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A Turkish version of Heartland Forgiveness Scale

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Abstract

The aim of the study was to adapt the Heartland Forgiveness Scale (HFS) developed by Thompson, Snyder, Hoffman, Michael, Rasmussen and Billings, (2005) into Turkish. In order to provide an evidence of reliability and construct validity of Heartland Forgiveness Scale (TVHFS), the internal consistency coefficient (Cronbach alpha), convergent validity and Confirmatory Factor Analyses were calculated for Turkish university sample. Internal consistency and convergent validity of TVHFS was found adequate for university sample. Results of the Confirmatory Factor Analyses (CFA) suggested that the slightly modified three factor structure of TVHFS was confirmed with the present data, indicating the cross-cultural equivalence of the TVHFS.

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1. Introduction

The concept of forgiveness has been investigated in social science in the last 20 years (e.g., Freedman & Enright, 1996; Girard & Mullet, 1997; McCullough, Pargament, & Thoresen, 2000; McCullough et al., 1998). More recently, family therapists, clinical and social psychologists and psychological counselors asserted a significant association between forgiveness and individuals' spiritual and mental well-being (Brown, 2003; Brown & Phillips, 2005; Maltby, Macaskill, & Day, 2001; McCullough & Witvliet, 2002). Furthermore, many investigations indicated the negative relationship with anger (Freedman & Enright, 1996; Thompson et al., 2005), rumination (Ysseldyk, Matheson, & Anisman, 2007) depression and anxiety (Maltby, Macaskill, & Day, 2001).

Many researchers developed a lot of different self-report measures in order to measure and study this concept. While some were developed to measure *nondispositional forgiveness* (e.g., Hargrave & Sells, 1997; McCullough et al., 1998; Subkoviak et al., 1995; Pollard, Anderson, Anderson, & Jennings, 1998), some were developed to assess *dispositional forgiveness* in order to measure individual's tendency to forgive other people (e.g., Berry, Worthington, Parrott, O'Connor, & Wade, 2001; Hebl & Enright, 1993; Mauger et al., 1992; Mullet, Houdbine, Laumonier, & Girard, 1998; Tangney, Fee, Reinsmith, Boone, & Lee, 1999). However, few of them have been interested in the multidimensional construct of forgiveness. One of which is *Forgiveness of Self and Forgiveness of Others Scales* (Mauger et al., 1992) which have two subscales to measure self and others forgiveness together. Another one is *Multidimensional Forgiveness Inventory* (Tangney et al., 1999) to assess tendency to forgive others and to ask for forgiveness from others and for self-forgiveness. Another recent measure is the *Heartland Forgiveness Scale (HFS)* was developed in order to assess the dispositional forgiveness in the multidimensional way. It consists of three subscales with six items each: *forgiveness of self*, *forgiveness of others*, and *forgiveness of*

situation. Higher scores on each subscale reflect a higher level of forgiveness in each domain. HFS has been reported to have adequate psychometric properties for university students in previous studies (Thompson et al., 2005). HFS correlated positively with cognitive flexibility, positive affect, and distraction, while it correlated negatively with rumination, vengeance, and hostility. Besides, HFS predicted four components of psychological well-being (anger, anxiety, depression, and satisfaction with life).

When Turkey is taken into consideration, there is very limited published research study exists about forgiveness. Furthermore, in the absence of a well-known Turkish version of forgiveness measures, very little is known about the process of forgiveness and the variables that may facilitate this process. Thus, translating and adapting the Heartland Forgiveness Scale into Turkish language and culture is quite important to understand and develop the multidimensional construct of forgiveness in relation to Turkish culture. Furthermore, HFS has been originally developed and used among English speaking countries. Therefore, testing cross-cultural equivalence of this scale can contribute understanding of cross-cultural similarities with the goal of stimulating research on the topic. For this reason, the aim of the study was to examine reliability, validity and the factor structure of the Turkish version of *Heartland Forgiveness Scale*.

2. Method

2.1. Participants

The present research was carried out with a sample of 376 (196 female, 180 male) students from different grade levels enrolled in different departments of Middle East Technical University, Turkey. Their mean age was 20.93 years ($SD = 1.55$). 96 participants (% 25.5) were freshmen, 99 (% 26.3) were sophomores, 86 (% 22.9) were juniors and 95 (% 25.3) were seniors students.

2.2. Instruments

2.2.1. *Heartland Forgiveness Scale* was developed by Thompson et al., (2005) to measure one's forgiveness level with 18 items. HFS is a 7-point Likert-type scale ranging from "almost always false than true" (1) to "almost always true of me" (7) HFS has three subscales; "forgiveness of self", "forgiveness of others", and "forgiveness of situation". Higher scores on each subscale reflect a higher level of forgiveness in each domain. The HFS has been reported to have adequate psychometric properties in previous studies (Thompson et al., 2005). Internal consistency alpha were found for forgiveness of self .75, for forgiveness of others .78, for forgiveness of situation .77 and for HFS overall .86 (Thompson et al., 2005).

In the first step of the current study, scale was firstly translated into Turkish by five counselors with PhD degree independently. Then the five translated versions of HFS were given to 3 academics at psychological and counseling department to choose the best fitting translation for each item. Next in order to ensure the equivalence of HFS in two languages, the Turkish translation of the HFS was given to two English language teachers with M.S. degree. After all modification made, a pilot study with the Turkish version of the scale was done on 20 university students. Some expressions were modified after the pilot study so that the questions were understood by as many subjects as possible.

2.2.2 A short version of the *Ruminative Response Scale* was formed by Treynor, Gonzalez, and Nolen-Hoeksema (2003) to remove the similar items of Beck Depression Inventory. It consists of 10 items from original list of 22. Internal consistency alpha were found for short version of RRS .85 (Treynor et al., 2003). The original version of RRS was translated into Turkish by Erdur (2002).

2.2.3. *The Satisfaction with Life Scale (SWLS)* was developed by Diener, Emmons, Larsen, and Griffin (1985) to measure global life satisfaction. The SWLS is a 5-item self-report measure. Each item is scored on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items are summed for a total score, which ranges from 5 (low satisfaction) to 35 (high satisfaction). Diener, Emmons, Larsen, and Griffin (1985) reported that the two-month test-retest correlation coefficient was .82, and the alpha coefficient was .87. Thus, the instrument has good psychometric properties. The Turkish version of the scale was developed by Köker (1991) who reported an internal consistency coefficient of .80, and a test-retest reliability coefficient of .85. The internal reliability coefficient was .84 for the present study.

2.3. Procedure

Before administering the instruments, necessary permissions were obtained from the METU University Human Subject Committee. Data for the pilot study were collected by researchers in September 2009 and data for main study were gathered in November 2009. All of the participants volunteered to participate in the study. The completion of the survey took approximately 10-15 minutes.

3. Results (Findings)

3.1. Descriptive analysis

Means, standard deviations, kurtosis, skewness, and a coefficient of the variables were presented in Table 1.

Table 1 Descriptive statistics of HFS, RRS and SWLS

	Mean	S.D.	Min	Max	Kurtosis	Skewness	α
Self	27.29	5.09	10	39	-.039	-.175	.64
Other	25.41	7.32	6	42	-.153	-.344	.79
Situation	27.20	6.72	9	41	-.336	-.304	.76
HFS overall	80.00	14.36	35	115	.509	-.264	.81
Rumination	21.73	5.29	10	41	.504	.523	.79
Life satisfaction	21.56	6.46	5	35	-.331	-.413	.84

3.2. Reliability

The internal consistency coefficient (Cronbach alpha) was calculated for the reliability of Heartland Forgiveness Scale. Cronbach's alpha for HFS overall was $\alpha = .81$, forgiveness of self subscale $\alpha = .64$, forgiveness of other subscale $\alpha = .79$, and forgiveness of situation subscale $\alpha = .76$, indicating adequate internal consistency.

3.3. Criterion-related validity

Pearson correlation coefficients were calculated for *convergent validity* of Heartland Forgiveness Scale. The correlation between Heartland Forgiveness Scale and The Satisfaction with Life Scale (SWLS) was indicated significantly high positive correlation between HFS overall and Life Satisfaction Scale (for self $r = .205$, $p = .00$; for other $r = .145$, $p = .00$; for situation $r = .381$, $p = .00$, and HFS overall $r = .324$, $p = .00$), indicating high forgiveness score. The correlation between Heartland Forgiveness Scale and the Ruminative Response Scale was indicated significantly high negative correlation between HFS overall and Ruminative Response Scale (for self $r = -.353$, $p = .00$; for situation $r = -.351$, $p = .00$, and total HFS $r = -.333$, $p = .00$), except of other subscale $r = -.085$, $p = .102$. Participants with a high rumination score tended to obtain high scores on the HFS (see Table 2).

Table 2 Correlation matrix of the HFS, RRS and SWLS

	1	2	3	4	5	6
Self	-					
Other	.150*	-				
Situation	.387*	.446*	-			
HFS overall	.621*	.774*	.831*	-		
Rumination	-.353*	.085	-.351*	-.333*	-	
Life satisfaction	.205*	.145*	.381*	.324*	-.441*	-

* $p < .001$

3.4. Confirmatory factor analysis (CFA)

Amos was used to perform confirmatory factor analysis. Maximum likelihood was the estimation method and covariance matrices were analyzed in order to test the original three-factor of the Heartland Forgiveness Scale. The fit of the model was evaluated using multiple criteria: Chi square/df ratio, the goodness of fit index (GFI), comparative fit index (CFI) and the root mean square error of approximation (RMSEA). The following criteria were

used to indicate goodness of fit: GFI and CFI .90 and higher, RMSEA .08 or lower and Chi-square/df ratio 3 or lower (Bentler, 1990; Bollen, 1989)

First of all, the original three factor model was evaluated. Results of the confirmatory factor analysis in this study indicated an inadequate model fit for original three factor structure of the Heartland Forgiveness Scale for Turkish sample [χ^2 (132) = 468.24, p = .00; χ^2 /df- ratio = 3.54; GFI = .86, CFI = .79, RMSEA = .08]. Therefore, modifications suggested by program were conducted. The new results showed a good fit for Turkish sample [χ^2 (124) = 289.49, p = .00; χ^2 /df- ratio = 2.33; GFI = .92, CFI = .90, RMSEA = .06]. The results suggested that the three factor structure of the Heartland Forgiveness Scale was confirmed with the present data, providing evidence for the construct validity of Turkish version of this scale.

4. Discussion

This study investigated the cross-cultural equivalence of Turkish version of the *Heartland Forgiveness Scale* in Turkish university students. For this aim, firstly a translation was made with the series of steps for ensuring equivalency of meaning and freedom from cultural bias. Then, the reliability, validity and the factor structure of Turkish version of the HFS were examined and the results of the analyses indicated that the Turkish version of HFS can be reliably used to measure forgiveness among Turkish students.

In terms of reliability of the scale, the scores on the Turkish version of HFS confirm good internal consistency reliability. Besides, in order to test convergent validity of Turkish version of HFS, the correlations were calculated between Heartland Forgiveness Scale, The Satisfaction with Life Scale (SWLS), and the Ruminative Response Scale (RRS). Consisted with the previous studies (Thompson et al., 2005), the results indicated significantly high positive correlation between HFS and SWLS and significantly high negative correlation between HFS and RRS. Therefore, internal consistency and convergent validity of Turkish version of HFS was found adequate for university sample.

Since there were clear a prior model established from previous literature, Confirmatory Factor Analyses (CFA) were calculated in order to test the original three-factor structure model of HFS proposed by Thompson et al. (2005). Results of the Confirmatory Factor Analyses (CFA) suggested that the slightly modified three factor structure of TVHFS was confirmed with the present data, indicating the cross-cultural equivalence of the TVHFS. Although many researchers developed a lot of different self-report measures in order to measure and study forgiveness, few well-known forgiveness measures exists in Turkey to assess the forgiveness. Thus, translating and adapting the Heartland Forgiveness Scale into Turkish language and culture is quite important to understand and develop the multidimensional construct of forgiveness in relation to this culture. Furthermore, the Turkish version of HFS can give an opportunity of cross-cultural researchers on forgiveness.

References

- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 238–246.
- Berry, J. W., Worthington, E. L. Jr., Parrott, L., III, O'Connor, L. E., & Wade, N. G. (2001). Dispositional forgiveness: Development and construct validity of the Transgression Narrative Test of Forgiveness (TNFT). *Personality and Social Psychology Bulletin*, 27, 1277-1290.
- Bollen, K. A. (1989). *Structural equations with latent variables*, Wiley, New York, NY
- Brown, R. P. (2003). Measuring individual differences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin*, 29, 759-771.
- Brown, R. P. & Phillips, A. (2005). Letting bygones be bygones: Further evidence for the validity of the tendency to Forgive Scale. *Personality and Individual Differences*, 38, 627-638.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Erdur, Ö. (2002). *Psychological reactions of Turkish earthquake survivors* [Electronic resource]. Doctoral dissertation, The University of Texas at Austin.
- Freedman, S. R. & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology*, 64, 983-992.
- Girard, M. & Mullet, E. (1997). Propensity to forgive in adolescents, young adults, older adults, and elderly people. *Journal of Adult Development*, 4, 209-220.
- Hargrave, T. D. & Sells, J. N. (1997). The development of a forgiveness scale. *Journal of Marital and Family Therapy*, 23, 41-62.
- Hebl, J. H., & Enright, R. D. (1993). Forgiveness as a psychotherapeutic goal with elderly females. *Psychotherapy*, 30, 658-667.
- Koker S (1991). *Comparing the level of the life satisfaction of the normal adolescents and adolescents with problems*. Unpublished doctoral dissertation. Ankara University, Ankara, Turkey.

- Maltby, J., Macaskill, A., & Day, L. (2001). Failure to forgive self and others: A replication and extension of the relationship between forgiveness, personality, social desirability and general health. *Personality and Individual Differences*, 30, 881-885.
- Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K. E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity*, 11, 170- 180.
- McCullough, M. E., Pargament, K. I. & Thoresen, C. E. (2000). *Forgiveness: Theory, research, and practice*. New York: Guilford.
- 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*, 73, 321-336.
- McCullough, M. E. & Witvliet, C. V. O. (2002). The psychology of forgiveness. In C. R. Snyder & S. Lopez (Eds.), *Handbook of Positive Psychology* (446-458). New York: Oxford University Press.
- Mullet, E., Houdbine, A., Laumonier, S., & Girard, M. (1998). “Forgiveness”: Factor structure in a sample of young, middle-aged, and elderly adults. *European Psychologist*, 3, 289-297.
- Pollard, M.W., Anderson, R. A., Anderson, W. T., & Jennings, G. (1998). The development of a family forgiveness scale. *Journal of Family Therapy*, 20, 95-109
- Subkoviak, M. J., Enright, R. D., Wu, C. R., Gassin, E. A., Freedman, S., & Olson, L. M., et al. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, 18, 641-655.
- Tangney, J., Fee, R., Reinsmith, C., Boone, A. L., & Lee, N. (1999, August). Assessing individual differences in the propensity to forgive. Paper presented at the annual meeting of the American Psychological Association, Boston.
- Thompson, L. Y., Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., & Billings, L. S. (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality*, 73, 313-359.
- Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research*, 27, 247-259.
- Ysseldyk, R., Matheson, K., & Anisman, H. (2007). Rumination: Bridging a gap between forgivingness, vengefulness, and psychological health. *Personality and Individual Differences*, 42, 1573-1584.