A research for potential application of self-directed humor aimed at bullying prevention:

With focusing on Aikido-humor as response to aggressive utterance

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ABSTRACT. In this study, we viewed self-directed humor as “Aikido-humor” by using the analogy of martial art, Aikido. The objective of this study is to evaluate its possible application to preventing bullying. A role-play experiment was conducted with 26 groups, each consists of three university students who had friendly relationship with each other, totally 78 subjects. We asked one of the three members of each group to respond with self-directed humor to aggressive utterance made by another while two sets of six-minute conversation under two different conditions: without and with an observer. The result suggests that the aggressive speaker feels like to reduce emotional distance with the respondent who responds to the aggressive utterance with self-directed humor. On the other hand, it was observed that the aggressive speaker doesn’t feel affinity for the respondent when there is a third party who doesn’t involved in the conversation even if the respondent responds with self-directed humor. Thus self-directed humor, here considered as Aikido-humor, may function as a kind of management communication which tends to make the interpersonal relationship of conversing parties negative while maintaining the mood of conversation when there is a third party. However, further consideration would be needed to make it a practical method to prevent bullying because it is also associated with risks such as encouraging aggression and making detection of victims difficult.

KEY WORDS: self-directed humor, Aikido-humor, response to aggressive utterance, bullying prevention

Introduction

We often see laughter and humor in our daily life and we even think them important. However, there are some kinds of communication involving humor which are related to poor mental health. For example, when someone make a mock of or play pranks on a person with the intention of humor, the person gets angry at the aggressive utterance and feels disconsolate. We could often observe such cases where the person accept the unpleasant feeling without express it and experiences conflicted feeling by trying to give consideration to the relationship with the friend and surrounding mood. In such situation, how can we avoid unpleasant and conflicted feelings without destroying surrounding mood? One of effective response options is to respond with humor as described in humor coping with interpersonal stress (Kunugimoto & Yamasaki, 2010). Humor is “a concept signifies stimulus with features that evokes funniness and laughableness, such as joke and sarcasm”
(Tsukawaki, Fukada & Higuchi, 2011), and we could take particular note of self-directed humor among all. Self-directed humor has a feature that converts one’s weakness, immaturity or complexes to a funny topic of conversation (Tsukawaki, Higuchi & Fukada, 2011). Self-directed humor has a function that suppresses escalating aggressive behavior of others by making them feel they have already involved in the attack, according to Ziv (1984). Thus responding to aggressive utterance with self-directed humor may enable maintaining interpersonal relationships, coping with stress and suppressing aggressive speech.

There are two styles in humor, positive and negative styles. Self-directed humor falls into the latter category (Martin, et al., 2003). It is suggested that the use of self-directed humor is related to hostility, anxiety and depression (Martin, 2003), in addition, self-directed humor has an aspect that it conveys poor self-affirmation and anxiety of the speaker to the receiver (Nihonmatsu & Okuno, 2016). However, knowledge about self-directed humor is not unambiguous. It is reported that application of self-directed humor promotes social support and reduces the speaker’s anxiety (Tsukawaki, Fukada & Higuchi, 2011). Another research found that positive feelings toward one’s life is related to preference for using self-directed humor (Ichinoseki, 2015). It is also explained that self-directed humor is a strategy for self-presentation with maintaining one’s self-esteem despite it seems verbally harms oneself (Dynel, 2009). Therefore the usage of self-directed humor is not necessarily related to poor mental health.

It is also reported that the effect of self-directed humor varies according to the features of the user. Self-directed humor used by people with excellent physical attractiveness is preferred (Lundy, Tan & Cunningham, 1998). When a person in an ideal social position uses self-directed humor, it makes others feel friendliness and human touch, and gives pleasant impression. However, using self-directed humor for long-term partners such as marriage relationships may be accepted as undesirable personality (Didonato, Bedminster & Machel, 2013). Thus it could be said that the effectiveness of self-directed humor is affected by the user’s social position and status.

In addition, it is also reported that how self-directed humor is used varies according to the context in which it is used. Humor Coping with Interpersonal Stress Scale (HCISS) developed by Kunigimoto & Yamasaki (2010) includes items such as “when dispraised in front of others, speak an episode related to the dispraised features in an amusing way” and “when one’s mistake or fault was witnessed by others, try to make them laugh by making the mistake or the fault a topic of conversation”. How humor is used varies in the situations where there are several numbers of people engaged in the conversation. Lampert & Ervin-Tripp (2006) reported that in a group of mixed genders compare to groups of the same gender, male speakers had less aggressive teasing and more self-directed humor and female speakers had less conversation with self-disclosure and more aggressive teasing.
The same research describes a conversation in which a male speaker responded with self-directed humor to aggressive humor made by female speakers. As such, there are some cases where self-directed humor is used as a means of coping with stress and communication.

In Brief Therapy, Watzlawick et al. (1974) and Saposnek (1980) compared the flow of communication change to Judo and Aikido using the power of the client in the therapy. Among them, Saposnek (1980) points out humor as the similarity of Aikido and Brief Therapy. Additionally, Morihei Ueshiba, the founder of Aikido said “When someone comes to you with anger, you respond to them with a laugh. This is exactly Aikido.” (Ueshiba, 1957). It explains that changing the communication by means of turning disadvantageous situation to a laugh, is highly compatible with Aikido. In this study, the mode of communication involving humor which makes use of the aggression and contents given in the context made by others such as one’s mistakes are pointed out or laughed at by others is regarded as “Aikido-humor”.

As explained above, it has been suggested that the effectiveness of self-directed humor varies according to the situation and relationship among parties. However, there is no studies investigating the possibility of utilizing self-directed humor as a means of responding to aggressive utterance. In addition, though Yoshida & Amemiya (2009) noted triadic interactive system consists of Joker (who makes others laugh), Target (who is laughed at) and Audience (who is made laugh), there has not been enough discussion comparing the effectiveness of humor between two or more parties. The structure of bullying is similar to the triadic interactive system stated above as it consists of bullies, victims and bystanders.

The objective of this study is to consider possible application of self-directed humor for the prevention of bullying in the situation where aggressive utterance such as teasing is made, with focusing on self-directed humor viewed as Aikido-humor.

Methods
1) Subject
26 groups, each consists of three university students who had friendly relationship with each other, totally 78 subjects (male 36, female 42; mean age±standard deviation 21.23±1.06).

2) Time period
December 2016 – January 2017

3) Experiment procedure
Each student was assigned to one of three roles: the aggressive speaker (A), the respondent to aggressive utterance (B) and the observer who observes the conversation (C) according to his or her adequacy based on the questionnaire response collected before the experiment. In the questionnaire, students were asked how they usually use humor. Each role group consists of 12 male and 14 female students. A and B were seated at the same side of a table and C was seated across the table in
the laboratory. Then they were asked again about contents and frequency of humor they usually use. Regarding advanced instruction, A was informed of topics acceptable to B when others play pranks on B in advance, as the questionnaire asked such topics. B was asked to respond to aggressive utterance made by A with self-directed humor (e.g. joining the conversation by talking about episodes related to the dispraised features). A and B were asked to talk for six minutes under each of two situations: with and without the observer (C). The order of two situations was counterbalanced. Roles are described in Figure 1. Video cameras were set up in the experiment site to shoot the expressions of the three parties, in agreement with the subjects.

4) The structure of questionnaire

①～③ were used to decide roles before the experiment. ④～⑦ were filled out after the experiment.

①The Japanese version of the Humor Styles Questionnaire (Yoshida, 2012)

This is used as scales to evaluate how questionees usually use humor. In this research we adopted a total of 12 items, six items asking for use of aggressive humor, six items asking for the use of self-directed humor. A total of four items are excluded from the original scale by taking factor loading into consideration. Evaluation is made by five point scale consists of ”1= disagree” - “5= agree”.

②Humor Coping with Interpersonal Stress Scale (Kunigimoto & Yamasaki, 2010)

Five point scale questionnaire to evaluate questionee’s response to stress and shame with humor in interpersonal communication. It consists of a total of 12 items.

③A questionnaire asking about aggressive humor and self-directed humor used in conversations among three members, acceptable topics and frequency when others play pranks on the questionee (free description).

④B was asked about the extent of aggression in utterance made by A with seven point scale from “1= felt no aggression” to “7= strongly felt aggression”. A was asked about the recognition of self-directed humor, i.e. whether he or she felt self-directed humor in B’s response with using seven point scale.

⑤Scales on the effectiveness of self-directed humor (Nihonmatsu & Okuno, 2016)

Totally 13 questions to evaluate the effectiveness of self-directed humor used in

\[ \text{Figure 1. Roles (the aggressive speaker, the respondent and the observer) and abbreviations (A, B, C) in this study} \]
interpersonal communication. A was also asked about subscales: “intentional communication of interpersonal relations” such as familiarity and favorability (α=.84), “low self-efficacy” including anxiety and lack of confidence (α=.72), “dignity” such as socially desirable features including intellectuality (α=.56) with using five point scale.

6) Property-based adjective measurement questionnaire (Hayashi, 1978)

Totally 14 questions regarding “intimacy” and “social desirability” were used in this study. A and C were questioned with using seven point scale and the results were regarded as their impressions of B.

7) Affect scales (Ogawa, Monchi, Kikuya, & Suzuki 2000; Mitani & Karasawa, 2005)

A, B and C were questioned about four items of “positive affect” (fun, pleasantness, vitality and vigorousness) and five items of “negative affect” (tension, fear, anger, guilt and amazement) with five point scale.

5) Analysis

Whether A sensed self-directed humor in the utterance made by B was determined as follows: cases with five or higher points were categorized into self-directed group and those with four or lower points into non-self-directed group. Two-way mixed-design analysis of variance was performed with the effectiveness of self-directed humor, affect scales, and impressions of B, as a dependent variable, and the mode of response (self-directed response group / non-self-directed response group: hereafter self-directed group/ non-self-directed group) and observer condition (without / with) as independent variables.

6) Ethical consideration

Based on the response of questionnaire ①～③, we sought to reproduce usual relationships and communication. For this purpose Respondent (B) were asked to answer acceptable topics when others play pranks on B under a precondition “in conversations among the three members”. Respondent (B) was firstly instructed and after checking and considering questionnaire response made by B, other participants were instructed. Debriefing session was held to share advanced instructions and feedback among three members after the experiment, and the experiment was concluded after introducing the clinical psychotherapist.

Results

1. Effectiveness of self-directed humor recognized by aggressive speakers

There were 15 self-directed groups and 10 non-self-directed groups. A pair was excluded from the scope of analysis as the conversation was not an interaction involving aggressive utterance and its response. Scores of the recognition of self-directed humor were compared with t-test. Self-directed group has significantly higher scores than non-self-directed group (t (13.22) = 5.27, p <.001). Thus it was confirmed that condition setting on response mode was appropriate.

Firstly, regarding effectiveness of self-directed humor, two-way mixed-design analysis of variance was performed with each
Table 1. Difference of “intentionality of interpersonal relationships” felt by A under different conditions of the mode of response made by B and observer condition

| Mode of response by B | Observer condition | Mean | SD | Mean | SD | F | Mode of response | Observer condition | Interaction |
|-----------------------|--------------------|------|----|------|----|---|-----------------|--------------------|-------------|
| Self-directed group   | without            | 28.87| 3.25| 30.00| 2.27| 7.40*| 1.93            | 0.94               |
| Non-self-directed group| with               | 25.90| 3.28| 28.44| 3.82| --- | ---             | ---                | ---          |

As for “low self-efficacy”, neither main effect of “mode of response” nor “observer condition” showed significant difference (F (1,23)=1.96, n.s., F (1,23)=0.00, n.s.) and there was no interaction either (F (1,23)=0.19, n.s.). As for “dignity”, “mode of response” and “observer condition” showed no main effect (F (1,23)=0.14, n.s., F (1,23)=1.20, n.s.) and there was no interaction (F (1,23)=0.05, n.s.).

Secondly, as for interpersonal impressions, two-way mixed-design analysis of variance was performed with “intimacy” and “social desirability” as dependent variables, and the mode of response (self-directed group/non-self-directed group) and observer condition (without/with) as independent variables.

![Figure 2](image-url)  
Figure 2  Mean scores of the intentionality of interpersonal relations
Regarding “intimacy”, interaction between the mode of response and observer condition was significant ($F (1,23)=5.92, p < .05$) and then simple main effect test was performed. Under the “observer condition” is “with”, the simple main effect of the “mode of response” was significant ($F (1,23)=4.17, p < .05$), and the simple main effect of “observer condition” was significant among non-self-directed group ($F (1,23)=4.95, p < .05$). These results are shown in Table 2 and Figure 3.

As for “social desirability”, neither significant difference ($F (1,23)=0.01, n.s., F (1,23)=0.00, n.s.$) nor interaction ($F (1,23)=0.55, n.s.$) was observed in each main effect of the “mode of response” and “observer condition”. In the same way, neither significant difference ($F (1,23)=1.88, n.s., F (1,23)=0.63, n.s.$) nor interaction ($F (1,23)=0.16, n.s.$) of the “mode of response” and “observer condition” was observed regarding positive affect. Likewise, neither significant difference ($F (1,23)=0.47, n.s., F (1,23)=1.90, n.s.$) nor interaction ($F (1,23)=0.85, n.s.$) of the “mode of response” and “observer condition” was observed regarding negative affect.

2. Respondent’s Affect and observer

Two-way mixed-design analysis of variance was performed with affect scale, with which respondent (B) rated aggressive utterance, as a dependent variable, and the mode of response

Table 2. Difference of “intimacy” of A toward B under different conditions of the mode of response and observer condition

| Mode of response by B | Observer condition | F | Interaction |
|-----------------------|--------------------|---|-------------|
|                       | without | with | Mode of response | Observer condition | Interpolation |
| Self-directed group   | 41.70    | 38.93 | 4.17*   | 4.95*   | 5.92* |
| Non-self-directed group | 38.70   | 42.60 | 4.95*   | 4.95*   | 5.92* |

*p < .05

Figure 3 Mean score of intimacy
Table 3. Difference of B’s positive affect under different conditions of the mode of response and observer condition

| Mode of response by B | Observer condition | F        |   | Interaction |
|-----------------------|--------------------|----------|---|-------------|
|                       | without            | with     |   |             |
| self-directed group   | mean    | SD      | mean | SD      | 0.05   | 5.13*  |
| non-self-directed     | 15.87   | 2.62    | 16.80 | 1.74    | 0.08   |         |

* p < .05

(self-directed group / non-self-directed group) and observer status (without / with) as independent variables. The main effect of “observer condition” was significant regarding “positive affect” \((F (1, 23)=5.13, p < .05)\). Neither main effect nor interaction of “mode of response” was observed \((F (1,23)=0.85, n.s., F (1,23)=0.08, n.s.)\). These results are shown in Table 3 and Figure 4. On the other hand, main effect \((F (1,23)=0.08, n.s., F (1,23)=2.36, n.s.)\) and interaction \((F (1,23)=0.00, n.s.)\) were not observed in the “mode of response” and “observer condition” regarding “negative affect”.

Regarding the observer (C), self-directed group and non-self-directed group are compared by performing t-test with impressions rated by the observer (intimacy of A and B, social desirability of A and B) as dependent variables and the mode of response as independent variable. There was no significance observed \((t (23)=0.01, n.s., t (23)=-0.33, n.s., t (23)=0.05, n.s., t (23)=-0.35, n.s.)\). In the same way, there was no significance observed with affect scale (positive affect, negative affect) as a dependent variables \((t (23)=0.64, n.s., t (23)=0.55, n.s.)\).

**Discussion**

1. **Self-directed humor viewed as Aikido-humor**
   It was suggested that the aggressive speaker feels like reducing emotional distance with the user of self-directed humor when the

![Figure 4. Mean score of B’s positive affect](image)
respondent uses self-directed humor as a response to aggressive utterance, as the main effect of “mode of response” on “intentionality of interpersonal relationship” was significant in the result of analysis of variance. An example given by Lampert & Ervin-Tripp (2006), responding to teasing about “small feet and shoes” as “These shoes were made by a man with a green moustache”, has effect which make the mood of conversation cheerful and friendly, while making use of aggressive utterance. According to Watzlawick et al. (1974), instead of pushing back with the same force against the pushing force by the opponent, pulling, accepting, and amplifying it, bring a change and problem solving. However, we cannot say with absolute certainty that responding with self-directed humor as Aikido-humor has short-term or long-term effect against mental damage.

In this study, we set interpersonal conflict situations, where one is played pranks with or teased by an intimate partner. Wakashima, Ikuta, & Hasegawa (2000) reported that “disqualification reactions” occur frequently in interpersonal conflict situations. Disqualification is also referred to as “trans-contextual communication”, and is a communication deviates from the context of the talk or deviates from the utterance of the partner (Wakashima, Ikuta & Hasegawa, 1999). Humor can be comprised of disqualification from the structure such as paradox and ambiguity. However, in such paradoxical behavior, Aikido humor is utilizing the aggression which the opponent was trying to degrade himself. It may be useful as an effective means to prevent bullying that applies to the structure of “Accuser / Defender game (Weakland et al., 1982)”.

2. How the observer and the mode of response affect the effectiveness of self-directed humor

It is suggested that the aggressive speaker feels less “intimacy” with the respondent who answers with self-directed humor under the condition that the observer is present. In other words, when there is a third party and teased respondent responds with self-directed humor, teasing speaker feels less familiarity with the respondent while he or she feels like reducing the mental distance at the same time. If there are subjects who are evaluated by observer in interpersonal conflict situations, consider how they appear in the eyes of the third person, and try to give a good impression to everyone in the place (Fukushima, Oobuchi, & Kojima, 2006; Sasaki & Daibo, 2010). In brief, self-directed humor as Aikido humor in the presence of an observer is likely to have reduced familiarity as a result of being caught as a controlled, acting and non-honest response. Regarding mode of response, when considering conversation system and interpersonal system suggested by Wakashima (1999), self-directed humor can be regarded as a centripetal conversation system which leads verbal and non-verbal laughter. In this study, it is used in an intimate interpersonal system. Okuno (2008) says that if there are only centripetal reactions in conversation and interpersonal systems, intimacy will be
increased or the either risk of disruption or transformation will be increased, and then positive feedback will be observed. This seemingly paradoxical result (Figure. 2 & Figure. 3) may show both possibilities of increasing familiarity caused by humor, and the transformation of relationship.

On the other hand, it was suggested that in the cases of non-self-directed response, which are not regarded as responses with self-directed humor, the aggressive speaker feels more “intimacy” with the respondent under the condition that the observer is present. The presence of a friend observer has a function to maintain smiling of speakers and activate conversation (Yamamoto, 2012; Yamamoto, 2013). It is expected that smiling face may make others deem the person familiar and active conversation has simply influenced good interpersonal impression.

However, in non-self-directed group, there were various responses including some cases which respondents couldn’t make self-directed response though the respondents had been asked to respond with self-directed humor. Based on limit of this research, further consideration is needed regarding the distinction of responses.

3. Respondents and observers

Regarding “positive affect” of the respondent, main effect of the “observer” was significant in the analysis of variance, which suggests fun and pleasant feelings of the respondent to aggressive utterance is promoted when there is the observer. Originally, it is said that receivers of aggressive utterance such as teasing often experience negative emotions, especially in females (Keltner et al., 1998). Therefore, it is predicted that emotions such as grief and anger will arose in the receivers to the partner’s aggressive utterance. However, under the situation where there is an observer, positive affect was promoted on receiving aggressive utterance, regardless of the mode of response. In Yamamoto (2013), it is said that the amount of utterance, smile, gaze of speakers when there is a friend observer is not related to the positive emotion of the speaker. Therefore, the mechanism of how the existence of a friend observer affected the respondent’s positive emotions should be examined in the future.

Regarding the observer, there was no effect of the mode of response observed. Because the more two people’s conversation is active, the more observer’s cognition becomes positive according to Kimura, Yogo & Daibo (2005), the activeness of conversation may be more important than the mode of response.

4. Suggestion for clinic

Regarding possible clinical application of the result of this study, application as a communicative intervention holds promise for preventing bullying. For example, it may be effective if you are teased excessively, and you want to stop. Yoshida & Amemiya (2009) states that people use aggressive humor towards others as relationships stabilize. This means that as you get closer, you get more aggressive utterance and teasing. Under such circumstances, self-directed humor as Aikido
humor may function as a management communication that can maintain the atmosphere while lowering familiarity. However, it is true only when there is the third party who is not verbally involved in the communication.

On one hand, there are some risks accompanied. According to Kimura (2015), the observer infers not only goodness but also intimacy of communication from active communication of two people. Negative aspect of above stated feature is that the responding with humor, the behavior itself, can disguise victims of bullying who suffer from unpleasant feelings, and make it difficult others discover them. There are also possibility that the observer comes to join the attack. In short, when applying self-directed humor as Aikido-humor, a prudent attitude is required to use it. The more you use it immoderately, the more others will tease you with expects you react comically.

Regarding the way to respond to other than self-directed humor, since a specific reaction wasn't identified in this study, we couldn't suggest unambiguously. However, as well as self-directed humor, non-self-directed humor can be used properly depending on how you want to make the relationship with aggressive speakers in the future.

**Conclusion**

Based on this study, it is suggested that the aggressive speaker’s interpersonal impressions of the respondent changes according to the mode of response to the aggressive utterance. It is also suggested that the presence of the third party, who is not involved in the conversation between the two parties, affects the effectiveness of self-directed humor. Though Aikido-humor, a form of response to aggressive utterance with self-directed humor, gives familiar and cheerful impressions to the aggressive speaker, it is suggested that the respondent can give unfamiliar impression under the condition with the third party.

When considering to apply humor to communication in schools and other organizations, further consideration about how to apply it in groups which consists of more than two people is required. However, as it is pointed out that the tripartite relationship in interpersonal conflict situations cannot be understood only from member’s positions and intimacy (Yoshida and Nakatsugawa, 2013), observer’s presence and mode of response should be considered with braking them into smaller categories. Finally, it is important to consider using self-directed humor as Aikido-humor to prevent escalation of bullying and teasing as a practical measure, and to gain more knowledge from the viewpoint of difference in positions such as the aggressive speaker and the observer.

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Reference
Didonato, T. E., Bedminster, M. C., & Machel, J. J. (2013). My funny valentine: How humor styles affect romantic interest. Personal Relationships, 3(20), 374-390.
Dynel, M. (2009). Beyond a Joke: Types of Conversational Humour. Language and Linguistics Compass, 3(5), 1284-1299.
Fish, R., Weakland, J. H., & Segal, L. (1982). The Tactics of Change: Doing Therapy Briefly. Jossey-Bass Publishers.
Fukushima, O, Oobuchi, K, & Kojima, K. (2006). Multiple goals in interpersonal conflict: Effects of concern for personal resource, evaluative observer, and politeness on verbal responses of resolution strategy. Japanese Journal of Social Psychology, 22, 103-115. [ in Japanese ]
Hayashi, H. (1978). The fundamental dimensions of interpersonal cognitive structure. Bulletin of the Faculty of Education (The Department of Educational Psychology), Nagoya University, 25, 233-247. [ in Japanese ]
Ichinoseki, S. (2015). ユーモアスタイルと生きがい感および幸福感との関連 The Japanese Journal of Research on Emotions, 23( Supplement ), 36. [ in Japanese ]
Kasagi, Y, & Daibou, I. (2010). Compensatory self-enhancement as a strategy for the multiple audience problem. The Japanese Journal of Psychology, 81(1), 26-34. [ in Japanese ]
Keltner, D., Youung, R. C., Heerey, E. A., Oemig, C., & Monarch, N.D. (1998). Teasing in hierarchical and intimate relations. Journal of Personality and Social Psychology, 75(5), 1231-1247. [ in Japanese ]
Kimura, M. (2015). Inferential evaluation of intimacy based on observation of interpersonal communication. The Japanese Journal of Psychology, 86(2), 91-101. [ in Japanese ]
Kimura, M, Yogo, M, & Daibo, I. (2005). Expressivity halo effect in the conversation about emotional episodes. The Japanese Journal of Research on Emotions, 12(1), 12-23. [ in Japanese ]
Kunugimoto, N, & Yamasaki, K. (2010). Development of the “Humor Coping with Interpersonal Stress Scale” (HCISS). The Japanese Journal of Personality, 18(2), 96-104. [ in Japanese ]
Lampert, M. D., & Ervin-Tripp, S. M. (2006). Risky laughter: Teasing and self-directed joking among male snd female friends. Journal of Pragmatics, 38, 51-72.
Lundy, D.E., Tan, J., & Cunningham, M.R. (1998). Heterosexual romantic preference: The importance of humor and physical attractiveness for different types of relationships. Personal relationships, 5(3), 311-325.
Martin, R. A.(2003). Sense of Humor. In S.J. Lopez & C. R. Snyder(Eds.), Positive psychological assessment:A handbook of models and measures, pp.313-326. Washington, DC: American Psychological Association.
Martin, R. A., Puhlik-Doris, P., Larsen, G.,...
Gray, J., & Weir, K. (2003). Individual differences in use of humor and their relation to psychological well-being: Development of the humor styles questionnaire. *Journal of Research in Personality, 37*, 48-75.

Mitani, N, & Karasawa, K. (2005). Appraisal dimensions of emotions: An empirical integration of the previous findings. *The Japanese Journal of Psychology, 76*(1), 26-34. [in Japanese]

Nihonmatsu, N, & Okuno, M. (2016). A research for effective use of self-deprecating humor: Focused on interpersonal relations function. *National Foundation of Brief Therapy the 8th Conference (Utsunomiya, Japan), Supplement*, pp.31. [in Japanese]

Ogawa, T, Monchi, R, Kikuya, M, & Suzuki, N. (2000). Development of the General Affect Scales. *The Japanese Journal of Psychology, 71*(3), 241-246. [in Japanese]

Okuno, M. (2008). コミュニケーションにおける言語と非言語の関係性について—言語・非言語操作を行った場面の検討から—Bulletin of Clinical Psychology Center, Graduate School of Education, Tohoku University, 6, 39-56. [in Japanese]

Saposnek, D. T. (1980). Aikido: A Model for Brief Strategic Therapy. *Family Process, 19*(3), 227-238.

Tsukawaki, R, Higuchi, M, & Fukada, H. (2009). Relationships between humor expression and self-acceptance, aggression, and altruism. *The Japanese Journal of Psychology, 80*(4), 339-344. [in Japanese]

Tsukawaki, R, Higuchi, M, & Fukada, H. (2011). Process effects of expression of humor on anxiety and depression. *The Japanese Journal of Experimental Social Psychology, 51*(1), 43-51. [in Japanese]

Ueshiba, K, (1957). 合気道とは何か. In Ueshiba, M (Ed.), 合気道, pp. 23-27. [in Japanese]

Wakashima, K. (1999). *A study of mechanism that causes “evasive communication “in conflicted conversation scenes: The key to solve the situation where disqualification occurs*. Graduate School of education, Tohoku University, Doctoral thesis. [in Japanese]

Wakashima, K, Ikuta, M, & Hasegawa, K. (1999). A study of Trans-contextual Communication in the Scene of Conflicting Conversation: The confirmation and modification of the problem-interaction model. *Japanese Journal of Family Therapy, 16*(3), 187-195. [in Japanese]

Wakashima, K, Ikuta, M, & Hasegawa, K. (2000). Incongruent Message and Disqualification in Conflict Situations: A Clinical Psychological Research on Double Bind Theory. *Japanese Journal of Counseling Science, 33*, 148-155. [in Japanese]

Watzlawick, P., Weakland, J. H., & Fish, R. (1974). *Change: Principles of problem formation and problem resolution*. New York: W. W. Norton.

Yamamoto, K. (2012). 第三者の存在が会話中の表情に及ぼす影響—表情の時系列的変化の検討—*Japanese Journal of Research on Emotions Proceedings of the 20th Annual Meeting, 20 Supplement, 39.*
Yamamoto, K. (2013). Emotional communication in the presence of an observer: The effect of personal relationships between observer and dyad. *The Japanese Journal of Research on Emotions*, 21(1), 19-27. [in Japanese]

Yoshida, K. (2012). 日本語版ユーモアスタイル質問紙の作成. *The Japanese Journal of Laughter and Humor Research*, 19, 56-66. [in Japanese]

Yoshida, K, & Amemiya, T. (2009). Attempts to measure aggressive humor behaviors based on triangle relations of Joker, Target, and Audience: A longitudinal study in university freshman. *The 73rd Annual Convention of the Japanese Psychological Association Proceedings*, 55. [in Japanese]

Yoshida, T, & Nakatsugawa, T. (2013). Effects of relational goal on interpersonal conflict management: An approach-avoidance analysis. *The Japanese Journal of Experimental Social Psychology*, 53(1), 30-37. [in Japanese]

Ziv, A. (1984). *Personality and Sense of Humor*. New York: Springer Publishing Company, Inc.