making fierce competition to NESTLE. An excerpt from the article is below:

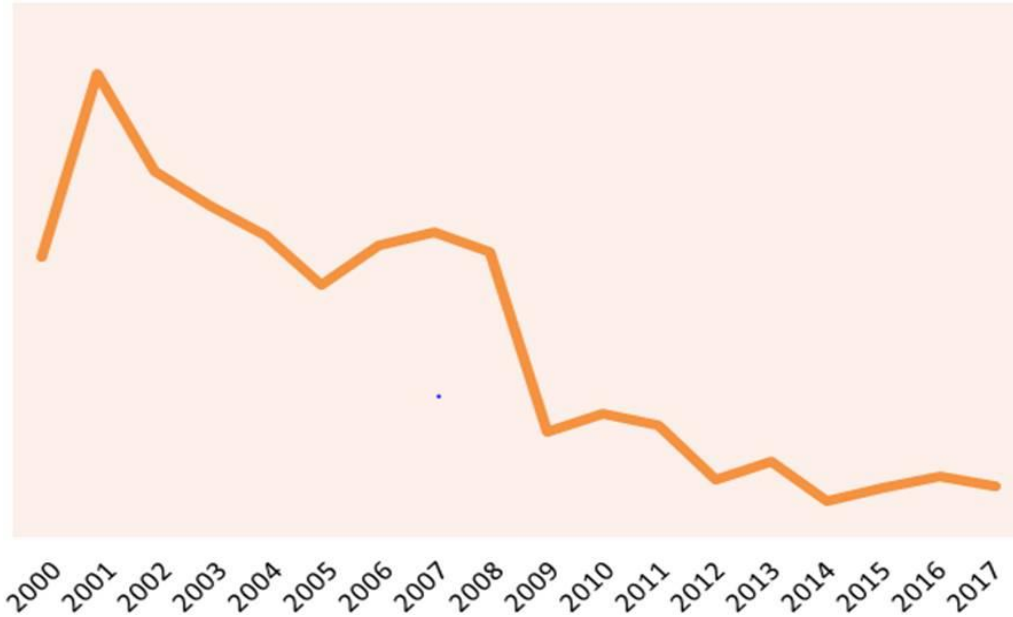
“Ajinomoto's product known as 'white maggi' is actually an Asian origin, and was intended to lead a fierce competition to Nestlé, No. 1 seasoning in Côte d'Ivoire, even in the sub-region. Because of the low-income level of households due to the 2000s military crisis, the company saw fit to make a forcing to implant its factory in Cote d'Ivoire (...). Yet, without knowing, this Asian seasoning is a real silent killer according to carefully conducted investigations. However, in our next publication, we will give you the harmful properties of the 'white maggi' on the human body, the diseases it causes, and for what purpose it is precisely used” (Le Démocrate, 2014).

The denunciation of this article and the prosecution of the author and his sponsor would have been an opportunity to restore the image of the company, and even better, to gain in public relations. These days, in contrary to the expectations of the company, these rumors have taken time to be embedded in the minds of consumers in Cote d'Ivoire, so that it has become more complex to remove them.

### *Impacts of Rumors on AAO Sales*

The impact of this strategic choice has been catastrophic on the company's performance, especially on its sales, as shown in the following chart.

**Table 4: Ajinomoto Afrique de l'Ouest sales from 2000-2017**



**Source:** AAO Sale report, 2017

For reasons of confidentiality, it was necessary to hide the figures and show the sales trend from 2000 to 2017, since by the time of the research, the company has not compiled 2018 sales due to the Japanese fiscal year. The analysis of the graph shows that in 2009, the year the company announced its intention to establish a factory in Cote d'Ivoire, which triggered the spread of the rumors, the sales drastically fell from triple to simple (3:1). This fall continued to reach its lowest level in 2014, the year when the daily newspaper "Le démocrate" published its article to denigrate the company.

***The Company new strategy: "denial strategy"***

Since the year 2017, the company has engaged in a denial strategy of the rumors through its Marketing and Public Relation department. The main activity used to deny these rumors is known as "Factory Tour". It is organized twice a month and takes place on Fridays. It consists of inviting the public mainly women to the company's factory so that they visit the packaging process of Ajinomoto seasoning. It comprises four phases:

***The discussion phase:*** a member of the marketing staff and public relations presents the company as a whole to the visitors, and then the participants are asked to list the so-called "hearsays" about the Ajinomoto seasoning. Once these "hearsays" are listed, the manager presents the product from its origin to the production process, before proceeding to the denial of the rumors around the product.

***The visit phase:*** it consists of showing the factory to the participants by a guide who explains to them the packaging process and the hygienic and safety measures that are practiced to ensure the quality of the product.

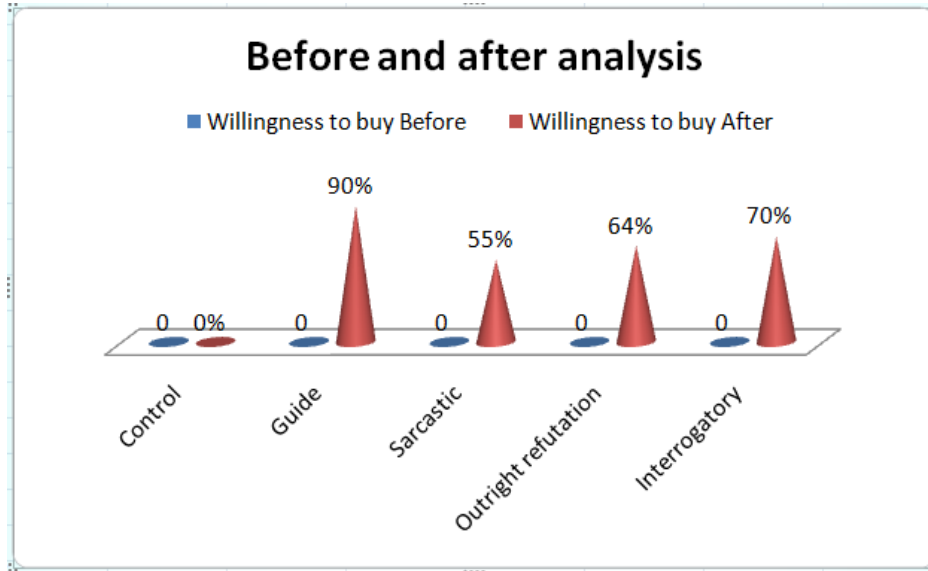
***The question and answers (QandA) phase:*** in this phase, participants are allowed to ask any questions or raise any concerns about the product, the company, or the factory.

***The tasting phase:*** During this phase, each participant receives a meal with two sauces, one with Ajinomoto seasoning and the other without seasoning. Then, after the meal, participants are asked to give their opinion on the product and their willingness to buy.

In addition to this key activity, the company began to correct its lack of communication and promotion to consumers. In November 2018, the company invited the national television to make an infomercial during a 'Factory tour' activity. This infomercial was shown four times on national television. The company began doing radio advertising on some local radios. These radio ads are broadcasted in the main dialects and throughout the main regions of the country.

#### ***4.3 Effects of denial messages on consumer's Willingness to buy Ajinomoto rumored seasoning***

The following graph presents the results of the experiment:



**Figure 5 : Before and after analysis of Consumer willingness to buy**

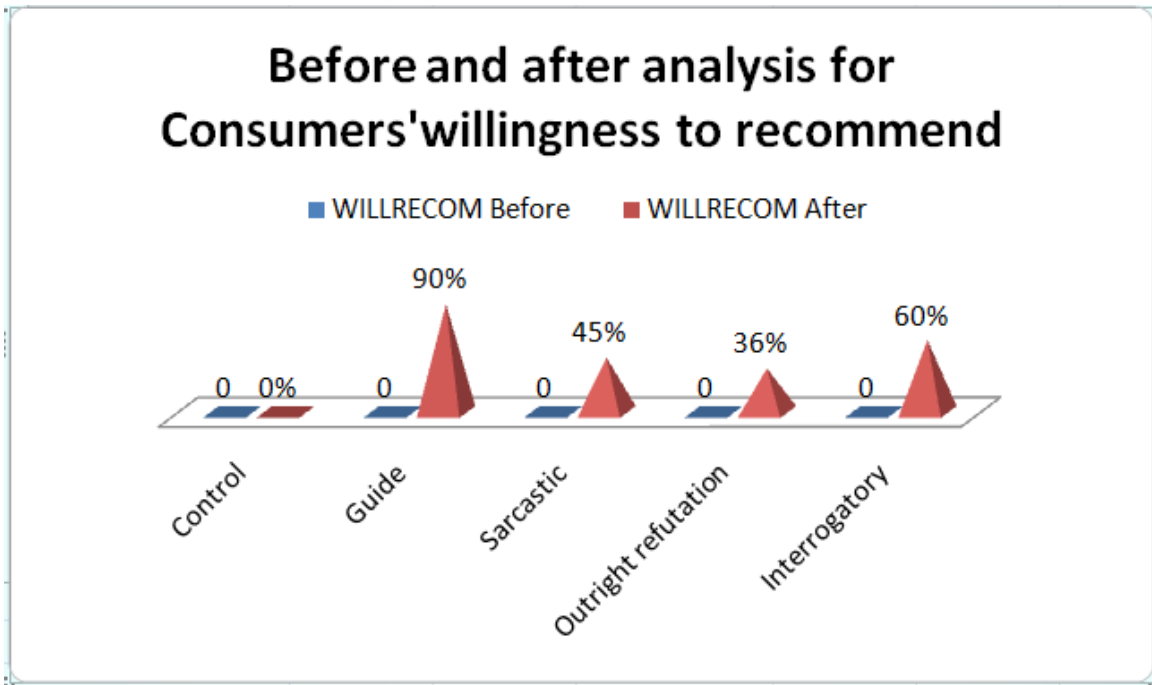
Before receiving the denial message, none (0%) of the participants had expressed their willingness to buy the product. The explanation behind is the fact that the study focused only on the participants who had stopped the consumption of the product because of the rumors.

Concerning the control group, this percentage did not evolve in the post-treatment assessment, because they did not receive any denial message, and no other factors have influenced their initial choice. The post-treatment evaluation shows that, in general, all messages types have a positive effect on consumers' willingness to buy the product. For instance, 90% of participants who received the guide message expressed their willingness to buy the product, 70% of those who received the interrogatory message expressed their willingness to buy it, as well as 64% of those who received the outright refutation message, and 55% of those who received the sarcastic message.

Most of the participants who change their buying intention toward the product justified their change by the fact that they had nothing against the product; it is the lack of information contradicting the rumors that led them to stop using it. Therefore, the denial message comes to relieve their fears and make them more confident about the consumption of the product.

#### ***4.4 Effects of denial messages on consumer's willingness to recommend a product***

The graph below presents the results of the experiment:



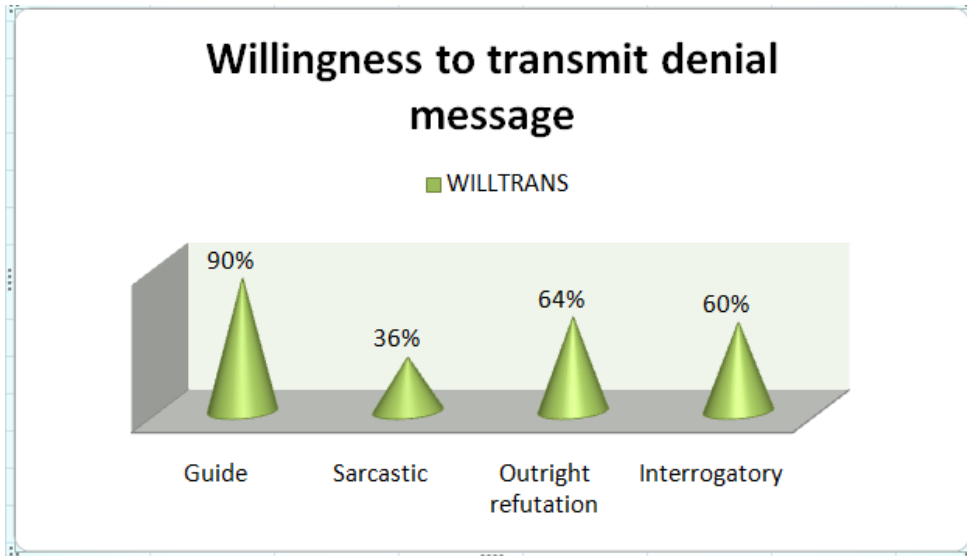
**Figure 6: Before and after analysis of Consumer willingness to recommend**

As for the willingness to buy, the willingness to recommend the product was 0% for all the groups before receiving the treatment. The control group remained 0% at the post-treatment evaluation. And the post-treatment evaluation shows that, in general, all messages types have a positive effect on consumers' willingness to recommend the product. The results shows that 90% of those who received the guide message expressed their willingness to recommend the product, 60% for those who received interrogatory message, as well as 36% for those who received the outright refutation message, and 45% for those who received the sarcastic message.

#### ***4.5 The most likely denial messages to be transmitted by consumers***

The willingness to transmit the denial message was assessed only on the post-treatment evaluation phase and the graph below shows the results:





**Figure 7: Analysis of Consumer willingness to transmit denial message**

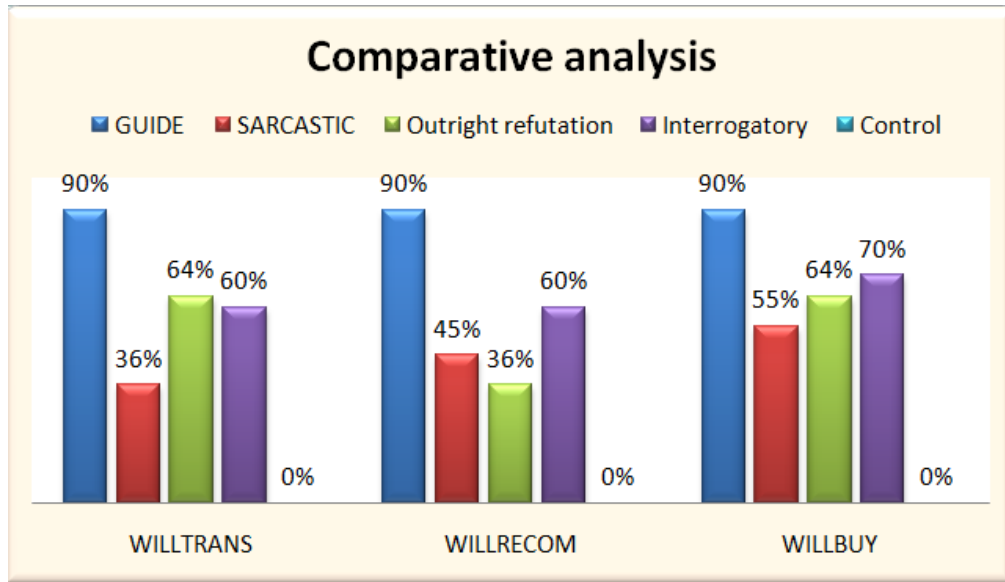
The results show that the Guide message seems to be the most likely denial message to be transmitted, expressed by 90% of those who received the message, then comes the outright refutation message expressed by 64% of those who received it, and the interrogatory message expressed by 60 % of those who received it. The less likely message to be transmitted is the sarcastic message expressed by 36% of those who received it.

**4.6 The most effective denial message for combating commercial rumors**

The comparative analysis of the different denial messages types showed the following results:

**Table 5: Comparative analysis of denial messages**

	WILLTRANS (%)	WILLRECOM (%)	WILLBUY (%)
<b>GUIDE</b>	90	90	90
<b>SARCASTIC</b>	36	45	55
<b>Outright refutation</b>	64	36	64
<b>Interrogatory</b>	60	60	70
<b>Control</b>	0	0	0



**Figure 8: Comparative analysis of denial messages**

Regarding these results, the guide message appears to be the most effective message for combating rumors in many ways. Whether it is for the willingness to buy, or the willingness to recommend the product or transmit the denial message, the guide message has a higher score with 90% of the participants. The reason is that in this type of message, the participants feel involved in the fight against the rumors. After proving that the rumors are false, calling them to no longer participate in its propagation, to denounce them and share the real information, they perceive the company as a victim of these rumors. Therefore, they feel supportive and are willing to defend the company. Indeed, during the post-treatment interviews, the most common expression from the participants was, "we will help you fight these rumors".

The interrogatory message comes in the second position in terms of effectiveness; it is expressed by 70% of the participant in terms of willingness to buy, and 60% in terms of willingness to recommend the product and to transmit the denial message. This is because it calls the participants for critical thinking towards the rumors. From this mental exercise, it appears that the participants feel like they have judged quickly based on hearsays they received.

The least effective denial message is the sarcastic message expressed by 55% of the participant in terms of willingness to buy, 45% in terms of willingness to recommend the product, and 36% for the willingness to transmit the denial message. Moreover, most of the participants who received

the sarcastic message said that they were not convinced and that they still have doubts about the harmlessness of the product.

## **V. Discussion**

The purpose of this study is to evaluate the effectiveness of rumors denial as strategy for combating the adverse effects of rumors on Ajinomoto seasoning in Cote d'Ivoire. The study focuses on the effects of denial messages types on consumers' behavioral intention such as their willingness to buy or recommend the product, and their willingness to transmit the denial message.

Foremost, the research aims to review the different types of rumors around the product, and the strategies of "Ajinomoto Afrique de l'Ouest" to manage these rumors. Then, the research intends to analyze the effects of denial messages on Ajinomoto consumer's willingness to buy, to recommend the product, and share the message; to finally assess the most effective message to rebut the rumors around Ajinomoto seasoning in Cote d'Ivoire.

The findings show that there are five main types of rumors about Ajinomoto seasoning in Cote d'Ivoire, and the initially strategy adopted by the company to manage these rumors has been inefficient. The alternative strategy consisting of denying the rumors seems to be the most appropriate as show the results of the experiment. Moreover, the experiment shows that, in general, the denial messages have significant influences on consumers' behavioral intention; and the most effective message is guide message, following by the interrogatory message.

All the research findings are discussed in the following points:

### **5.1 Rumors emerge and spread out of ambiguity and uncertainty**

This study confirmed the fact that most rumors emerge because of the ambiguous and uncertain situation that leads to personal anxiety as shown by Allport and Postman (1947), and Kimmel and Audrain-Pontevia (2010). The study shows that the fact that the company does not communicate and advertise enough about its product has created an ambiguous and uncertain situation in which rumors about Ajinomoto seasoning emerged and spread.

The rumors identified in this research expressed consumers' concerns about the potential dangers of the product on their health. Also, the lack of communication by the company to reassure consumers on the safety of the product has opened access for rumors.

In an industry like foods industry where there is a high proportion of food safety risk perception among consumers (Ling, 2018), the lack of communication by companies to reassure consumers of products is an opening door for potential rumors. Therefore, companies' managers must develop effective promotion and communication means to reduce ambiguity and uncertainty so that they prevent their business from rumors exposure.

### **5.2 Advertisement can reduce rumors belief**

This study shows that the fact that the company does not advertise, especially TV advertisement has strengthened consumers' beliefs in the rumors about its product. This shows that advertising does not only aim to boost companies' sales, but it is also a means to prevent companies' from the negative effects of rumors. This finding confirms the results of Danbury et. al. (2013) which indicate that advertising can help in building and preserving a trusting image of brands. It also confirms the finding of Naufal, et al. (2016), which revealed that brand awareness affects customer perception, especially perceived quality.

As one of the objectives of advertising is to create awareness (Sawant, 2012), advertising turns out to be an effective means to reduce consumers' beliefs in rumors. This is especially true, because in the industries where the proportion of safety risk perception is high, managers should consider the impact of advertng, not only upon companies' sales, but as a way to preserve the brands' image and avoid the negative effect of rumors.

### **5.3 Distribution channel can affect market rumors prevalence**

An interesting finding in this research is how distribution strategy can affect product or brand image and be an opened door for emerging and spreading of rumors. Indeed, if the use of direct distribution strategy seems to be reasonable and understandable for premium and luxurious products, use of such strategy in mass production and common goods appears to be troublesome in consumers' perspective, especially when it goes against market norms.

As the finding showed, the Ivorian markets norms for mass production and daily goods required indirect distribution strategy through wholesalers and retailers. This strategy not only ensures the availability of the product in the retailing shops but also ensures trust and confidence from consumers' perspective.

Therefore, to avoid any mistrust from consumers, managers should consider how trustful and loyal consumers are in the markets norms before defining their distribution strategy. However, the relationship between distribution strategy and consumer trust and loyalty could be subject to further research.

#### **5.4 Rumors management as part of the company daily management system**

From this research, it appears that the company's lack of a pre-defined strategy for preventing and fighting against rumors led to groping when it comes to fighting the rumors pouring into the market. This confirms the recommendations of Kimmel (2004) for control and prevention strategies of the negative effects of rumors; especially, when the author proposed managers to include rumors management as day to day business operations rather than facing them in a crisis situation. Marketing functions should include rumor management as a complete marketing activity, and companies especially those who are exposed to potential high safety risks perception should designate rumor monitoring and control officers, who will identify potentials risks of rumors, and develop a rumor management plan.

#### **5.5 Effective strategy for combating rumors**

Regarding the effectiveness of a strategy for combating rumors negative effects, the findings of this research confirm the findings of DIFONZO, et al. (1994), who referred to “no response strategy” as the weakest one and recommend to evaluate the upsurge of the rumor before consider using such strategy. The findings also match those of Adebowale and Funmilayo (1994), who stated that denial strategy is the most effective and most aggressive to fight rumors. Indeed, the results showed that the “no response strategy” used by the Ajinomoto did not work, since the sales had gone from bad to worse from the time when rumors began and that the company decided to do nothing.

Concerning the "denial strategy", although the study has not been able to assess its effects in terms of the company's results, the experience with consumers has shown that the denial strategy has a considered impact on their behavioral intention. Moreover, delay denying a rumor in the early stage can reinforce consumers' beliefs on it, and make it more difficult to combat. Therefore, managers should first consider denial as a strategy for fighting market rumors and adjust the form of the denial strategy according to the cases.

### **5.6 Message type is essential for the effectiveness of rumor denial**

If the denial strategy appears to be effective in general, the type of denial message is even more essential, and this is what the results of this study have shown. Besides, these results confirm the findings of Bordia (2005) who identified characteristics of the message as a variable which influence the effectiveness of rumors denial, by reducing beliefs and anxieties associated with the rumors.

From this study, the guide message appears to be influencing the most consumers' behavioral intention, then, comes the interrogatory message. The managerial implication is that managers should not be contented to deny rumors about their products simply, but should go further by involving consumers and the public in this fighting against these rumors.

Although this study did not assess the mixture of both the message guide and interrogatory message, it is prospective that it could have more impact on consumers. However, this could be the subject for further research to appreciate better.

## **VI. Research limitations**

This research, like any other study, has its limitations. The most important limitation is that the study focused only on the characteristics of the denial message; however, there are some other factors to be taken into account when it comes to denying a rumor. For example, the source of the message and how trustful is the person who delivers it, may influence the consumers' likelihood to believe or not believe in the message. Therefore, the personal relevance might have influenced the participants' responses, since the researcher introduced himself as graduate student from Japan

who does not have any connection with Ajinomoto's product, and any commercial interest. The participants' belief in the message might be influenced not only by the content of the messages, but also by the personal relevance, since because of the neutrality of the researcher, he appears to be more credible to them. The proper way for the study would have been to take into account the other factors so that it can better appreciate the impact of each one of them. Another limitation, and not least, is that the study took place only in 4 quarters of Yopougon district in Abidjan, with a limited number of participants due to time constraint; therefore it cannot have the pretention to be representative in terms of industries and place.

## **VII. Conclusion**

The negative effects of market rumors on products, brands, or companies that are targeted by rumors have been proved not only in this research but by the existing literature as well.

Various reasons may be the causes of the emerging and spreading of market rumors. This study showed that the uncertainty and ambiguity around Ajinomoto seasoning due to the lack of communication from the company and the lack of knowledge on the part of consumers, have favored the emerging and spreading of rumors about the product.

Moreover, if in this study the denial has been proven to be an effective strategy against rumors in general, the type of message to convey in denial is also essential for its effectiveness. Indeed, in this study, the guide message that consists in presenting the evidence on the false rumors and then inviting the consumers to take action against the transmission of these rumors appears to be the most effective type; while the sarcastic message consisting of ridiculing those who believe in the rumors seems to be the least effective.

The study also revealed interesting topics that could be explored in further researches:

- The effects of distribution strategy on brand trust and loyalty ;
- The effect of mix guide and interrogatory denial message on consumers' behavioral intention.

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# Appendices

## **Appendix 1: Questionnaire for identification of experiment participants**

### **Introduction:**

Hello,

Thank you for your availability to respond to this questionnaire.

I am a student doing my research project on Ajinomoto seasoning in Cote d'Ivoire

Your sincerity in your responses will be appreciated for the quality of this study.

Date:

Name of participant:

Phone Number

Email (if possible):

Location :

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Do you know the product named "Ajinomoto"?

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Have you ever consumed it? If no, why ?

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If yes, do you still use it?

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---

If no why have you stopped use it?

---

---

Would you buy it?

---

---

Would you recommend it to your friends?

---

---

Would you like to have more information about the product?

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**Appendix 2 : Aide-mémoire for participants post-treatment interviews**

Have you transmitted or are you intended to transmit the information that you receive last week about Ajinomoto seasoning? Why?

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Would you buy it from now? Why?

---

Have you recommended the product since last week or would you recommend the product from now? Why?

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Do you have any other comments ?

---

## Appendix 3

### Outright refutation

*In fact, the product was discovered by a Japanese researcher named Dr. Ikeda. This researcher did research on what is called the 5th taste after the sweet; salty, bitter; sourness. For example if you eat meat without salt, you will realize a taste that is different from these 4 tastes mentioned above, this taste is called Umami.*

*Dr. Ikeda has found a way to make this taste from the amino acids called monosodium glutamate (MSG). This compound is naturally present in many foods such as meat, mushrooms, etc. Glutamate is the amino acid found most in breast milk.*

MSG is certainly one of the most studied food additives in history around the world. The truth is that over the years, many studies have demonstrated the safety of MSG. As a result, major regulators have publicly confirmed this point. The Japanese Ministry of Health, Labor and Welfare, which regulates food safety in Japan, formally approved MSG as a safe additive in 1948. Ten years later, the US Food and Drug Administration also stated that the MSG was healthy.

In addition, starting in 1970, a Joint WHO/FAO Committee of Experts on Food Additives (JECFA), formed by the World Health Organization and the Food and Agriculture Organization of the United Nations, published a series of statement about the safety of MSG in infants, leading to the conclusion in 1987 that there was no need to limit the consumption of MSG in children, regardless of age. The Ajinomoto product is consumed not only in Africa and Côte d'Ivoire, but all over the world: in Europe, Asia, America, Oceania, the Middle East, all over the world.

In Cote d'Ivoire the product has had the agreement of the authorities and the governmental organizations of hygiene and health before being put on the market. You should know that all that is said about this product is only rumors and is not based on any study or evidence.

### Guide message

*In fact, the product was discovered by a Japanese researcher named Dr. Ikeda. This researcher did research on what is called the 5th taste after the sweet; salty, bitter; sourness. For example if you eat meat without salt, you will realize a taste that is different from these 4 tastes mentioned above, this taste is called Umami.*

*Dr. Ikeda has found a way to make this taste from the amino acids called monosodium glutamate (MSG). This compound is naturally present in many foods such as meat, mushrooms, etc. Glutamate is the amino acid found most in breast milk.*

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The Ajinomoto product is consumed not only in Africa and Côte d'Ivoire, but all over the world: in Europe, Asia, America, Oceania, the Middle East, all over the world.

In Cote d'Ivoire the product has had the agreement of the authorities and the governmental organizations of hygiene and health before being put on the market. You should know that all that is said about this product is only rumors and is not based on any study or evidence.

***We invite you to denounce all those who tell false information about the product. We want you from now to become ambassadors of the product by refusing to participate in the propagation of these rumors and by transmitting the true information you just received today.***

**SARCASTIC**

*In fact, the product was discovered by a Japanese researcher named Dr. Ikeda. This researcher did research on what is called the 5th taste after the sweet; salty, bitter; sourness. For example if you eat meat without salt, you will realize a taste that is different from these 4 tastes mentioned above, this taste is called Umami.*

*Dr. Ikeda has found a way to make this taste from the amino acids called monosodium glutamate (MSG). This compound is naturally present in many foods such as meat, mushrooms, etc. Glutamate is the amino acid found most in breast milk.*

But, as you might know, In Cote d'Ivoire, anyone gets up and spread any information and people believe on it. A French journalist even wrote that in Côte d'Ivoire we need a special ministry to twist rumors. So many rumors are spread everyday. Today it says this, tomorrow is that, and anything is said without providing any proof. It is ridiculous what is said about the product. It does not make sense all these rumors around the product. People are talking rubbish; they have had no proof that Ajinomoto is dangerous. For example, the rumor that says you can take to wash plate so when you eat it pierces your stomach. Even if it happens that people use to wash their pots it does not mean that we should not eat. When you take the fresh tomato to whiten its chain it does not mean that the tomato is bad for the health. Even salt, if you use the crystals to wash your pot, it will turn white. It's the crystals that act on the pot that has nothing to do with a toxic product.

**Interrogatory**

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Do you believe in the hearsays around the product? Have you checked if they are true? How much do you believe on them? Do you have any evidence of its harmfulness? Have you experienced yourself or a member of your family, or an acquaintance, the negative effects related to the consumption of Ajinomoto?

Do you think that if the product Umami was harmful,  
- Could it have existed since 1909?  
- Could it be consumed anywhere in the world?  
- Could it have the approval of WHO, governments of the most developed countries in the world (Japanese, American, Australian, European, etc.)?

Do you know it's a Japanese product? And that Japan is recognized for these high demands in terms of quality?