

## Development of a Behavioral Scale toward People Who Fail at “Taking a Hint” and a Test of its Reliability and Validity

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**Abstract:** This study aimed to develop a behavioral scale toward other people who fail at “taking a hint” and to test its reliability and validity. An internet survey was conducted with 419 university students ( $M=20.80$  years,  $SD=1.85$ ). The results indicated that the scale had a six-factor structure: Jeer / Tease, Criticize, Follow Along, Ignore, Avoid, and Gossip. Validity was examined in terms of both content and convergence. Reliability was tested in terms of internal consistency, factor invariance, and temporal stability. The results indicated the reliability and validity of the scale.

**Key Words:** “Taking a hint,” Japanese culture, group norm, behavior

### Introduction

The formation and maintenance of norms are essential to human group life (Kameda, 2015). The formation of group norms maintains order in the community and enables group members to lead a smooth social life (Fehr & Gächter, 2002). On the other hand, it also has a dangerous aspect: those who deviate from the group norm are attacked or excluded from the group (Silver, 1994). The type of norms emphasized in a society or group is said to depend on the cultural sphere to which the group belongs (Gelfand, Nishii, & River, 2006), and the group norms that people in Japan have been argued to emphasize are “Taking a hint” (Sato, 2002).

### “Taking a Hint” in Japan

“Taking a hint” is defined as “perceiving the desired behavior in a given situation from the social context, including the facial expressions and relationships of the people present, and behaving accordingly” (Koiwa, 2022). Behind Japanese people’s emphasis on “taking a hint” is their communication system that emphasizes social context. According to Hall (1976), there are two aspects of communication: content and social context. The weight of the ratio varies according to culture. Hall (1976) describes

Japan as an example of a “high context culture” in which social context is more important than content. However, some studies have criticized Hall’s (1976) theory (Cardon., 2008), as many attempts to directly model Hall’s (1976) high/low context theory have failed. However, there have been many cultural psychological studies comparing Western and Oriental people. For example, Kitayama & Ishii (2002) reported that Americans judge others’ emotions based on verbal information, whereas Japanese place more emphasis on auditory information. Kim & Sherman (2007) showed that Westerners prefer to express themselves more than Orientals, whereas Orientals place more importance on avoiding verbalizing their own thoughts. Furthermore, Ambady, Koo, Lee, & Rosenthal (1996) reported that Westerners varied their mode of expression depending on the content of the topic, whereas Orientals varied their mode of expression depending on the relationship between speakers. Thus, there is a wealth of evidence that indirectly support Hall’s (1976) theory that communication in Oriental communities, especially in Japan, emphasizes social context.

Most studies that have pointed out the importance of social context have examined it as a strategy for survival without being excluded from the group (Takahashi et al., 2009). On the other hand, it has recently been reported that Japanese have an aspect of expecting others to behave in a way that is sensitive to the facial expressions and emotions of others (Hashimoto, 2019). Therefore, it is assumed that “taking a hint” is emphasized in Japanese groups in a situation where social context-oriented communication,

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which was originally conducted on one’s own initiative, is now functioning as a group norm of what one has to do.

### **Problems and Vicious Cycles Related to “Taking a Hint”**

Nevertheless, the importance of “taking a hint” as an important norm in Japanese groups causes two problems. The first is the occurrence of aggressive behavior toward those who fail in “taking a hint.” Studies of group norms show that Japanese tend to be intolerant to deviators as they call *Yosomono* (Stamkou et al., 2019; Sato, 2001). In addition, Japanese communities try to maintain a group by actively removing any person who disturbs its order (Setagawa, 2002). In fact, people who fail at “taking a hint” tend to be criticized or excluded in Japanese school settings (Doi, 2008; Naito, 2009). The second problem is that “taking a hint” has become an object of feared. Many Japanese people have difficulties in relationships due to fear and anxiety, or interpersonal fear (Shimizu and Kaizuka, 2002). Furthermore, because Japanese people tend to reject new group members, exclusion from a group is more damaging in Japan than in other countries (Sato, 2002). Therefore, Japanese adolescents are concerned about how they are perceived by those around them and whether they will be judged as failing at “taking a hint” (Koiwa and Komatsu, 2020).

When such social problems are viewed from the perspective of brief therapy, it is necessary to focus on the coping behavior toward the person who failed in “taking a hint.” In the systems theory of brief therapy and communication theory, when problems occur in the interpersonal system, some kind of coping is done (Hasegawa, 1997). This coping is called “first order change” or “false resolution,” and is assumed to function in a direction that causes a vicious cycle and exacerbates the problem (Watzlawick et al, 1967; Hasegawa, 1997). Applying the theory of brief therapy to “taking a hint,” the following situations can be envisioned. First, in Japanese groups, the system is maintained by mutual “taking a hint,” and failure leads to fluctuations in the system. Therefore, group members are expected to take all types of measures in response to the failure. A vicious cycle is assumed as failures and coping becomes patterned, e.g., aggressive coping escalates and becomes problematic as bullying, or the binding force of “taking a hint” as a group norm becomes stronger. Therefore, based on the theory of brief therapy, it is important to understand how the other group members react toward the person who fails in “taking a hint.”

### **Failure in “Taking a Hint” and the Communication Label**

The present study is a psychological investigation of the behavior toward a person who fails in “taking a hint.” Because “taking a hint” is a norm determined by the social context, it is necessary to control the assumed social context in order to conduct the investigation. In previous studies, many situations have been created and examined in

which people are judged to have failed in “taking a hint.” First, Oishi (2009) investigated situations in which many Japanese adolescents believed that they failed in “taking a hint.” According to the study, modern adolescents perceive scenes in which only one person seems to be having fun and not listening to the serious discussions of the group members as a failure in “taking a hint.” Next, based on Oishi’s (2009) findings and Bateson’s (1972) theory of communicative labels, Koiwa et al. (2020) examined situations in which many adolescents judged that they failed in “taking a hint.” According to Bateson (1972), we assign labels to our communication: for example, “this is a playful interaction,” “this is a serious (non-playful) interaction,” and so on. The sender of the communication chooses a posture, gesture, facial expression, voice inflection, etc., that the receiver can label appropriately. According to Bateson’s (1972) theory, the receiver of the communication instantly labels whether the communicative intent of the sender is playful or non-playful (serious), based on the social context of the conversation and the non-verbal utterances of the sender. Using Bateson’s (1972) theory, Koiwa et al. (2020) attempted to control the social context for a scene. Specifically, they set up four scenes in which playful and non-playful interactions occurred in a friend group, and one of the group members failed to read the implied communication labels correctly. The results showed that more than 90% of the adolescents judged each of the words and actions as a failure in “taking a hint” and over 90% of the adolescents judged each behavior as a failure in “taking a hint.”

### **Behavior toward Others Who Fail in “Taking a Hint”**

Previous studies have examined attacks and punishments against people who deviate from group norms. First, Molho et al. (2020) investigated words and actions considered inappropriate in daily life as behavior deviating from the norm and clarified the aspects of punishment. The results suggest there are two forms of punishment for such a person: direct and indirect attacks (Molho et al., 2020). In addition, Molho, Twardawski, and Fan (2020) examined the relationship between the severity of punishment and aggressive behavior and found that direct punishment was a more severe form of punishment.

There have also been several studies on the behaviors toward the person who failed in “taking a hint.” First, Oishi (2009) conducted an exploratory study on the behaviors that Japanese adolescents choose to exhibit toward a person who failed in “taking a hint,” based on a free-description survey of Japanese adolescents. Based on Oishi’s (2009) study, Komatsu and Koiwa (2019), itemized behaviors toward a person who failed in “taking a hint,” and factor analysis revealed three factors of the behaviors: Mention, Ignore, and Follow Along. After making modifications to the items in Komatsu and Koiwa (2019), Koiwa et al. (2020) conducted a factor analysis of the behaviors toward

a person who failed in “taking a hint” and extracted four factors: Jeer / Tease, Criticize, Follow Along, and Ignore. Furthermore, Koiwa and Wakashima (2021) conducted a factor analysis of the behaviors after adding items related to Gossip and Avoid to the four factors of Koiwa et al. (2020); subsequently, six factors were identified: Jeer / Tease, Criticize, Follow Along, Ignore, Avoid, and Gossip.

### Study Purpose

As previously discussed in this paper, “taking a hint” is the social norm at the center of Japanese people’s closed interpersonal relationships. When the problems occurring in the Japanese group are viewed from a brief therapy perspective, it is important to measure the behavior of group members toward those who fail to “take the hint.” Consequently, conventional studies have examined situations in which people determine that they failed in “taking a hint” and the behaviors of these people. However, the following three points remain unaddressed. The first is the need to create a definitive measurement tool for behaviors associated with failure in “taking a hint.” The items used in previous studies varied and were revised in order to determine the appropriate number of factors. The second is the need to examine the validity of the tool. It was not confirmed in previous studies whether each item appropriately measured the behavior toward the person who failed in “taking a hint,” and there was a lack of procedures for examining the validity of the scale. The third is the need to examine the aspects of punishment. In existing studies of group norms, behaviors based on the perception of inappropriateness are considered punishments for deviant individuals (Molho et al., 2020). The severity of punishment has also been examined (Molho et al., 2020). Research is necessary to examine the behavior toward a person who failed in

“taking a hint” and their viewpoint regarding recognition of inappropriateness and the severity of punishment.

The purpose of this study was to develop a scale for behaviors toward others who fail in “taking a hint.” First, the items based on Koiwa and Wakashima’s (2021) six factors of Jeer / Tease, Criticize, Follow Along, Ignore, Avoid, and Gossip were created, and the factor structure and items included in the scale were determined based on factorial validity. Next, the reliability of the scale was examined in terms of its internal consistency and temporal stability. In addition, the validity of the scale was examined in terms of content and convergent validity. Then, the relationships between the perceptions of inappropriateness and necessity of severe punishment and each behavior were examined, as were the characteristics of each punishment.

### Study Hypothesis

Because content and convergent validity were examined in this study, it was necessary to first define each behavior and discuss the variables that are expected to be theoretically relevant in the scale. The definition of each factor is shown in Table 1.

First, based on humor studies (Maki, 2008; Keltner et al., 2001), we defined Jeer / Tease as an act of provoking or attacking another person verbally, while showing that this is a playful interaction through nonverbal means, such as facial expressions, tone of voice, and gestures. In addition, a scale exists to measure a person’s humor orientation in which “teasing” is classified as aggressive humor (Ueno, 1992). Therefore, it is predicted that those who have an aggressive humor orientation often choose Jeer / Tease as a way to respond to a person who fails at “taking a hint.”

Second, based on Koiwa et al. (2020), Criticize was defined as the act of directly referring to the negative feel-

**Table 1** Predicted factors and their definitions.

Predicted Factors	Definition	Example Item
Jeer / Tease	The act of provoking or attacking another person verbally, while showing that this is a playful interaction through nonverbal means, such as facial expressions, tone of voice, and gestures.	Teasing A directly on the spot.
Criticize	The act of directly referring to the negative feelings or thoughts one has toward another in order to convey them to the person.	Directly pointing out that A’s statement is not appropriate.
Follow Along	The act of behaving so that others can understand the position and circumstances of a person.	Casually telling other friends that A may have had their own circumstances or reasons for behaving as they did.
Ignore	The act of actively avoiding involvement with the person who failed in “taking a hint” in the situation.	Ignoring A’s comments on the spot.
Avoid	The act of continuing to actively avoid involvement with the other even after the scene ends.	Even after that, trying not to talk to A by oneself.
Gossip	The act of talking maliciously or defamatory without the person in question being present.	Talking about A behind their back.

ings or thoughts one has toward another in order to convey them to the person. It is assumed by Molho et al. (2020) that to Criticize a person who failed in “taking a hint” corresponds to direct aggression. Research on aggressive behavior has identified two types of human aggression: extrinsic aggression and relational aggression (Isobe et al., 2007). Direct aggression is assumed to be related to the extrinsic aggression tendency (Isobe et al., 2007). (Isobe et al., 2007). Criticism is also considered to require assertion, and in particular, self-assertion ability (Harada, Yoshizawa, & Yoshida, 2007). Therefore, it is assumed that adolescents with high self-assertion ability often choose Criticize.

Based on Sugiman (2013), we defined Follow Along as the act of behaving so that others can understand the position and circumstances of a person. In studies on conflict, it has been reported that those who are highly cooperative are able to forgive their opponents (Fukumoto et al., 2019). On the other hand, cooperativeness has three aspects: cooperative problem solving, cooperation orientation, and harmony orientation, but cooperative problem solving indicates cooperativeness in the social context of conflict situations (Tobari et al., 2019). Therefore, it is speculated that adolescents with a high propensity for cooperative problem solving will choose to Follow Along.

Next, we defined Ignore and Avoid. Based on Eriksson et al. (2021), Ignore was defined as the act of actively avoiding involvement with the person who failed in “taking a hint” in the situation, and Avoid was defined as the act of continuing to actively avoid involvement with the other even after the scene ends. In normative research, deviators from the norm are regarded as “alien others” in the group (Silver, 1994). In addition, the tendency to refuse involvement with heterogeneous others is called the heterogeneous rejection tendency and has been examined psychologically (Kosaka, 2010). Therefore, adolescents who have a tendency to reject others are thought to be more likely to Ignore or Avoid others.

Finally, based on Eriksson et al. (2021), we defined Gossip as the act of talking maliciously or defamatory without the person in question being present (Eriksson et al., 2021). Since Gossip is a kind of relational attack (indirect attack) (Archer & Coyne, 2005), it is assumed to be related to relational aggression (Isobe et al., 2007). Therefore, it is predicted that the relational aggression of the sender is positively correlated with Gossip.

## Method

### Procedure

We recruited the participants through a crowdsourcing service. Among the monitors owned by Crowd Works, a crowdsourcing service provider in Japan, we recruited university, vocational school, short-term university, and graduate students between the ages of 18 and 24.

In this study, we examined the behavior of a person who

failed at “taking a hint” by using the assumptions of the scene method (Koiwa et al., 2020). The first questionnaire used a scene in which A did not listen to the conversation and the second questionnaire used a scene in which A made the situation worse. Participants who were presented with the first questionnaire were included in Sample 1 (hereinafter referred to as S1), and those who were presented with the second questionnaire were included in Sample 2 (hereinafter referred to as S2).

To examine temporal stability, this survey was conducted twice. Those who responded to the survey at Time 1 (hereafter referred to as T1) were followed up one month later at Time 2 (hereafter referred to as T2).

### Subjects

In T1, 208 students in S1 and 211 students in S2 participated in the survey, totaling 419 students (201 males, 215 females, 3 gender non-responses,  $M=20.80$  years,  $SD=1.85$ ). There were 39 students in S1 and 49 students in S2 who participated in T2, totaling 88 students (32 males, 55 females, one gender non-response,  $M=20.75$  years,  $SD=1.46$ ). The participants were paid an honorarium after confirming that there was no duplication of responses in S1 and S2 and that the survey was completed correctly. The gratuities were JPY 100 for T1 and JPY 60 for T2.

### Survey Period

The survey was conducted between October and December 2021, including T1 and T2.

### Survey Contents

**Aggressive Humor Orientation** We measured respondents’ aggressive humor orientation as a convergent validity measure of Jeer / Tease. The Aggressive Humor Orientation Scale (Ueno, 1993) was used in the survey; the measure consists of eight items and respondents were asked to answer using a 5-point scale from 1 (Not applicable) to 5 (Applicable).

**Aggression** The aggression of the respondents was measured as a convergent validity measure for Criticize and Gossip. An aggression scale used in previous research was used in the survey (Isobe and Hishinuma, 2007); the scale consists of two subfactors, external aggression and relational aggression, with 19 items that participants were asked to rate using a 5-point scale from 1 (Not at all applicable) to 5 (Frequently applicable).

**Self-assertion** As a measure of convergent validity for Criticize, we measured respondents’ self-assertiveness. Self-assertion, a subscale of the Social Self-Control Scale (Harada et al., 2008) was used in the survey; the scale consists of 13 items, and respondents were asked to rate them using a 5-point scale from 1 (Not at all applicable) to 5 (Frequently applicable).

**Cooperative Problem Solving** As a measure of the convergent validity for Follow Along, we measured the

respondents' cooperativeness. Cooperative problem solving, a subscale of the Multidimensional Cooperativeness Scale (Tobari et al., 2019), was used in the survey; it consists of six items and respondents were asked to answer using a five-point scale from 1 (Not at all true) to 5 (Often true).

**Tendency to Reject Heterogeneous Others** We measured respondents' tendency to reject heterogeneity as a measure of convergent validity of Ignore and Avoid. The tendency to reject otherness, a subscale of the Attitude toward Otherness Scale (Kosaka, 2010) was used in the survey; it consists of 11 items, and respondents were asked to answer using a 5-point scale from 1 (Not at all applicable) to 5 (Very applicable).

**About A** In the survey, the person who failed at "taking a hint" was designated as "A." As in Koiwa et al. (2020), participants were instructed, "A is the same gender as you. A is a member of a group of friends with whom you are working, and you have known them for about six months. You talk to A when you are with your friends, but you rarely talk to them alone."

**Failure in "Taking a Hint"** We used the assumptions of the scene method to examine the situation. Consistent with Koiwa et al. (2020), we presented "a scene in which A did not listen to the conversation" for S1 and "a scene in which A made the situation worse" in S2 (Table 2).

**Behavioral Scale toward People Who Fail in "Taking a Hint"** We developed 42 items to measure behavior toward people who fail at "taking a hint," based on Komatsu and Koiwa (2019), Koiwa et al. (2020). Participants were asked to answer on a 6-point scale from 1 (Not at all) to 6 (Very much) for each item.

**Aspect of Punishment** In order to examine the punishment aspect of each behavior, the participants were asked to respond to two questions regarding their perceptions of inappropriateness and severity of the punishment. The first two questions were about inappropriateness and respondents answered using a scale ranging from 1 (I do not think it is inappropriate at all) to 6 (I think it is very inappropriate). Next, regarding the severity of the punishment and based on Molho et al. (2020), we asked, "Do you think that A should be punished severely?" and respondents answered using a six-point scale from 1 (Totally disagree) to 6 (Very much agree).

**Manipulation Checks** Three manipulation checks

were conducted from three perspectives: 1) whether the participants were able to imagine A, 2) whether the participants were able to imagine a situation in which A had failed at "taking a hint," and 3) whether the participants judged A's words and actions as incapable of "taking a hint." Respondents answered all three questions using a six-point scale from 1 (Not at all) to 6 (Very much).

Then, the Instructional Manipulation Check task (hereinafter referred to as the IMC task) created by Masuda, Sakagami, and Morii (2019) was used to select the defective responses. This task was created to detect respondents who answered without properly reading the instructions. In the task, the instruction "Do not choose any option and proceed" is hidden in the instruction text, and the respondent is required to click the button labeled "Next" without answering the item.

### Ethical Considerations

At the beginning of the survey, we clearly stated the purpose of the survey, that consent was based on the individual's free will, that the survey would be conducted anonymously, and that no personal information would be given to outside parties. This study was approved by the Research Ethics Review Committee, Graduate School of Education, Tohoku University (Approval No: 21-1-040).

## Results

### Selection of Analysis Targets

Responses for seventeen respondents detected by the IMC task were excluded from the analysis. Next, 56 respondents who answered that they "Not at all," "Not," or "Not so much" could imagine the person who failed in "taking a hint" or the scene where it occurred were excluded. In addition, we excluded the responses for 25 respondents who answered "rather agree," "agree," or "very much agree" to the item "Do you feel that A's words and actions are capable of 'taking a hint'?" Responses for the remaining 321 participants (S1: 165, S2: 156, 155 males, 164 females, two gender non-respondents,  $M=20.68$ ,  $SD=1.91$ ) were included in the analysis.

### Item Selection and Factorial Validity

To examine the factorial validity and items included in

**Table 2** The two scenes presented in this study.

Present to S1: The scene in which A doesn't listen to you	During break time, you were talking with your "group of friends," when one friend said to you in a serious tone, "Actually, there is something that has been bothering me lately..." and told you about her recent problem. While all his friends were thinking of solutions to his problem with serious expressions, only A started to share his boastful story with a cheerful tone.
Present to S2: The scene in which A made a scene	During recess, your "group of friends" was chatting and laughing. The leader of the group made a joke about a past mistake. All the members of your "friend group" were laughing at the joke. However, only one person, A, did not laugh and said, "What's so funny?"

the scale, confirmatory factor analysis was conducted using AMOS (version 20.0) (Table 3). RMSEA of less than .10 and CFI of .90 or more were set as the acceptable range of goodness of fit. First, a model with a six-factor structure (Model 1) using all 42 items was created. Since the CFI was greater than .90, items were deleted from the model based on the standardized coefficients for each of the six factors. As a result, 17 items were deleted and a model with a six-factor structure was created using the remaining 25 items (Model 2). The results showed that RMSEA was less than .10, and CFI was greater than .90, which increased the goodness of fit.

Next, to examine the validity of the six-factor structure, it was compared with a model that assumed a five-factor structure. First, based on Komatsu and Koiwa (2020), in which Jeer / Tease and Criticize were assumed to be the same factor, we tested a model in which Jeer / Tease and Criticize were integrated to form five factors (Model 3). In addition, a correlation analysis of each factor was conducted (Table 4), and since the correlation between Gossip and Avoid was high, a five-factor model (Model 4) was created by assuming they belonged to the same factor. As a result, the fit of Model 2 was higher than that of Models 3 and 4, and it was confirmed that the Behavioral Scale for People Who Fail in “Taking a Hint” had a six-factor structure.

Finally, considering the correlations, a model with a covariance between the error variables of Item13 and Item19 was assumed (Model 5). As a result, the goodness of fit of Model 5 was the highest and was used as the final model in this study. The items in the final model and the standardized coefficients are listed in Table 5.

**Table 3** Factorial Validity Examination.

	GFI	AGFI	CFI	RMSEA
Model 1	.726	.693	.860	.075
Model 2	.850	.815	.918	.071
Model 3	.731	.672	.827	.103
Model 4	.717	.660	.831	.101
Model 5 (last model)	.863	.832	.923	.067

\* $p < .05$ , \*\* $p < .01$

**Examination of Content Validity**

To confirm the content validity of the items included in the scale, one clinical psychologist and four master’s course graduate students majoring in clinical psychology were asked to complete the questionnaire. The definitions of the items were presented and the respondents were asked to rate them on a four-point scale (1=not at all relevant, 2=not very relevant, 3=somewhat relevant, 4=very relevant). The items were selected for the survey if the ratio of the respondents who answered that they were related (“somewhat related” and “very related”) was four out of five. Consequently, all items included in the final model were adopted, and the items included in the scale were judged to have a degree of content validity.

**Review of Convergent Validity**

To test convergent validity, correlations with variables that were expected to be related were examined. The results showed that aggressive humor was positively correlated with Jeer / Tease ( $r = .45, p < .01$ ), assertiveness and extrinsic aggression were positively correlated with Criticize ( $r = .24, p < .01$ ;  $r = .23, p < .01$ ), relational aggression was positively correlated with Gossip ( $r = .39, p < .01$ ), cooperative problem solving was positively correlated with Follow Along ( $r = .20, p < .01$ ), and heterogeneity rejection tendency was positively correlated with Ignore and Avoid ( $r = .33, p < .01$ ;  $r = .40, p < .01$ ). Statistically significant correlations were found with each of the variables assumed to be theoretically related.

**Internal Consistency**

For each subfactor, Cronbach’s alpha coefficients were calculated. The reliability coefficients for T1 were  $\alpha = .92$  for Gossip,  $\alpha = .90$  for Criticize,  $\alpha = .88$  for Follow Along,  $\alpha = .88$  for Ignore,  $\alpha = .90$  for Avoid, and  $\alpha = .85$  for Jeer / Tease. The reliability coefficients for T2 were  $\alpha = .93$  for Gossip,  $\alpha = .90$  for Criticize,  $\alpha = .88$  for Follow Along,  $\alpha = .85$  for Ignore,  $\alpha = .92$  for Avoid, and  $\alpha = .87$  for Jeer / Tease.

**Invariance of the Factor Structure**

To confirm that the structure of the scale was consistent across the assumed situations, we examined the universality

**Table 4** Relationships among variables.

	Jeer / Tease	Criticize	Follow Along	Ignore	Avoid	Gossip	Inapprop riate	Severity
Jeer / Tease	-.	.37**	.09	-.01	.16**	.44**	.10	.08
Criticize		-.	-.04	-.03	.28**	.30**	.38**	.36**
Follow Along			-.	-.02	-.16**	-.07	-.32**	-.29**
Ignore				-.	.59**	.30**	.30**	.20**
Avoid					-.	.66**	.38**	.48**
Gossip						-.	.25**	.45**
Inapprop riate							-.	.44**
Severity								-.

\* $p < .05$ , \*\* $p < .01$

**Table 5** The behavioral scale toward people who fail at “taking a hint”.

	Factor name (T1/T2)	Standardized factor
<b>Jeer / Tease (<math>\alpha=.85/.87</math>)</b>		
(24)	Teasing A directly on the spot. その場で直接, A さんのことをからかう	.866
(6)	Jeering A directly on the spot. その場で直接, A さんのことをいじる	.741
(34)	Attacking A directly on the spot with a sense of humor. ユーモアを交えながら, その場で直接 A さんを攻撃する	.729
(18)	Making fun of A's comments on the spot. A さんの発言を, その場で茶化す	.719
<b>Criticize (<math>\alpha=.90/.90</math>)</b>		
(22)	Directly pointing out that A's statement is not appropriate. A さんの発言が適切でないと, 直接指摘する	.914
(32)	Telling A directly that their behavior is not good. A さんに直接, よくないと伝える	.868
(16)	Paying attention to A's comments directly and clearly. A さんの発言を, 直接はっきりと注意する	.832
(37)	Directly accusing A of wrongdoing. 直接, A さんの非をとがめる	.737
<b>Follow Along (<math>\alpha=.89/.88</math>)</b>		
(33)	Casually telling other friends that A may have had their own circumstances or reasons for behaving as they did. A さんにも事情があったのではないかと, ほかの友人たちにさりげなく伝える	.884
(40)	Casually telling other friends that A may not have had bad intentions. A さんには悪意がなかったのではないかと, ほかの友人たちにさりげなく伝える	.864
(23)	Casually telling other friends that A may have had some ideas for why they behaved as they did. A さんにも考えがあったのではないかと, ほかの友人たちにさりげなく伝える	.787
(38)	Making comments to other friends in defense of A. A さんを擁護するような発言を, ほかの友人たちに対してする	.669
<b>Ignore (<math>\alpha=.88/.85</math>)</b>		
(7)	Ignoring A's comments on the spot. その場の A さんの発言を無視する	.831
(1)	Pretending not to hear what A said at that moment. その場の A さんの発言が聞こえないふりをする	.691
(19)	Avoid mentioning A's comments as much as possible on the spot. A さんの発言に, その場で極力ふれないようにする	.654
(13)	Refraining from saying anything in response to A's comment. A さんの発言に対して, その場で何かを言うのを控える	.486
<b>Avoid (<math>\alpha=.90/.92</math>)</b>		
(30)	Even after that, trying not to talk to A by oneself. その後も, A さんに自分から話しかけないようにする	.853
(14)	Not inviting A to the next play date. A さんのことを次の遊びに誘わないようにする	.838
(20)	Even after that, treating A in an indifferent manner. その後も, A さんにそっけなく接する	.806
(35)	Even after that, trying not to react to A's words and actions. その後も, A さんの言動に反応しないようにする	.799
(22)	Even after that, consciously avoiding any relationship with A. その後も, A さんとの関わりを意識的に避ける	.721
<b>Gossip (<math>\alpha=.92/.93</math>)</b>		
(15)	Talking about A behind their back. A さんの陰口を言う	.878
(36)	Complaining about A in their absence. A さんのいないところで, A さんに関する愚痴を話す	.875
(31)	Talking about A's unfavorable characteristics in their absence. A さんのいないところで, A さんの好ましくないところについて話す	.871
(9)	Saying something ridiculous about A when they are not around. A さんのいないところで, A さんを馬鹿にするようなことを言う	.826

**Table 6** Results of simultaneous multi-population analysis.

	GFI	AGFI	CFI	RMSEA
Model 0: S1	.826	.789	.927	.066
Model 0: S2	.798	.753	.902	.078
Model I: Placement invariant model	.804	.764	.908	.052
Model II: Measurement invariant model	.798	.765	.905	.052

of the factor structure by conducting a multiple population analysis in which each group was subjected to confirmatory factor analysis (Table 6). First, deterministic factor analysis was conducted for each group in S1 and S2 (Model 0), for which different scenes were presented. The results showed that the degree of fit was acceptable in both groups and that the six-factor structure fit consistently, even in samples presented with different scenes. In addition, the influence indices of each factor on the observed variables were significant in both groups.

Next, we created a placement-invariant model that assumed that the factors are measured with the same observables, even if the populations are different (Model I). We also created a measurement-invariant model that assumed that the factor loadings on each observation variable were equal (Model II). The goodness of fit of both Model I and Model II was acceptable, with CFI above .90 and RMSEA below .10, but the discrepancy between the two models was significant ( $\chi^2(19)=34.64, p<.05$ ). Therefore, we adopted an allocation-invariant model and rejected the measurement-invariant model. This indicated that factor loadings differed across populations, although the factors were measured with the same observed variables even when the populations differed.

### Investigation of Temporal Stability

Correlation coefficients between the T1 and T2 scores, which were administered after 4 weeks, were calculated. The results showed a strong positive correlation between Jeer / Tease and Criticize ( $r=.70, p<.01$ ;  $r=.77, p<.01$ ), and a moderate positive correlation between Gossip, Ignore, Avoid, and Follow Along ( $r=.59, p<.01$ ;  $r=.49, p<.01$ ,  $r=.68, p<.01$ ;  $r=.59, p<.01$ ).

### Examining Aspects of Behavior as Punishment

To examine the punishment aspect of each behavior, the relationships between the perceptions of inappropriateness and severity of punishment were examined. For the perception of inappropriateness and behavior, a positive correlation was found with Criticize, Gossip, Ignore, and Avoid ( $r=.38, p<.01$ ;  $r=.25, p<.01$ ;  $r=.30, p<.01$ ;  $r=.38, p<.01$ ). Teasing showed no correlation, and Follow Along showed a negative correlation ( $r=-.32, p<.01$ ). Next, we examined the relationship between behavior and the perceived severity of the punishment given to a person who fails to read the situation. Positive correlations were found with Criticize,

Gossip, Ignore, and Avoid ( $r=.36, p<.01$ ;  $r=.45, p<.01$ ;  $r=.20, p<.01$ ;  $r=.48, p<.01$ ), respectively, and negative correlations were found with Follow Along ( $r=-.29, p<.01$ ).

### Consideration

This study focuses on the behavior toward those who fail in “Taking a hint,” from the perspective of brief therapy, in which the behavior by group members toward those who fail causes a vicious cycle. And the purpose of this study was to create the Behavioral Scale toward People Who Fail in “Taking a Hint” and examine the reliability and validity of the scale. The validity of the scale was examined from the viewpoints of factor, content, and convergent validity. First, from the results of confirmatory factor analysis, it was confirmed that the scale had a six-factor structure of Teasing, Criticize, Follow Along, Ignore, Avoid, and Gossip. Next, the results of judgments by a third party indicated that a high percentage of all items in the factors were consistent with the definition of each behavior. From these results, it was determined that this scale had a degree of content validity. Correlation analyses with other indices indicated that aggressive humor orientation was significantly related to Jeer / Tease, assertiveness and external aggression to Criticize, cooperative problem solving to Follow Along, heterogeneity rejection tendency to Ignore and Avoid, and relational aggression to Gossip. Although the correlation coefficients between “cooperative problem solving” and “Follow Along,” “assertiveness,” and “extrinsic aggression” and “Criticize” are low, the significant associations found between each of the variables assumed to be theoretically related, suggest that the scale has a certain degree of convergent validity.

Reliability was examined from three perspectives: internal consistency, invariance of the factor structure, and temporal stability. The alpha coefficients of each factor for T1 and T2 were .80 or higher, indicating satisfactory internal consistency. The reliability coefficients were sufficiently high, indicating that each item of the scale had internal consistency. The results of the simultaneous analysis of other populations for S1 and S2, which presented different situations, showed that the model that assumed that the factors were measured by the same observables was a good fit, even though the populations were different. Therefore, the evidence indicated that this scale is effective even when other situations judged to be failure of “taking



a hint” presented. Furthermore, the reliability of the scale was examined using a test-retest method, and a correlation between the two surveys was shown. The results indicated that the scale scores were stable over time.

In summary, these results indicated that the scale has validity (factorial, content, and convergent validity) and reliability (internal consistency, factorial invariance, and temporal stability).

### Traits of Behavior toward Someone Who Fails in “Taking a Hint”

Next, among the six factors, we examined behaviors that have aspects of punishment for the person who failed in “taking a hint.” Since a previous study (Molho et al., 2020) treated the behavior toward a deviant person as punishment based on the recognition that his or her words and actions were “inappropriate,” the present study examined the relationship between the recognition of inappropriateness and behavior. The results indicated that the four communicative behaviors—Criticize, Ignore, Avoid, and Gossip—were significantly related to the severity of punishment as well as the perception of inappropriateness. For the severity of punishment, the correlation coefficients from high to low were for Avoid, Gossip, Criticize, and Ignore. For the perception of appropriateness, the correlation coefficients from high to low were for Ignore, Avoid, Criticize, and Gossip. Notably, Avoid was more strongly related to the severity of punishment than Criticize. However, in terms of the perception of inappropriateness, both Avoid and Criticize were associated with the same level of punishment. In previous normative studies, the punishment assumed to be severe was direct aggression (Molho et al., 2020), but the results of the present study are inconsistent with those of previous studies. We speculate that this result was related to the closed nature of the Japanese community, in which intergroup mobility is likely to be disadvantageous, and exclusion from the group is considered significant (Takahashi et al., 2009). Therefore, indirect punishment may be more likely to be used as severe punishment than direct mention.

### Significance and Challenges of this Study

This study examined the issue of “taking a hint,” which is assumed to be a group norm emphasized by Orientals (especially Japanese). When the social problem of “taking a hint” was considered from the perspective of brief therapy, it was necessary to examine the behavior of those who failed to do so. In this study, a scale was developed to measure the behavior of those who failed at “Taking a hint.” In addition, validity was confirmed from the perspectives of both content and convergent validity, and reliability was examined from the perspectives of internal consistency, factor invariance, and temporal stability. The scale developed in this study may help to elucidate the strong binding force of “taking a hint” and the bullying phenomenon against those who fail

to do so.

On the other hand, several issues remain to be examined with this scale. The first relates to the limitations of the research method. In this study, the assumption method was used, consistent with Koiwa et al. (2020), to control for the behaviors that the respondents assumed to be failure in “taking a hint”. Second, the number of subjects in the study was limited. As most of the studies on which the present study was based were conducted with university students (Koiwa et al., 2020; Oishi, 2009), the present study also targeted university students who were friends in late adolescence. Third, it is necessary to examine cultural differences. The theoretical basis of this study is a communication system that emphasizes social context, a characteristic of Eastern cultures. In Eastern societies, there is abundant evidence that many group members engage in social context-oriented communication as a survival strategy (Kitayama & Ishii, 2002; Kim, 2002; Kim & Sherman, 2007; Ambady et al., 1996). However, there are no studies that directly show that Orientals expect other group members to “take a hint” and attack those who fail to do so, compared to Westerners. In addition, the results of the present study also showed that exclusion was used as a severe punishment, and the possibility was considered that this result is specific to closed Japanese communities. In order to examine whether the importance of “taking a hint” as a norm and aggression against deviators are phenomena unique to Japan, we hope that the present scale will be useful to other countries and be utilized in an international comparative study, thereby revealing important findings in comparative cultural psychology.

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