Practical Research

Relational Frame Theory-Oriented Acceptance & Commitment Therapy Matrix for Autism-Spectrum Disorder: A Clinical Case Report

TANI Shinji

（College of comprehensive psychology, Ritsumeikan University）

　The purpose of the study is to demonstrate the effectiveness of the relational frame theory（RFT）-oriented Acceptance & Commitment Therapy Matrix（ACT-Matrix）for one person with autism-spectrum disorders（ASDs）. The participant was a 16-year-old female with ASDs, struggling with social interactions with her classmates. The six steps of the ACT Matrix were conducted based on the four RFT-oriented strategies. GHQ-28 was used as an outcome measurement. The four questionnaires（AAQ-II; Acceptance and Action Questionnaire-II, AFQ-Y; Avoidance and Fusion Questionnaire for Youth, CFQ; Cognitive Fusion Questionnaire, and VQ; Valuing Questionnaire）were used as the process measurement. At the baseline, the score of GHQ-28 was 12-point, and decreased to 2-point at the end of the intervention. The score of AAQ-II and CFQ decreased at the post assessment. The change of VQ was significant only during the one-month follow-up. The results（mental health condition improved and psychological flexibility and value-directed action were increased after the intervention）were considered that the RFT-oriented ACT Matrix is applicable to an individual with ASDs.

　Autism-spectrum disorder（ASD）is a neurodevelopmental condition characterized by restricted, stereotypical patterns of behavior and interests. Many studies have reported that anxiety disorder and depression are often associated with ASD. This issue is essential in developing an effective psychological program for ASD.

　Cognitive behavior therapy that includes a mindfulness element is an evidence-supported therapy for psychological problems. Acceptance and commitment therapy（ACT）is one of them and is based on the relational frame theory（RFT）, a contextual behavioral explanation of human language and cognition（Hayes, Strosahl, & Wilson, 1999）. The aim of ACT is to enhance psychological flexibility, defined as the ability to be in the present moment more fully as a conscious human being, and based on what the situation affords, to change or persist in behavior to serve valued ends（Hayes et al., 1999）. Psychological

inflexibility is associated with reduced goal-directed action control and vulnerability to sensory stimuli and stress（Alvares et al., 2016）.

ACT is a promising treatment for ASD that co-occurs with anxiety and mood disorders. However, research on the use of ACT for ASD is limited. Eilers & Hayes（2015）reported that the intervention combining a defusion exercise（frequently used in ACT）with exposure and response prevention effectively reduced challenging behavior in three autistic children. A group-format ACT was implemented for individuals with ASDs. For example, Pahnke et al.（2019）observed improvements in self-reported measures related to stress, social impairments, psychological inflexibility, and cognitive fusion. These improvements were maintained at the three-month follow-up（FU）, and an increase in QOL and a decrease in depression score were observed.

Researchers have developed an RFT-oriented intervention（Ramnero & Törneke, 2008; Törneke, 2010; Törneke et al., 2016）. RFT-oriented interventions which have developed a protocol directly derived from RFT（Ruiz & Perete, 2015）could be useful for individuals with ASDs who have cognitive challenges, such as difficulty understanding abstract or conceptual terms. They emphasized the importance of noticing the sources of influence on experiences（orienting property）, describing their ongoing experiences with emotional aspects（evoking property）and hierarchically relating the experiences into the rule（value）that has an appetitive property. Perspective-taking skills and deictic and hierarchical framings help make a connection with the rule.

The RFT-oriented strategy will promote the application of ACT to ASDs.

The ACT Matrix, a frequently used ACT tool（Polk et al., 2016）, is useful when the RFT-oriented strategy applies to individuals with ASDs. Because many visualized materials, such as the Matrix diagram and worksheets, and easy-to-understand terms（e.g., stuck loop, toward move, or away move）are used instead of unique ACT terms, such as cognitive fusion, experiential avoidance, and creative hopelessness, clients are trained repeatedly to notice and describe own behaviors in the ACT Matrix. Furthermore, an ACT Matrix therapist helps a client track the influence of own behavior on what is important to him or her using visual materials.

Watanabe（2021）reported a case study using ACT Matrix for a woman having ASD and major depressive disorder. Treatment was provided following six steps of the ACT Matrix（Polk et al., 2016）, and idiosyncratic adjustments were made to fit her experience and progress. Regarding to the adjustments, he made the session progress slower. ACT Matrix often conducted each step in one session（a total of six sessions）, but Watanabe（2021）made a treatment plan consisting of 12 to 16 sessions in advance. It is twice as usual. He also used daily feedback by e-mail which asked a client to discriminate what she was doing at the time was "away move" or "toward move". It is a similar method to the ACT Matrix app（Krafft, et al., 2019）. The results showed that depressive symptoms decreased, and valued behaviors increased after one-hour 15 sessions and that these changes were maintained at the 6-months-after assessment. Watanabe（2021）suggested

the feasibility of the ACT Matrix for a person having ASD. While the treatment adjustments were personalized for the client in his case report, the current study is going to apply a strategy induced by RFT to ACT Matrix so that ACT Matrix could make simpler.

The purpose of the study is to report a case that applied the ACT Matrix using the RFT-oriented strategy and examine the program's effectiveness.

Materials and Methods

Based on four RFT-oriented strategies, the six steps of the ACT Matrix were introduced in sequence. The strategies were as follows:（1）notice and describe events, both private and public experiences （e.g., feelings or sensations, thoughts, and responses）, and evoke the properties that these events have （Villatte et al., 2015）;（2）track sources of behavioral control on the basis of short- and long-term usefulness and request that the client provide verbal descriptions （Villatte et al., 2015）;（3）explore that her value, which is abstract and has appetitive property, is connected to her goals or tangible reinforcements in favor of activating her valued behaviors （Luciano et al., 2009）; and （4）transform the discriminative functions of the ongoing experience into values （Ruiz & Perete, 2015）by using deictic and hierarchical framing.

The session was held once per week. The outline of the six steps conducted in the study is shown in Table 1. Each session comprised reviewing her homework and the current session topics and performing exercises using PowerPoint slides or video clips.

Participant

The participant was recruited using the research homepage of the author. The purposes of the intervention, an outline of the study, and the study's research ethics （publication of the study, management of the data, and voluntary participation in the study） were explained by the author at an intake session. The documents written above contents were sent to the participants. They returned signed consent forms and completed questionnaires to the author when they agreed to participate in the study.

The participant is a 16-year-old female named Sakura （an assumed name）. She was diagnosed with ASD when she was five years old. Her intelligence was regarded as average. She lived with her mother and father. She experienced difficulties interacting socially with her classmates. She liked to draw pictures and often concentrated too much to notice that others were talking to her. As she had high sensitivity, especially to sound, she wore earplugs in school. She did not take any medications.

Settings

All sessions were conducted online and recorded with the permission of the client. The therapist and client met in a Zoom room, to which the entrance was restricted. Her mother joined the session at the request of the client.

The Autism-Spectrum Quotient Japanese version （Wakabayashi et al., 2004）was used to assess the participant's autistic features at the intake session. Five psychological questionnaires were used to evaluate the effect of the intervention. The General Health Questionnaire-28 Japanese

version（GHQ-28, Nakagawa & Daibo, 1982）was used for outcome measurement. Four ACT process measurements were used: Cognitive Fusion Questionnaire Japanese version（CFQ, Shima et al., 2016）, Acceptance and Action Questionnaire-II Japanese version（AAQ-II, Shima et al., 2013）, Avoidance and Fusion Questionnaire for Youth Japanese version（AFQ-Y, Ishizu et al., 2013）, and progressive subscale of the Valuing Questionnaire Japanese version（VQ, Doi et al., 2017）. In the current study, the Progressive subscale of VQ was only used because Cronbach α of Obstruction subscale was lower and the correlation between Progressive and Obstruction（-.34）is lower than the original version.

A survey of the accessibility of the procedure was conducted with the participant at the end of the program. The survey consisted of four items rated on a five-point Likert scale and one yes/no item that asked about accessibility, such as usefulness, the number of sessions, and length of one session. 1）How useful is the program to you？（"not at all useful" to "extremely useful",）, 2）Is the number of a session of the program appropriate? 3）Is the length of a session appropriate?, 4）Would you like to recommend the program to people who have psychological sufferings like you?, 5）would you like to attend the program again?（Yes/No）.

ACT Matrix cards, worksheets（"ACT Matrix diagram worksheet", "hook worksheet", "Verbal aikido worksheet", "Grow the life worksheet"）, PowerPoint slides, and video clips were used in a session. Values cards sorting[1]

---

1 ）https://www.scribd.com/document/251819827/
　　Values-Cards-1-INSTRUCTIONS-Louise-Hayes
　　accessed 03/06/2022

and "Teleportation & Texting your future self" exercise were conducted with PowerPoint slides. All materials were provided online. Some video clips were also used to practice.

Study design

The intervention sessions started after the two baseline assessments. The first baseline assessment was done at the intake session, and the second baseline assessment was implemented at three weeks after the first baseline assessment to make sure of the stability of the test scores. Another three assessments were conducted during the intervention sessions. The post assessment was completed at finishing Step 6. The two FU sessions were conducted at one and three months after the intervention sessions.

Ethics

Ritsumeikan University Ethics Review Committee for Research Involving Human Subjects（衣笠-人-2019-7）. The study was performed in accordance with the Declaration of Helsinki. The participant and her mother provided written informed consent. Written informed consent for publication is not required as the submission does not include images that may identify the person.

Results

Baseline assessment

Table 2 shows the results of the baseline assessments. Her AQ score at the intake interview was 46（cut off score is 33.）, it revealed she has many autistic features. The results indicate that the client was psychologically

inflexible and had strong cognitive fusion (the score of AAQ-II and CFQ were higher than the average of the same age person; see Table 2).

Intervention

Steps 1 and 2 (sessions 1 and 2): Through writing a Matrix diagram, the therapist asked the client to notice and describe her behaviors, both private and public. When she had difficulty describing her feelings and thoughts, the therapist prompted her by showing examples. The visual material (ACT Values Cards) was introduced in the second session to prompt the client's noticing and describing of skills.

Step 3 (session 3): Two video clips ("The Choice Point"[2] and "Struggling with Internal Hijackers"[3]) were used to improve the verbal tracking skill of the sources of influence on the client's behaviors. Furthermore, a mindfulness exercise was introduced with a video clip. Practicing mindfulness exercises were given as a homework. The client's describing skills improved gradually.

Step 4 (sessions 4 and 5): *The hook exercise* and the *verbal Aikido exercise* (Polk et al., 2016) were introduced in session four. Sakura thought that she had to understand what a classmate told her. She had attempted to concentrate on talking with a classmate. That endeavor made her feel tired. She often wondered whether she was understood, and she felt uncomfortable, restless, or anxious. She frequently asked questions to her classmates,

for example, "What does it mean?". The therapist asked her "when you ask questions to classmates, what do your classmates do?" to prompt her tracking skill. The client noticed that a classmate was annoyed by her frequent asking of questions, and then she avoided talking with this classmate. She also noticed that she felt that talking with her classmate was difficult, that she avoided talking with her classmates, and that she was left alone in a classroom (avoidance). She considered that individuals must understand what others say when talking with others. Although others easily perform this task, it was too difficult for her to perform. She considered that her difficulty in understanding what others are talking about was due to disability (causal relational frame). Her self-generated rule may have been reinforced by causal relating because she said, "Normal people can understand what others told. I am not normal; I am ASD; then, I can't understand." She named wanting to be perfect and overfocusing as "should be 100% loop." She also noticed that the "should be 100% loop" occurred in a class.

Exercises (word repeating and a funny voice exercise) were employed to extend the client's focus. Through the verbal Aikido exercise, she described what occurred when she was hooked by the "should be 100% loop" and the short- and long-term results. She improved the verbal tracking skill of the sources of influence on her behaviors. She chose creativity, uniqueness, and acquiring knowledge as what was important to her. She related her "should be 100%" thought into one aspect of creativity and uniqueness "should-be-100% is OK, and it sometimes works for my creativity, sometimes does not work."

---

2) https://www.youtube.com/watch?v=OV15x8LvwAQ&t=1s accessed 03/06/2022

3) https://www.youtube.com/watch?v=NdaCEO4WtDU&t=11s accessed 03/06/2022

She began to be willing to touch hooks to move toward to her values.

Steps 5 and 6 (sessions 6–8): To enhance the perspective-taking and compassion skills, the author introduced the *Mother cat exercise* and the *Teleportation exercise* using a video clip (Polk et al., 2016). In these exercises, the client's negative feelings and thoughts were related to one of her various feelings and thoughts, and she was trained in perspective-taking. For example, the therapist asked her, "Imagine these feelings as your family member, such as a brother. If he was in trouble, what will you do for him?" and "What advice will you give 'the future Sakura' who gets in trouble?" and "How does 'the future Sakura' feel when she gets the message from 'the present Sakura'?" She enjoyed the exercises and showed compassion to herself. For example, she said, "I understand what (the future) Sakura feels," "You are in the 'should be 100% loop,'" and "It would be good to step back."

Changes in the scores of measurements

Table 2 shows the changes in the GHQ-28 scores and ACT process measurements. The GHQ-28 score decreased to under the cut-off score (6 points) in the post-treatment assessment and was maintained for the one- and three-month FU. All process scores changed to the expected directions (AAQ-II, CFQ, and AFQ-Y were decreasing, and VQ was increasing).

The reliable change index (RCI) was calculated to show the clinical significance (Table 2). If the RCI was greater than 1.96, the difference was significant (Jacobson & Truax, 1991). Significant changes were found between BL1 and Post and BL1/2-FU1/2 in AAQ-II and GHQ-28. Changes in CFQ and VQ emerged but were delayed (FU1 or FU2). The AFQ-Y score, the average level in the baseline assessments, did not change significantly in the sessions.

Behavioral changes

Many behavioral changes were reported during the sessions and FUs: Drawing anime and Making music (session 3), Attending a live concert (session 6), Chatting with a friend

Table 1　*Contents of the ACT Matrix and RFT strategy*

Step (session)	Contents of the ACT Matrix	RFT Strategy
Step 1 (session 1)	Setting Up the Point of View	
Step 2 (session 2)	Understanding the Effectiveness of Away Moves	To notice the events (feelings or sensations, thoughts, and responses) and evoking properties these events have.
Step 3 (session 3)	Hooks and the Problem with Control Efforts	To track sources of behavioral control on the basis of short- and long-term usefulness and gently requesting him to describe things verbally.
Step 4 (session 4)	Verbal Aikido	To explore that his value, which is abstract and has an appetitive property, is connected to his goals or tangible reinforcements in favor of activating his valued behaviors.
Step 5 (sessions 5–8)	Training Self-Compassion	To transform the discriminative functions of the ongoing experience into values by using deictic framing and hierarchical framing.
Step 6 (sessions 5–8)	Harnessing the Power of Perspective Taking	

Table 2　*Score of the Measures and RCI*

	Time	GHQ-28	VQ	CFQ	AAQ-II	AFQ-Y
Score of	BL1	11	16	42	36	16
measures	BL2	12	18	39	44	14
	SS 3	3	18	46	42	13
	SS 4	6	24	44	39	17
	SS 6	11	###	45	42	17
	Post	2	21	35	29	11
	FU 1	5	25	38	34	13
	FU 2	5	23	31	30	13
RCI	BL1-post	− 3.40*	1.57	− 1.79	− 1.76	− 1.10
	BL2-post	− 3.77*	.94	− 1.02	− 3.78*	− .66
	BL2-FU	− 2.64*	2.19*	− 0.26	− 2.52*	− .22
	BL2-FU2	− 2.64*	1.57	− 2.04*	− 3.53*	− .22

Note. BL indicates baseline, FU indicates follow-up. SS indicates sessions. ### indicates the data are missing. * indicates the change is statistically significant.

（session 7）, Wearing clothes the client has never chosen, and Eating foods she has never tried（FU）. She attempted things she had never attempted and reported her feelings and thoughts during those times.

Procedure accessibility

She answered as follows: the program was "extremely useful," the number of sessions for the program was appropriate, the length of a session was appropriate, she would recommend the program to others, and she wanted to attend the program again.

Fidelity of the program

The programs fidelity was evaluated by two independent evaluators who had doctoral degrees and over five years' experience of ACT. On the basis of the four RFT-oriented strategies presented in the general methods section, they rated the fidelity of the program on a 5-point Likert scale（1: "not applicable at all" to 5: "very applicable"）. Both evaluators assessed that the program was conducted

using RFT-oriented strategies（the average score was 3.9, ranged from 3.5 to 4.5）.

Discussion

The results of the study show the effectiveness of the RFT-oriented ACT Matrix. The client's mental health improved significantly, the process measures related to the ACT concept changed in the expected direction, these changes were maintained, and additional changes（CFQ and VQ）were observed in the FUs. The client rated the accessibility of the program as high.

Watanabe（2021）reported the same phenomena which the changes of the score of CFQ and VQ were found in the latter session, and large changes were at follow-up. He explained it due to necessary for continuous practice. The relational responses related with cognitive fusion often are complex. In Sakura case, her the relational responses（e.x., "I am ASD"）were related with her fusion and this reduced variation and flexibility of her behavior. The

self-related-network and the disability-related network are mutually related（"I am ASD"）, and it makes the most complex relational-relational network. Therefore, many practices would be needed for the network to acquire the variation and flexibility. After enough practices, the score of CFQ might be changed after the intervention.

In order to make a chain of verbally description of values, select behaviors based on the value, and self-reinforcement of the behaviors, a therapist helps a client to practice four RFT strategies together. Deictic and hierarchical framing are utilized to make the chain. It is importantly noted that deictic and hierarchical framing were introduced at the latter session（after session 6）. For example, *Mother cat exercise* and *Teleportation exercise* were used to learn deictic and hierarchical framing during from session 6 to 8. Consequently, the change of the score of VQ might emerge a little later at the follow-up.

An RFT-oriented strategy can easily embody in ACT Matrix work. A Matrix diagram was used to improve the noticing and describing skills of the client in terms of the sources of the influence on behaviors, the hook exercise and verbal Aikido are available to enhance the tracking skill, the choice of toward move promotes to relate the toward moves to the abstract events that have an appetitive property（values）. The perspective-taking skill and the relating of events to the rule that has appetitive properties are taught using the *Mother cat exercise* and the *Teleportation exercise*.

Notably, the RFT-oriented ACT Matrix is closely connected to applied behavior analysis（ABA）. An ABA therapist easily understands that noticing and describing in the RFT-ACT Matrix implies tacting a private event, and tracking means that a client engages in the functional analysis of his or her behaviors. Therefore, the RFT-oriented ACT Matrix could be seamlessly connected to ABA. It will contribute consistent, comprehensive supports to individuals with ASD and their families.

Some elements in the procedure contributed to the results of the study. One element was the client's mother's participation. Her mother participated in all the sessions and sometimes played a role as an interpreter between Sakura and the therapist. Because Sakura and her mother had ABA-home-based training when Sakura was a child, her mother had the basic knowledge and skills of ABA（e.g., prompting, positive reinforcement）and positively supported attitude to her. The mother sometimes prompted Sakura to notice the "should be 100% loop" at home and advised her to perform the exercises used in a session. Collaboration with parents contributes to the therapy's effect. Another element was the usage of animation video clips. As she often watches and draws animation, the experiences might enhance the orienting function of session videos and her motivation for the program. The participation of parents and the use of visual materials fitted to a client's experience facilitate the accessibility of the program and enhance the effectiveness of the application of ACT to individuals with ASD.

In studies that have applied ACT to individuals with ASD, some changes, which included small groups, shorter mindfulness exercises than usual exercises, and visualized metaphors, were added to ACT for neurotypical populations

(Pahnke et al., 2014, 2019). In addition to these modifications, applying the RFT-oriented ACT Matrix will promote ACT for individuals with ASD. A systematic review (Byrne & O'Mahony, 2020) of ACT for individuals with ASD reported that eight controlled studies have been conducted, and the quality assessment revealed that two studies were adequate and that the other six were weak. In further research, robust experiment designs are required. Recently, the concept of RFT is updated and a hyper-dimensional multilevel (HDML) framework is proposed (Barnes-Holmes et al., 2020). A clinical application of HDML framework to ASDs will be also expected.

Acknowledgments

References

Alvares, G. A., Balleine, B. W., Whittle, L., & Guastella, A. J. (2016). Reduced goal-directed action control in autism spectrum disorder. *Autism Research*, 9 (12), 1285–1293. https://doi.org/ 10.1002/aur.1613

Barnes-Holmes, D., Barnes-Holmes, Y., & McEnteggart, C. (2020). Updating RFT (more field than frame) and its implications for process-based therapy. *The Psychological Record*, 70, 605–624. https://doi.org/10.1007/ s40732-019-00372-3

Byrne, G., & O'Mahony, T. (2020). Acceptance and commitment therapy (ACT) for adults with intellectual disabilities and/or autism spectrum conditions (ASC): A systematic review. *Journal of Contextual Behavioral Science*, 18, 247–255.

https://doi.org/10.1016/j.jcbs.2020.10.001

Doi, S., Sakano, A., Muto, T., & Sakano, Y. (2017). Reliability and Validity of a Japanese Version of the Valuing Questionnaire (VQ). *Japanese Journal of Behavior Therapy*, 43, 1, 83–94.

Eilers, H. J., & Hayes, S. C. (2015). Exposure and response prevention therapy with cognitive defusion exercises to reduce repetitive and restrictive behaviors displayed by children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 19, 18–31. https://doi.org/ 10.1016/j.rasd.2014.12.014

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy*. Guilford Press., New York.

Ishizu, K., Shimoda, Y., & Ohtsuki, T. (2013). Developing the scale regarding psychological inflexibility in Japanese early adolescence. Paper presented at the Poster presented at *30th Annual Pacific Rim International Conference on Disability and Diversity*, Honolulu.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology,* 59 (1), 12–19. https://doi.org/10.1037//0022-006x.59.1.12

Krafft, J., Potts, S., Schoendorff, B., & Levin, M. E. (2019). A Randomized Controlled Trial of Multiple Versions of an Acceptance and Commitment Therapy Matrix App for Well-Being. *Behavior Modification*, 43 (2), 246–272.

Luciano, C., Valdivia-Salas, S., Cabello, F., & Hernandez, M. (2009). Developing self-directed rules. Derived relational responding. *Applications for learners with autism and other developmental disabilities*, 335–352.

Nakagawa, Y, Daibo, I. (1982). Tests of the validity and reliability of the Japanese version General Health Questionnaire and its clinical applications. In: Nakagawa Y (ed) The Theory Behind Understanding Psychiatric and Neurotic Symptoms Using a Questionnaire and Its Clinical Applications, *Monograph of National Institute of Mental Health*, Japan, Part 2, National Institute of Mental Health, Japan, Ichikawa, pp 110–197 (in Japanese)

Pahnke, J., Lundgren, T., Hursti, T., & Hirvikoski, T. (2014). Outcomes of an acceptance and commitment therapy-based skills training group for students with high-functioning autism spectrum disorder: a quasi-experimental pilot study. *Autism, 18* (8), 953–964. doi:10.1177/1362 361313501091

Pahnke, J., Hirvikoski, T., Bjureberg, J., Bölte, S., Jokinen, J., Bohman, B., & Lundgren, T. (2019). Acceptance and commitment therapy for autistic adults: An open pilot study in a psychiatric outpatient context. *Journal of Contextual Behavioral Science*, 13, 34–41. https://doi.org/10.1016/j.jcbs.2019.04.002

Polk, K. L., Schoendorff, B., Webster, M., & Olaz, F. O. (2016). *The essential guide to the ACT Matrix: A step-by-step approach to using the ACT Matrix model in clinical practice*. New Harbinger Publications., Oakland.

Ramnero, J., & Törneke, N. (2008). *The ABCs of human behavior: Behavioral principles for the practicing clinician*. New Harbinger Publications., Oakland.

Ruiz, F. J., & Perete, L. (2015). Application of a relational frame theory account of psychological flexibility in young children. *Psicothema, 27* (2), 114–119.

Shima, T., Kawai, T., Yanagihara, M., & Kumano, H. (2016). Validation of the Japanese Version of the Cognitive Fusion Questionnaire: The 13-Item Content Revised Version and the 7-Item Version. *Japanese Journal of Behavior Therapy*, 42, 1, 73–83.

Shima, T., Yanagihara, M., Kawai, T., & Kumano, H. (2013). Japanese version of Acceptance and Action Questionnaire-II 7-item version of the study. *In Japan Psychological Association convention announcement Papers Japan Psychological Association 77th Convention (pp. 1AM-042).* The Japanese Psychological Association.

Törneke, N. (2010). *Learning RFT: An introduction to relational frame theory and its clinical applicatio*n. New Harbinger Publications., Oakland.

Törneke, N., Luciano, C., Barnes-Holmes, Y., & Bond, F.W. (2016). RFT for clinical practice. In R. D. Zettle, S. C. Hayes, D. Barnes-Holmes, & A. Biglan (Eds.), *The Wiley handbook of contextual behavioral science*, John Wiley & Sons, UK, 254–272.

Villatte, M., Hayes, S. C., & Villatte, J. L. (2015). *Mastering the clinical conversation: Language as intervention*. Guilford Publications., Oakland.

Wakabayashi, A., Tojo, Y., Baron-Cohen, S., & Wheelwright, S. (2004). The Autism-Spectrum Quotient (AQ) Japanese version: evidence from high-functioning clinical group and normal adults. *The Japanese journal of psychology*, 75 (1), 78–84.

Watanabe, T. (2021). Treatment of Major Depressive Disorder with Autism Spectrum Disorder by Acceptance and Commitment Therapy Matrix. *Case Reports in Psychiatry,* 2021, 5511232. doi:10.1155/2021/5511232

実践報告

関係フレーム理論のストラテジーに基づく アクセプタンス＆コミットメント・セラピー・ マトリックスの自閉スペクトラム症への適用
——臨床ケースレポート——

谷　　　晋　二

（立命館大学総合心理学部／教授）

　本研究の目的は関係フレーム理論（Relational Frame Theory; RFT）のストラテジーに基づくアクセプタンス＆コミットメント・セラピー・マトリックス（ACT-Matrix）を，自閉スペクトラム症を持つ参加者に適用した症例を報告することである。参加者は自閉スペクトラム症を持つ16歳の女性であった。彼女はクラスメートとの社会的な交流に問題を持っていた。ACT-Matrix の6つのステップが関係フレーム理論に基づいたストラテジーで実施された。GHQ-28 がアウトカム尺度として用いられ，4つの質問紙（AAQ-II, AFQ-Y, CFQ, VQ）がプロセス尺度として用いられた。ベースライン時の，GHQ-28 の得点は12点であったが，介入の終了時点では2点に減少した。AAQ-II と CFQ の得点も減少したが，VQ の得点の変化は1か月後のフォローアップでのみ有意に増加した。この結果より（メンタルヘルスの状態の改善，心理的柔軟性と価値に方向づけられた行為の増加）RFT のストラテジーに基づく ACT-Matrix が自閉スペクトラム症を持つ者に適用可能であると考えられる。

キーワード：ACT-Matrix, 自閉スペクトラム症，ケースレポート，関係フレーム理論，ACT
立命館人間科学研究, No.47, 13-23, 2023.