# Development of Japanese Measures of Reconciliatory Tendencies:The Japanese Trait Forgivingness Scale and the Japanese Proclivity to Apologize Measure

Ohtsubo, Yohsuke

Yamaura, Kazuho

Yagi, Ayano

(Citation)
社会心理学研究,31(2):135-142

(Issue Date)
2015

(Resource Type)
journal article

(Version)
Version of Record

社会心理学研究　第31巻第2号
２０１５年，135−142
http://dx.doi.org/10.14966/jssp.31.2_135

［資料論文（Report）］

# Development of Japanese Measures of Reconciliatory Tendencies: The Japanese Trait Forgivingness Scale and the Japanese Proclivity to Apologize Measure[1)]

Yohsuke OHTSUBO (*Kobe University*)
Kazuho YAMAURA (*Ritsumeikan University*)
Ayano YAGI (*Kobe University*)

Reconciliation processes are influenced by two important dispositional variables: (i) the victim's disposition to forgive the offender, and (ii) the offender's disposition to apologize to the victim. We translated extant English measures of each of these dispositions into Japanese using the back-translation method. We then examined the validity of the two resultant measures, the Japanese Trait Forgivingness Scale (J-TFS) and the Japanese Proclivity to Apologize Measure (J-PAM). Consistent with previous findings, J-TFS scores were correlated with agreeableness, neuroticism (inversely), and subjective well-being, while J-PAM scores were correlated with agreeableness and subjective well-being. Interestingly, these two reconciliatory tendencies were positively correlated with each other, even when controlling for agreeableness (*i.e.*, a preference for harmonious social relationships). In addition, two autobiographical recall studies (of actual instances of forgiveness and apology) confirmed the validity of these two measures. The J-TFS predicted the extent to which participants had forgiven a workplace offense inflicted by one of their co-workers, while the J-PAM predicted whether participants had apologized to their victims following a recent transgression.

Key words: forgiveness, Japanese Trait Forgivingness Scale (J-TFS), Japanese Proclivity to Apologize Measure (J-PAM), Transgression-Related Interpersonal Motivations Inventory (TRIM)

Occasional disputes are inescapable even within close relationships. Reconciliation is important not only because close relationships are associated with various beneficial effects, such as increases in subjective well-being and decreases in the risk of physical and mental health problems (Argyle, 1987; House, Landis, & Umberson, 1988), but also because unforgiveness (harboring grudges) itself is a stressful state, that is detrimental to one's health (Witvliet, Ludwig, & Vander Laan, 2001; Worthington, Witvliet, Pietrini, & Miller, 2007). Moreover, apology-making improves health outcomes by reducing self-condemnation and other negative feelings such as guilt and shame (Hall & Fincham, 2005, 2008). Since offenders' apologies are a major determinant of their victims' forgiveness, an integrative approach to research on forgiveness and apologies seems imperative (Ohtsubo, 2015). To this end, this research developed Japanese versions of the Trait Forgivingness Scale (TFS: Berry, Worthington, O'Connor, Parrott, & Wade, 2005) and the Proclivity to Apologize Measure (PAM: Howell, Dopko, Turowski, & Buro, 2011; Howell, Turowski, & Buro, 2012).

1) We are grateful to Jack Berry, Andrew Howell, Michael McCullough, and Everett Worthington for their kind permissions to report the Japanese versions of their measures. We also thank Adam Smith and Molly Vallor for their invaluable assistance. This research was generously supported by grants from the John Templeton Foundation and the Japan Society for the Promotion of Science to Yohsuke Ohtsubo (JSPS KAKENHI Grant No. 26590132) and to Kazuho Yamaura (JSPS KAKENHI Grant No. 23730593). Some variables included in the questionnaire of Study 1 are not reported in the article. The full results including all variables are reported as supplementary materials of this article at the Kobe University Repository (http://www.lib.kobe-u.ac.jp/kernel/).

## Forgiveness and Trait Forgivingness

Forgiveness (*i.e.*, the act of forgiving someone) is defined as a psychological process involving a suite of motivational changes that culminate in positive, prosocial states (McCullough, Bono, & Root, 2007). For example, forgiveness entails the replacement of negative emotions with positive, other-regarding emotions (Worthington, 2005). Although forgiveness is strongly influenced by external/situational factors, such as the severity of a transgression and the presence/absence of an apology (see Fehr, Gelfand, & Nag, 2010, for a meta-analytic review), people also differ in their inherent disposition to forgive others (*e.g.*, Berry *et al.*, 2005; Mullet, Houdbine,

Laumonier, & Girard, 1998). Roberts (1995) coined the term, *forgivingness*, to refer to such a forgiving disposition.

There are several scales designed to measure trait forgivingness: Some of them assume that trait forgivingness is a single-factor construct (*e.g.*, Berry *et al.*, 2005; Brown, 2003), while others assume it is a multifactor construct (*e.g.*, Kato & Taniguchi, 2009; Mullet *et al.*, 1998). Of the various available measures, this study chose to focus on Berry *et al.*'s single-factor Trait Forgivingness Scale (TFS), which consists of 10 items. Carmody and Gordon's (2011) autobiographical recall study recently showed that TFS scores predict the extent to which participants had forgiven a betrayal (*e.g.*, infidelity, lying) by a relationship partner. Of note, acts of forgiveness in this study were measured by the Transgression-Related Interpersonal Motivations inventory (TRIM; McCullough, Rachal, Sandage, Worthington, Brown, & Hight, 1998), which is one of most frequently used measures of forgiveness. Therefore, Carmody and Gordon's results speak to the validity of the TFS.

McCullough, Bellah, Kilpatrick, and Johnson (2001) theorized that forgiveness would be associated with two of the Big Five personality traits: agreeableness and neuroticism. Agreeableness is associated with prosocial orientation to others, and forgiving someone is an instance of a pro-social act. People high in neuroticism more readily experience negative affect in general, and anger toward someone's offense in particular. Supporting McCullough *et al.*'s conjecture, empirical research has found that trait forgivingness is positively correlated with agreeableness and negatively correlated with neuroticism (Allemand, Job, Christen, & Keller, 2008; Berry *et al.*, 2005; Brose, Rye, Lutz-Zois, & Ross, 2005; Steiner, Allemand, & McCullough, 2012). In addition, people high in trait forgivingness are happier and less depressive (Allemand, Hill, Ghaemmaghami, & Martin, 2012; Brown, 2003) possibly because they tend to have better interpersonal relationships (Lawler-Row & Piferi, 2006).

In our research, we developed a Japanese version of Berry *et al.*'s (2005) TFS, the Japanese Trait Forgivingness Scale (J-TFS; see Table 1).[2] We first examined whether the J-TFS would be positively correlated with agreeableness and subjective well-being, and negatively correlated with neuroticism (Study 1). In addition, by conducting an autobiographical recall study (Study 2), we tested whether the J-TFS would predict participants' level of forgiveness following a recent transgression by a co-worker.

**Proclivity to Apologize**

Compared to trait forgivingness, individual differences in willingness to apologize for one's wrongdoing have received limited attention. The Proclivity to Apologize Measure (PAM) is a recently developed measure of trait-level variation in the tendency to apologize (Howell *et al.*, 2011, 2012). In developing the PAM, Howell *et al.* (2011) theorized that proclivity to apologize would be positively correlated with agreeableness and neuroticism, as these personality traits are correlated with guilt-proneness (Einstein & Lanning, 1998). Proclivity to apologize was also expected to be associated with better interpersonal relationships, and thus with high subjective well-being. In addition, it was predicted that the PAM would be positively correlated with caring for the victim's well-being. These predictions were confirmed (Howell *et al.*, 2011).

In the same manner as with the J-TFS, we developed a Japanese version of Howell *et al.*'s (2011) PAM, the Japanese Proclivity to Apologize Measure (J-PAM; see Table 2). We examined whether the above pattern of correlations would be replicable in a Japanese sample (Study 1). Furthermore, we asked the same participants to recall an incident of their own interpersonal wrongdoing and report whether they had apologized to their victim (reported as Study 3 in Ohtsubo & Yagi, 2015). Correlating participants' J-PAM scores with their apology behaviors, we examined the validity of the J-PAM.

## Study 1

### Method

**Participants**　Participants were 192 Japanese undergraduates (84 males and 108 females) who responded to an e-mail advertisement of this study that guaranteed a monetary reward of 1,000 yen in exchange for one hour of participation. Mean age (standard deviation, hereafter abbreviated as *SD*) of the participants was 19.42 years old (2.06). The relatively large *SD* was due to one

2) There are already two Japanese measures of forgivingness, the Japanese Dispositional Forgiveness Scale (J-DFS; Ishikawa & Hamaguchi, 2007) and the Forgiveness of Others Scale (FOS; Kato & Taniguchi, 2009). The J-DFS includes items assessing self-forgiveness, as opposed to other-forgiveness, disposition. As a result, the DFS consists of 23 items, while the TFS consists of only 10 items. The FOS was designed to measure two aspects of forgivingness (the forgiving trait and the vengeful/grudge-holding trait), while TFS is a single-factor scale.

Table 1 The Japanese Trait Forgivingness Scale (J-TFS) and the Results of the Confirmatory Factor Analysis (CFA) and the Exploratory Factor Analysis (EFA).

| 以下の文章を読んで、それぞれの文章にあなたがどれくらい賛成するか、あるいは反対するかを評定して下さい。(1=とても反対、2=やや反対、3=どちらとも言えない、4=やや賛成、5=とても賛成) | | Estimated Path Coefficients (CFA) (1-factor) | Factor Loadings (2-factor EFA) | |
|---|---|---|---|---|
| | Japanese Items | | F1 | F2 |
| R | 私の親しい人たちは、私が根に持ってなかなか許さないタイプだと思っているだろう | −0.28 | −0.04 | **0.48** |
| | ほとんどどんなことがあっても、私は友人を許すことができる | 0.58 | **0.52** | −0.13 |
| R | 誰かにひどい扱いを受けたら、私は相手を同じように扱うだろう | −0.36 | −0.19 | **0.48** |
| | たとえ相手が自分がしたことについて罪の意識を感じていないとしても、私は相手を許そうとする | 0.51 | **0.51** | −0.02 |
| | 誰かに侮辱されても、私は通常それを許し、忘れることができる | 0.67 | **0.57** | −0.09 |
| R | 私は多くの対人関係で苦々しく思っていることがある | −0.16 | 0.14 | **0.58** |
| R | 誰かを許した後であっても、怒りがぶり返してくることがある | −0.20 | 0.18 | **0.74** |
| R | 家族や親友のようなどんなにいとおしい相手だったとしても、こういうことがあったら絶対に私には相手を許せないということがある | −0.23 | 0.02 | **0.47** |
| | 私は自分を傷つけた人をいつも許してきた | 0.70 | **0.87** | 0.18 |
| | 私は許しがちな人間だ | 0.76 | **0.83** | 0.11 |

"R" indicates the reverse-scoring items.

Table 2 The Japanese Proclivity to Apologize Measure (J-PAM) and the Result of the Confirmatory Factor Analysis (CFA).

| 次の文章にあなたはどれくらい賛成しますか。それとも反対しますか？(1=とても賛成、4=どちらとも言えない、7=とても反対) Japanese Items | Estimated Path Coefficients (CFA) (1-factor) |
|---|---|
| 他の人に対して過ちをおかしたとき、相手に謝るよりもむしろ、それはさほど悪くなかったかのように振る舞いがちだ | 0.87 |
| 悪い行いについて告白すると困ったことになるかもしれないので、あまり謝らない | 0.86 |
| 私が何をしたか誰にもわからないと思ったら、謝らないだろう | 0.68 |
| 謝らないことで、自分がしたいように振る舞い続けることができる | 0.81 |
| 自分を無能だと感じなくてよいように、あまり謝らない | 0.80 |
| 自分が悪いということを認めるのは嫌なので、私はめったに謝らない | 0.88 |
| 私が謝ると相手が私に対して優越感をもつので、謝るのは好きでない | 0.64 |
| 怒りがおさまらないので謝ることができないことがしばしばある | 0.67 |

45-year-old participant: mean age (*SD*) was 19.29 (0.90) without this participant.

**Materials** This study was conducted in combination with other unrelated studies. Participants first completed a questionnaire including various individual difference measures, and then engaged in several other tasks. The first questionnaire included the Newcastle Personality Assessor (NPA; Nettle, 2007), a two-item measure of subjective well-being, and the Moral Foundations Questionnaire (MFQ; Graham, Nosek, Haidt, Iyer, Koleva, & Ditto, 2011) along with the J-PAM (translated from Howell *et al.*, 2011) and the J-TFS (translated from Berry *et al.*, 2005). The MFQ was included to assay participants' caring for other's well-being. The Japanese ver-

Table 3　Descriptive Statistics for the Variables of Interest and the Correlation Matrix of these Variables ($N$=192).

| | Mean | (*SD*) | 1. J-TFS | 2. J-PAM | 3. A | 4. N | 5. O | 6. WB |
|---|---|---|---|---|---|---|---|---|
| 1. J-TFS | 2.95 | (.57) | | | | | | |
| 2. J-PAM | 5.26 | (.88) | .34*** | | | | | |
| 3. Agreeableness | 3.66 | (.64) | .36*** | .41*** | | | | |
| 4. Neuroticism | 3.69 | (.93) | −.33*** | −.02 | .07 | | | |
| 5. Openness | 2.71 | (.95) | .12 | −.00 | .02 | .18* | | |
| 6. Well-being | 3.65 | (.94) | .25*** | .21** | .20** | −.29*** | −.03 | |
| 7. Care (MFQ) | 3.58 | (.65) | .10 | .26*** | .39*** | .08 | −.01 | .07 |

* $p$<.05, ** $p$<.01, *** $p$<.001.

sions of the NPA and MFQ, as well as the TFS and the PAM, were developed by the present authors using the back-translation method.

***Trait forgivingness and proclivity to apologize*** The questions that comprise the J-TFS and the J-PAM are reported in Tables 1 and 2. The J-TFS was accompanied by a 5-point scale (higher scores indicate higher trait forgivingness). The J-PAM was accompanied by a 7-point scale (higher scores indicate a greater proclivity to apologize). The internal consistency of the J-TFS was slightly low in Study 1: Cronbach's $\alpha$ coefficient=.69 (but see Study 2). The J-PAM was associated with a reasonable level of internal consistency: Cronbach's $\alpha$ coefficient=.78. The J-TFS and J-PAM scores were obtained by averaging the responses to the relevant item. Therefore, the theoretical range of the J-TFS score was 1 to 5, while that of the J-PAM score was 1 to 7.

***Newcastle Personality Assessor and subjective well-being*** The NPA is a twelve-item measure of the five-factor personality traits (with two or three items for each trait). The NPA was followed by two subjective well-being items (*i.e.*, "In general, I consider myself a happy person," "Compared to most of my peers, I consider myself happy"), which were adopted, with some modification, from Shimai, Otake, Utsuki, Ikemi, & Lyubomirsky's (2004) Japanese Subjective Happiness Scale (SHS). The NPA and subjective well-being items were accompanied by a 5-point scale (1="very uncharacteristic" to 5="very characteristic").

Cronbach's $\alpha$ coefficients were reasonably high for neuroticism (.82) and subjective well-being (.85), but only modest for agreeableness (.44) and openness to experience (.58). We omitted extraversion (.27) and conscientiousness (.22) from the subsequent analyses due to their low reliability.

***Moral Foundations Questionnaire*** The MFQ was developed by Graham *et al.* (2011) to measure moral concerns in five moral domains. The primary interest of this study was its Care subscales, which measure respondents' concern for others' suffering and well-being. The MFQ has two sections. In the moral relevance section, respondents evaluate the moral relevance of several issues (*e.g.*, "whether or not someone suffered emotionally") from 0 (not at all relevant) to 5 (extremely relevant). In the moral judgment section, respondents rate their level of agreements with several contextualized moral judgments (*e.g.*, "compassion for those who are suffering is the most crucial virtue") from 0 (strongly disagree) to 5 (strongly agree). Each section consisted of three Care items. We averaged the responses to the six items to obtain the Care score (Cronbach's $\alpha$=.63).

***Autobiographical recall of interpersonal transgression*** Participants briefly described a recent instance of making someone angry. They rated the seriousness of their transgression on a 4-point scale and pre-transgression closeness to their victim using the Inclusion of Other in the Self scale (IOS scale: Aron, Aron, & Smollan, 1992). Participants were then asked whether they apologized to their victim. In this study, two participants did not recall any such events ($N$=190 for the analyses including this dichotomous apology-making variable).

**Results and discussion**

The descriptive statistics for the variables of interest, and the correlation matrix of those variables are shown in Table 3. The means (*SD*) of trait forgivingness were 2.98 (.58) for males and 2.93 (.61) for females, $t(190)<1$, *ns* (*cf.* the means for European American college students were 3.63 and 3.49 for males and females, respectively; the means for Asian American college students were 3.32 and 3.14 for males and females, respectively; Berry *et al.*, 2005). The means (*SD*) of proclivity to apologize were 5.11 (.81) for males and 5.39 (.92) for females. Females were slightly more likely to apologize than males, $t(190)=2.19$, $p=.030$. The comparative mean

for Canadian college students, not separated by sex, was 4.92 (Howell *et al.*, 2011).[3)]

The correlational pattern of the J-TFS was comparable with previous studies. Trait forgivingness was correlated positively with agreeableness and well-being, and negatively with neuroticism. The correlational pattern of the J-PAM partly deviated from the previous findings: the J-PAM was positively correlated with agreeableness, well-being and caring, but bore no correlation with neuroticism. In sum, the correlational pattern for the J-TFS and J-PAM was mostly comparable with previous studies. Interestingly, as shown in Table 1, J-TFS and J-PAM scores were positively correlated with each other ($r$=.34).

We finally examined whether the J-PAM would predict actual apology-making behavior. Proclivity to apologize was significantly correlated with the dichotomous measure of apology-making; the point-biserial correlation was .19, $df$=188, $p$=.008. The relatively weak correlation is understandable given that apology-making ought to be more strongly determined by external variables, such as transgression seriousness. A logistic regression analysis including the participants' sex, closeness to the victim, self-rated transgression seriousness as well as proclivity to apologize confirmed this conjecture. Although the strongest determinant of apology was transgression seriousness, $\beta$=.77 (standard error=.24), $p$=.001, proclivity to apologize remained significant even after controlling for these variables, $\beta$=.42 ($SE$=.21), $p$=.043 (*cf.* the effects of sex and closeness were not significant). This result confirms the validity of the J-PAM.

3) A series of confirmatory factor analyses with the robust maximum likelihood estimation method were applied to the J-TFS and J-PAM in order to test whether the previously reported single-factor structure would be found in the Japanese versions. For the J-PAM, the single-factor structure fitted the data modestly well: $\chi^2(20)=39.37$, $p$=.006, the Comparative Fit Index (CFI)=.93, RMSEA=.071, SRMR=.050 (see Table 2 for the path coefficients). On the other hand, the single-factor structure did not fit the J-TFS data (Studies 1 and 2 combined): $\chi^2(35)=256.56$, $p$<.001, CFI=.70, RMSEA=.112, SRMR=.096 (see Table 1 for the path coefficients). An exploratory factor analysis (EFA) using the promax rotation suggests that it has a two-factor structure (see Table 1 for the factor loadings). However, the two-factor structure might reflect some response biases because all the standard items loaded on the first factor, and all the reverse-scoring items loaded on the second factor (*cf.* Kato & Taniguchi, 2009). Therefore, in this study, we decided to adhere to the single-factor norm prescribed by Berry *et al.*'s original study.

## Study 2

### Method

Study 2 was conducted as a part of a larger internet-based survey. Respondents were 310 employees (155 males and 155 females) of Japanese companies. Their ages ranged from 23 to 68 (mean=46.52 years old, $SD$=12.05). The respondents recalled an incident in which they were offended or upset by one of their co-workers (either a supervisor or a subordinate). Among other measures, their state forgiveness at the time of the survey was assessed by the TRIM,[4)] and their trait forgivingness was assessed by the J-TFS. The J-TFS was associated with a reasonable level of internal consistency in Study 2 (Cronbach's $\alpha$=.78). The TRIM consisted of 18 items and assessed motivations of revenge, avoidance, and benevolence. A recent study revealed that this measure has a uni-dimensional structure (McCullough, Luna, Berry, Tabak, & Bono, 2010). Therefore, we averaged the 18 items to obtain the single index of forgiveness (Cronbach's $\alpha$=.89).

### Results and discussion

The mean ($SD$) of trait forgivingness were 2.89 (.47) for males and 2.84 (.62) for females, $t(287.00)=0.73$, *ns* (equal variance not assumed). A 2 (Study 1 [students] *vs.* Study 2 [company employees])×2 (sex) ANOVA revealed no significant effects of sample or sex, although the student sample (Study 1) was associated with a slightly higher level of forgivingness than the employee sample (Study 2), $F(1, 498)=3.35$, $p$=.068. We refrain from over-interpreting this marginally significant difference.

First, replicating the result of previous studies (Mullet *et al.*, 1998; Steiner *et al.*, 2012), trait forgivingness was positively correlated with age, $r$=.15, $df$=308, $p$=.007. Second and more importantly, trait forgiving-

4) We developed the Japanese version of TRIM using the back-translation method (see Appendix). There are two other Japanese versions of TRIM. One was developed by Hashimoto and Karasawa (2012). Examining the factor structure, they dropped seven items. Therefore, Hashimoto and Karasawa's TRIM has 11 items. There is an 18-item Japanese TRIM developed by N. Takata, which can be found in Michael McCullough's website (http://www.psy.miami.edu/faculty/mmccullough/). Not noticing Takata's version, we independently developed our version. In our impression, the three versions are similar to each other, and any one of the three versions is suitable for future studies.

ness was positively correlated with state forgiveness (*i.e.*, the extent to which the respondents had forgiven their co-worker's offense), $r$=.27, $df$=308, $p$<.001. This J-TFS×TRIM correlation remained significant ($\beta$=.28, $SE$=.06, $p$<.001) after controlling for the effects of age and sex. The effects of age and sex were not significant ($\beta_{age}$=−.05, $\beta_{sex}$=.06). These results confirmed the validity of the J-TFS.

## General Discussion

This research developed Japanese versions of two reconciliatory tendency measures: the J-TFS to measure the disposition to forgive others, and the J-PAM designed to measure the disposition to apologize. Consistent with previous studies, trait forgivingness was positively correlated with agreeableness and subjective well-being, and negatively with neuroticism among a Japanese sample. Moreover, the J-TFS predicted the respondents' actual forgiveness at the workplace, which can be considered as strong evidence for the validity of the Japanese TFS.

The J-PAM was positively correlated with agreeableness, subjective well-being, as well as moral concerns of care. These correlations were consistent with previous findings. However, the J-PAM was not correlated with neuroticism. The lack of this correlation might be due to collectivism in Japan. According to Einstein and Lanning (1998), neuroticism is associated with anxiety-based guilt. Transgressors in collectivistic cultures, however, might be more prone to feel anxiety regardless of their levels of neuroticism, because their behaviors starkly contradict the collectivistic value of social harmony (Triandis, 1995). Future studies involving samples from individualistic and collectivistic countries are needed to test this possibility.

An interesting finding of the present research was the positive correlation between trait forgivingness and proclivity to apologize. This correlation remained significant after controlling for agreeableness. In other words, the observed correlation cannot be accounted for by a general tendency to value harmonious relationships. Instead, there seems to be a more specific disposition to peacefully resolve interpersonal conflicts. However, the present study employed the NPA, a truncated measure, to assess the participants' personality traits. The author of this measure, Nettle (2007) himself recommended the use of longer measures to achieve greater validity. Therefore, whether the J-TFS×J-PAM correlation is robust and, if so, whether agreeableness, at least partly, accounts for this relationship should be investigated in future studies.

The present study did not examine whether trait forgivingness predicts health outcomes. One of the important reasons to study forgiveness/forgivingness is its relation to positive health outcomes (Worthington *et al.*, 2007). Although we showed that both trait forgivingness and proclivity to apologize are positively correlated with subjective well-being, it is important to investigate whether they are also related to positive health outcomes in the Japanese population. Furthermore, it is important to study what mechanisms may mediate the relationship between reconciliatory tendencies and positive health outcomes (Lawler-Row & Piferi, 2006).

Peaceful reconciliation is obviously important in the realm of interpersonal relationships. Moreover, it may even have beneficial effects on both physical and mental health. The present research developed two Japanese tools to measure reconciliatory dispositions (trait forgivingness and proclivity to apologize). It is our hope that these measures will be used in the future research to cultivate our understanding of Japanese reconciliatory processes and their cross-cultural similarities and differences.

## References

Allemand, M., Hill, P. L., Ghaemmaghami, P., & Martin, M. (2012). Forgivingness and subjective well-being in adulthood: The moderating role of future time perspective. *Journal of Research in Personality*, **46**, 32−39.

Allemand, M., Job, V., Christen, S., & Keller, M. (2008). Forgivingness and action orientation. *Personality and Individual Differences*, **45**, 762−766.

Argyle, M. (1987). *The psychology of happiness*. London: Methuen.

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, **63**, 596−612.

Berry, J. W., Worthington, E. L. Jr., O'Connor, L. E., Parrott, L., III., & Wade, N. G. (2005). Forgivingness, vengeful rumination, and affective traits. *Journal of Personality*, **73**, 183−225.

Brose, L. A., Rye, M. S., Lutz-Zois, C., & Ross, S. R. (2005). Forgiveness and personality traits. *Personality and Individual Differences*, **39**, 35−46.

Brown, R. P. (2003). Measuring individual differ-

ences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin*, **29**, 759–771.

Carmody, P. & Gordon, K. (2011). Offender variables: Unique predictors of benevolence, avoidance, and revenge? *Personality and Individual Differences*, **50**, 1012–1017.

Einstein, D. & Lanning, K. (1998). Shame, guilt, ego development, and the five-factor model of personality. *Journal of Personality*, **66**, 555–582.

Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin*, **136**, 894–914.

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, **101**, 366–385.

Hall, J. H. & Fincham, F. D. (2005). Self-forgiveness: The stepchild of forgiveness research. *Journal of Social and Clinical Psychology*, **24**, 621–637.

Hall, J. H. & Fincham, F. D. (2008). The temporal course of self-forgiveness. *Journal of Social and Clinical Psychology*, **27**, 174–202.

Hashimoto, T. & Karasawa, K. (2012). Victim and observer asymmetries in their reactions to an apology: How responsibility attribution and emotional empathy lead to forgiveness. *Japanese Journal of Experimental Social Psychology*, **51**, 104–117.

House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, **241**, 540–545.

Howell, A. J., Dopko, R. L., Turowski, J. B., & Buro, K. (2011). The disposition to apologize. *Personality and Individual Differences*, **51**, 509–514.

Howell, A. J., Turowski, J. B., & Buro, K. (2012). Guilt, empathy, and apology. *Personality and Individual Differences*, **53**, 917–922.

Ishikawa, M. & Hamaguchi, Y. (2007). Dispositional forgiveness and externalizing and internalizing problems: Junior and senior high school students. *Japanese Journal of Educational Psychology*, **55**, 526–537.

Kato, T. & Taniguchi, H. (2009). Development of the forgiveness of other scale. *Japanese Journal of Educational Psychology*, **57**, 158–167.

Lawler-Row, K. A. & Piferi, R. L. (2006). The forgiving personality: Describing a life well lived. *Personality and Individual Differences*, **41**, 1009–1020.

McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the Big Five. *Personality and Social Psychology Bulletin*, **27**, 601–610.

McCullough, M. E., Bono, G., & Root, L. M. (2007). Rumination, emotion, and forgiveness: Three longitudinal studies. *Journal of Personality and Social Psychology*, **92**, 490–505.

McCullough, M. E., Luna, L. R., Berry, J. W., Tabak, B. A., & Bono, G. (2010). On the form and function of forgiving: Modeling the time-forgiveness relationship and testing the valuable relationships hypothesis. *Emotion (Washington, D.C.)*, **10**, 358–376.

McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L. Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships: II. Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, **75**, 1586–1603.

Mullet, E., Houdbine, A., Laumonier, S., & Girard, M. (1998). Forgivingness: Factor structure in a sample of young, middle-aged, and elderly adults. *European Psychologist*, **3**, 289–297.

Nettle, D. (2007). *Personality: What makes you the way you are*. Oxford, U.K.: Oxford University Press.

Ohtsubo, Y. (2015). Understanding reconciliation from an evolutionary social psychological perspective: The valuable relationships hypothesis and a costly apology model. *Japanese Journal of Social Psychology*, **30**, 191–212.

Ohtsubo, Y. & Yagi, A. (2015). Relationship value promotes costly apology-making: Testing the valuable relationships hypothesis from the perpetrator's perspective. *Evolution and Human Behavior*, **36**, 232–239.

Roberts, R. C. (1995). Forgivingness. *American Philosophical Quarterly*, **32**, 289–306.

Shimai, S., Otake, K., Utsuki, N., Ikemi, A., & Lyubomirsky, S. (2004). Development of a Japanese version of the Subjective Happiness Scale (SHS), and examination of its validity and reliability. *Japanese Journal of Public Health*, **51**, 845–853.

Steiner, M., Allemand, M., & McCullough, M. E. (2012). Do agreeableness and neuroticism explain age differences in the tendency to forgive others? *Personality and Social Psychology Bulletin*, **38**, 441–453.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.
Witvliet, C. V. O., Ludwig, T. E., & Vander Laan, K. L. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology, and health. *Psychological Science*, **12**, 117–123.
Worthington, E. L. (Ed.) (2005). *Handbook of forgiveness*. New York: Routledge.
Worthington, E. L. Jr., Witvliet, C. V. O., Pietrini, P., & Miller, A. J. (2007). Forgiveness, health, and well-being: A review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. *Journal of Behavioral Medicine*, **30**, 291–302.
（2014年10月29日受稿，2015年5月19日受理）

## Appendix

Table A1　The Japanese Transgression-Related Interpersonal Motivations (TRIM) Inventory.

以下の質問では、あなたを傷つけた相手に対して、あなたが現時点でどのように考えているか・感じているかを答えてください。つまり、その相手についてあなたの今現在の感情を知りたいと思っています。あなたの現在の考え・感情をもっともよく表している数字に○をつけて下さい。

R　相手に仕返しするだろう
A　相手とできるだけ距離をおこうとしている
B　相手の行為は私を傷つけはしたけれど、相手に対して善意をもっている
R　相手に何か悪い事が起こればよいのにと思う
A　相手があたかも存在せず、自分の周りにいないかのように生活している
B　相手と仲直りをして前向きに関係を進展させたい
A　相手を信頼していない
B　相手がしたことによらず、もう一度よい関係を持ちたいと思う
R　相手にそれなりの報いを受けさせたい
A　相手に対して温かく接するのは難しく感じている
A　相手を避けている
B　相手は私を傷つけたけれど、そのことを忘れて、相手との関係を回復することができる
R　相手にしっぺ返しするつもりだ
B　傷ついた気持ちや怒りはもう水に流してしまった
A　相手と関係を断った
B　怒りの感情は消してしまったので、相手との関係を健全な状態に戻すように行動することができる
R　相手が傷ついたり惨めな思いをするところを見たい
A　相手とはもうかかわらないようにする

A: Avoidance Motivations, R: Revenge Motivations, B: Benevolence Motivations（1次元の尺度として利用する場合は、Avoidance項目とRevenge項目の得点を逆転して、Benevolence項目の得点と合成）
回答は5段階で測定（1=全く当てはまらない、2=当てはまらない、3=どちらともいえない、4=当てはまる、5=非常によく当てはまる）