Psychometric properties of Turkish form of the Fear of Happiness Scale

Mutluluk Korkusu Ölçeği Türkçe Formu'nun psikometrik özellikleri

Murat Yildirim¹, Izaddin A. Aziz²

Abstract

The purpose of this study was to examine the psychometric properties of Turkish form of the Fear of Happiness Scale (FHS). After the linguistic equivalence of the scale was assured, reliability and validity analyses were performed. The factor structure of the scale was examined through exploratory factor analysis (N = 171) and confirmatory factor analysis (N = 171). The results indicated that FHS is unidimensional. The results also showed that the Turkish version of the FHS had Cronbach's alpha value of 0.86. In addition to this, Pearson product-moment correlation analysis revealed that the scale had acceptable evidence of criterion-related validity by negatively correlating with measures of Positive Affect, Life Satisfaction and Subjective Happiness and positively correlating with measure of Negative Affect. These findings indicated that Turkish version of the FHS can be used as a reliable and valid measure in Turkish culture. The findings also facilitate the improvement of the theoretical and empirical research on happiness and well-being.

Keywords: Fear of happiness, reliability, validity, exploratory factor analysis, confirmatory factor analysis

Özet

Bu araştırmanın amacı Mutluluk Korkusu Ölçeği'nin (MKÖ) Türkçe formunun psikometrik özelliklerinin incelenmesidir. Ölçeğin dilsel eşdeğerliği sağlandıktan sonra, güvenirlik ve geçerlik analizleri yapıldı. Ölçeğin yapı geçerliği açımlayıcı faktör analizi (N = 171) ve doğrulayıcı faktör analizi (N = 171) ile incelenmiştir. Sonuçlar, ölçeğin tek boyutlu olduğunu göstermiştir. Ayrıca, ölçeğin Türkçe formunun Cronbach alfa katsayısı 0.86 olarak saptanmıştır. Bunun yanı sıra, Pearson çarpım-moment korelasyon katsayısı analizi, Mutluluk Korkusu Ölçeği Pozitif Duygu Ölçeği, Yaşam Doyumu Ölçeği ve Öznel Mutluluk Ölçeği ile negatif korelasyonlar ve Negatif Duygu Ölçeği ile pozitif korelasyon göstererek, ölçüt bağıntılı geçerliğe ilişkin kabul edilebilir kanıtlara sahip olduğunu ortaya koymuştur. Bu sonuçlara göre, MKÖ Türkçe Formu Ölçeği'nin Türk kültüründe kullanılabilecek güvenilir ve geçerli bir ölçme aracı olduğunu göstermektedir. Elde edilen bulgular, mutluluk ve iyi oluş ile ilgili yapılacak teorik ve bilimsel çalışmaların geliştirilmesine olanak sağlamaktadır.

Anahtar Kelimeler: Mutluluk korkusu, güvenirlik, geçerlik, açımlayıcı faktör analizi, doğrulayıcı faktör analizi

Introduction

Joshanloo (2013) have recently presented a new psychological construct of happiness named *fear* of happiness. Theoretical context of this construct was derived from a wide range of domains including cultural, religious and superstitious beliefs. Fear of happiness has been conceptualized as relatively stable beliefs that might lead to negative outcomes. According to this conceptualization,

Received: 08.02.2017 Accepted: 10.08.2017 © The Journal of Happiness & Well-Being (JHW)

¹University of Leicester Department of Neuroscience, Psychology and Behaviour, Centre for Medicine, UK. E-mail: my109@le.ac.uk

²University of Leicester

individuals, who believe that experiencing of different positive emotions (e.g., happiness, joyfulness) have negative outcomes, may supress their authentic positive feelings to prevent undesirable outcomes (Joshanloo et al., 2014; Joshanloo, 2013; Joshanloo & Weijers, 2014; Joshanloo, 2014).

Joshanloo (2014) argued that there may a diverse range of reasons for possessing fear of happiness. These reasons can be classified into four main categories as follows: (i) being happy causes bad things to happen; (ii) being happy is morally understood as being a bad person; (iii) verbalizing happiness is not good for people; (iv) seeking for personal happiness is not good for someone.

Furthermore, Gilbert et al. (2012) provided similar evidence from a clinical sample in relation to why people endorse fear of happiness. According to Gilbert et al. (2012), people with mental health disorders such as depression, anxiety and stress do not necessarily experience positive emotions such as happiness and joy, but rather such positive emotions may be frightening for them. They maintained that past experiences of these positive feelings could have been resulted in unfavourable consequences. Therefore, people may averse to happiness because they believe "If you feel good you let your guard down" or "I worry that if I feel good something bad could happen". In addition, they found that fear of happiness were positively correlated to a range of psychopathological disorders including depression, anxiety and stress and negatively correlated with positive affect.

Joshanloo (2013) developed Fear of Happiness Scale (FHS) to measure the concept of fear of happiness. The scale is a brief five-item measure to assess the extent to which people averse to happiness, (e.g., I believe the more cheerful and happy I am, the more I should expect bad things to occur in my life).

The FHS was found to have good psychometric properties across different students samples from fourteen nations including South Korea, India, Kenya, Iran, Russia and Brazil (Joshanloo et al., 2014). Except India and Kenya, the scale had satisfactory internal consistency reliability with Cronbach's alpha ranging between 0.70 and 0.87 across twelve nations. In addition, structural validity of the scale has been tested in the same study. In thirteen nations, FHS indicated a single-factor structure by showing an excellent model fit statistics suggested through confirmatory factor analysis (CFA). However, CFA failed to yield a single-factor structure for Indian sample. The scale was established to predict life satisfaction at both individual-level and cultural-level. Furthermore, at the individual-level, the results suggested that fear of happiness measure was negatively related to life satisfaction and positively related to dampening. Similarly, at the cultural level, results suggested that fear of happiness measure was positively associated with verticality, conformity, societal cynicism and dynamic externality, and negatively associated with subjective well-being (Joshanloo et al., 2014).

In sum, although there is evidence indicating that FHS is a reliable and valid measure to assess the global idea that happiness, particularly to an excessive degree, causes unhappiness (Joshanloo et al., 2014; Joshanloo, 2013; Joshanloo & Weijers, 2014; Joshanloo, 2014), there is little empirical work verifying the reliability and validity of the scale in Turkish culture due to newly presented. In addition, in the Turkish literature, various self-report measure exists for both researchers and clinicians to assess happiness and well-being including Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) and Subjective Happiness (Lyubomirsky & Lepper, 1999). Yet, none of these measures intends to measure the beliefs associated to fear of happiness. Given the fact that there is a growing interest in happiness and well-being research in Turkey, it is necessary to adapt this measure into Turkish culture for use in various settings (e.g., counselling). Furthermore, it would also play an important role in developing of fear of happiness literature.

The purpose of this study was to evaluate the reliability and validity of Turkish adaptation of the FHS. To this end, given that FHS has a single-factor structure employed by Joshanloo et al. (2014), we first examined factorial validity of the scale using exploratory factor analysis and confirmatory factor analysis. In addition, we explored internal consistency reliability of the translated version of the FHS using Cronbach's alpha coefficient. Moreover, assuming that FHS is related to subjective well-being and life satisfaction, we hypothesized that FHS would also be correlated with Turkish translations of happiness measures (e.g., subjective happiness scale) to provide evidence of criterion-related validity of the scale.

Method

Participants

A Turkish community sample was selected for the present study. The sample consisted of 342 participants (240 men and 102 women) from different socio-economic background. Ages ranged from18 to 61 (M = 28.2; SD = 6.7). With respect to marital status, a total of 53.5% was single, 45.6% married and 0.9% widow. The participants predominantly graduated from university (51.7%) with postgraduate (24.6%) being the next highest reported education qualification and college (7.8%), high school (8.4%), secondary school (7.5%) and primary school (1.8%), respectively.

Opportunistic sampling method was used to collect the data because of its convenient accessibility to the researchers. Participation in the study was voluntary and the participants' confidentiality and anonymity were assured.

Measures

Fear of Happiness Scale (Joshanloo et al., 2014; Joshanloo, 2013): The FHS is a 5-item self-report instrument that intends to measure the global belief that experiencing of positive emotions, specifically to an extreme degree may have negative consequences. Respondents indicate their agreement and disagreement with the statements on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7).

Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, (1988). The scale is a 20-items self-report measure presented as two factors: positive affect (PA) and negative affect (NA). PA measures the extent to which a person experiences positive affect such as active, excited and determined; NA measures the extent to which a person feels negative affect such as distress, afraid and nervous. Responses are scored on a 5-point Likert-type scale ranging from very slightly or not at all (1) to extremely (5). Satisfactory levels of internal consistency were reported for the two subscales: PA ranges from .83 and .90 and NA ranges from .85 to .90. Gençöz (2000) examined psychometric properties for Turkish version of the scale. Gençöz reported good internal consistency for the measure with alpha coefficients of .83 for PA and .86 for NA in addition to test-retest reliability: PA shown to be .40 while NA was .54.

Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, (1999). The scale is a 4-items scale designed to measure global level of happiness. Participants rated each of the items on a 7-point Likert-type scale ranging 1 to 7, but the ratings are different for each of the items. For example, the item "Compare to most of my peers, I consider myself..." can be rated by selecting an option from *less happy* to *more happy*. In the original form, the scale showed satisfactory level of internal consistency ranging between 0.79 and 0.94 across different samples. The SHS was adapted to Turkish culture by Doğan and Totan (2013).

Satisfaction with Life Scale (SWLS; Diener et al., (1985): The scale was developed to measure people's global judgements of life satisfaction. The scale is a 5-items scale presented as unidimensional scale. Participants rated each of the statements on a 7-point Likert scale varying

from 1= "strongly disagree" to 7="strongly agree". The alpha coefficient of the scale ranges between 0.79 and 0.89 (Pavot, Diener, Colvin, & Sandvik, 1991). The scale was adapted to Turkish culture by Durak, Senol-Durak, and Gencoz (2010).

Procedure

The method of back-translation was used when the scale was translated from English to Turkish. Two bilingual researchers translated English version of the scale into the Turkish language and then two different bilingual researchers translated Turkish version back into English. All bilingual researchers hold PhD degrees that were fluent in both Turkish and English languages. Afterwards, language consistency was examined between the back translation and original versions of the scale. After language equivalency assured, the scale with accompany scales were conducted.

The participants were recruited via e-mail, social media and referral from friends or relatives. Participants gave their consent through the first page of the online survey. The online consent form included information about the purpose of the study, participants' rights, storing and disposing of the data. Those, who agreed to take part the study, were allowed to proceed. Those, who disagreed, were allowed to withdraw the survey at any time.

The total sample was randomly split into two samples of 171 by using a split-sample method to cross-validate the findings. The first sample was used for exploratory factor analysis (EFA) to define the underlying latent factor loadings. We conducted a maximum likelihood analysis without rotation as expected all items loaded on a single factor. The second sample was used for confirmatory factor analysis (CFA) to verify the obtained results through EFA.

Results

Exploratory Factor Analysis

The Sample 1 was used to determine the number of factors of FHS underlying the data and to estimate the factor loadings utilizing exploratory factor analysis.

	Mean	SD	Skewnes	Skewness		Kurtosis		
FHS1	2.9766	1.81157	.660	.186	966	.369		
FHS2	2.6140	1.70902	.962	.186	328	.369		
FHS3	2.7719	1.77914	.851	.186	676	.369		
FHS4	2.5322	1.67081	1.168	.186	.182	.369		
FHS5	3.2749	1.85041	.323	.186	-1.457	.369		

Table 1. Mean, Standard Deviation, Skewness and Kurtosis Values for each of the FHS items

Not. FHS = Fear of Happiness Scale

Two tests of normality, skewness and kurtosis, were used to examine the distribution of 5 FHS items responses. Table 1 presents mean, standard deviation, skewness and kurtosis values for each of the FHS items. The values of skewness and kurtosis statistics ranged between -2 and +2 considering "acceptable" in order for normal univariate distribution (George & Mallery, 2010). Therefore, a maximum likelihood analysis was performed on the first set of data.

For the present sample, the number of participants (171) to items (5) ratio for EFA were greater than recommended ratio of 10:1 with a minimum number of participants of 150 (Gorsuch, 1983).

Bartlett's test of sphericity showed that the correlation matrix was adequate for performing EFA, $\chi^2 = 395.62$, df = 10, p < .001. Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = .81) suggested that the data was good for factor analysis by exceeding the recommended value of .60 as "good" (B. G. Tabachnick, 2001).

Table 2. Factor loadings of the Fear of Happiness Items (N = 171)

Items	
1. "disasters often follow good fortune" (item 3)	.81
2. "bad things to occur in my life" (item 2)	.81
3. "joy and fun causes bad things" (item 4)	.79
4. "some bad consequences" (item 5)	.70
5. "joy is followed by sadness" (item 1)	.63

Note. Extraction method: Maximum Likelihood Extraction without rotation. These are abbreviated items. Full list of original items are available in Joshanloo, M. (2013). See Appendix for the list of Turkish Form of FHS items.

We have adapted three most widely used methods to decide the number of factors: Kaiser's (1960) K1 method, Cattell's (1966) scree test and Horn's (1965) parallel analysis of Monte Carlo simulations. K1 method extracts only the factors that have eigenvalues greater than one for interpretation. Based on this method, EFA results yielded a one-factor solution with 65% of total variance accounted for (eigenvalue = 3.24) and the second factor accounted for 13% (eigenvalue = .63). Visual examination of the scree test showed that the plot gradually became flat at the second eigenvalue supporting a one-factor solution. Furthermore, parallel analysis, which have been suggested as the most accurate method for retaining the number of factors because of indicating the least variability and sensitivity to various factors (Ledesma & Valero-Mora, 2007; Zwick & Velicer, 1986), indicated an appropriate one-factor solution, because the second eigenvalue (3.243, .634) was greater than the second mean eigenvalue (1.218, 1.091) obtained from 1,000 generated random sets of data with 171 subjects and 5 variables.

Table 2 presents that each of the items loadings ranges from .63 to .81 representing "very good" and "excellent" loadings based on the criteria suggested by Comrey and Lee (1992) and Tabachnick and Fidell, (2012). The internal consistency for the five-item scale (a = .86), performed using the Cronbach's alpha coefficient, showed a good internal consistency level of $\alpha > .70$ (Kline P., 1996).

Confirmatory Factor Analysis

Confirmatory factor analysis was carried out on the second half of the sample to confirm unidimensionality of the FHS using AMOS 22 software. Since unidimensional factor structure assumes that all items on a scale load on an underlying latent factor, we expected that the five items on the FHS to be loaded onto a single factor.



Figure 1. Standardized Factor Loading of FHS

We used several fit statistics to assess how well one-factor solution fit the data. Particularly, we used goodness of fit index (GFI) (Jöreskog & Sörbom, 1993), comparative fit index (CFI; Bentler, (1990) and non-normed fit index (NNFI; Tucker and Lewis (1973), and standardized root mean square residuals (SRMR; Hu and Bentler, 1999) along with chi square test (χ^2 ; Bollen, 1989), degree of freedom and relative chi-square test (CMIN/DF; Bollen (1989)). CMIN/DF values below 3 indicate good fit, while values below 5 indicate acceptable fit; GFI, CFI and NNFI values above 0.95 indicate good fit while values above 0.90 indicate acceptable fit; SRMR values below .06 indicate good fit. As a rule of thumb, it is recommended that associated probability χ^2 value should be significant. Since the size of the estimated χ^2 is directly related to sample size, it is likely that this test provides a significant probability value even in a good fitting model (Byrne, 2001).

Based on the aforementioned fit statistic criteria, CFA with the unidimensional factor structure of the FHS indicated good fit: $\chi^2 = 17.687$, df = 5, *p* <.001; CMIN/DF = 3.537; GFI = .960; CFI = .960; NNFI = .920; SRMR = .0416. Figure 1 presents estimates of standardized factor loadings of the FHS. The factor loadings varied between .51 and .83.

Criterion-Related Validity

To provide evidence of the criterion-related validity of FHS, we examined the relationship between FHS and measures of subjective well-being including SWLS, SHS, PA and NA. We performed this analysis in the total sample of 342. As shown in the Table 3, FHS indicated significantly negative correlations with SWLS, SHS and PA suggesting that higher scores on FHS were associated with lower scores on SWLS, SHS and PA. The scale also indicated significantly positive correlation with NA suggesting that higher scores on FHS were related with higher scores on PA.

Name of Scales	Fear of Happiness Scale				
Satisfaction with Life Scale	129 [*]				
Subjective Happiness Scale	321**				
Positive Affect	226**				
Negative Affect	.239**				

Table 3. Correlation between FHS and subjective well-being scales

* p < 0.05, ** p < 0.01

Discussion

The present study examined reliability and validity of Turkish version of the Fear of Happiness Scale. The factor structure of the scale was examined by EFA followed by CFA to provide evidence for the construct validity. The EFA results suggested that the scale consisted of one factor as its original version and presented very good to excellent loadings. CFA results revealed that a single factor structure presented a good fit to the data with good fit statistics. These findings were in accordance with Joshanloo (2013) and Joshanloo et al. (2014) findings where they found a single-factor structure for the scale.

Cronbach alpha coefficient was reported as adequate in the present study. This result was consistent with the original form of the scale conducted by Joshanloo (2013). In addition, the correlation analysis indicated that fear of happiness were negatively correlated to positive affect, life satisfaction and subjective happiness while positive correlation was obtained between fear of happiness and negative affect. This results support the notion that people who believe positive feelings (e.g., satisfaction and happiness) cause negative outcomes might decrease their level of happiness (Diener, Oishi, & Ryan, 2013; Gilbert et al., 2012; Joshanloo et al., 2014).

The importance of translating this scale is that it would allow researchers to measure fear of happiness in Turkish culture. Furthermore, it would also facilitate the improvement of the theoretical and empirical research on happiness and well-being.

The current study was designed to examine reliability and validity of fear of happiness scale on a volunteer community sample. Since the participants of the current study consisted of volunteers, the obtained findings could carry volunteer bias that limits external validity of the findings. Therefore, future research should address this issue by providing evidence from samples obtained via random sampling method for generalizability of the findings. This would facilitate the scale to be applied into a wide range of settings (e.g., clinical, counselling). In summary, fear of happiness scale can be used as reliable and valid measure in assessing the idea that fear of happiness may cause bad things to happen.

References

Bentler, P. M. (1990). Comparative fit indexes in structural models. Psychological Bulletin, 107(2), 238-246.

- Bollen, K. A. (1989). Structural equations with latent variables (1st ed.). Chichester; New York: Wiley.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1(1), 55-86.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245-276.

- Comrey, A. L., & Lee, H. B. (1992). A first course in factor analysis (2nd ed.). Hillsdale, N.J: L. Erlbaum Associates.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49(1), 71-75.
- Diener, E., Oishi, S., & Ryan, K. L. (2013). Universals and cultural differences in the causes and structure of happiness: A multilevel review. *Mental well-being* (pp. 153-176) Springer.
- Doğan, T., & Totan, T. (2013). Psychometric properties of turkish version of the subjective happiness scale. *The Journal of Happiness and Well-Being*, 1(1), 20-27.
- Durak, M., Senol-Durak, E., & Gencoz, T. (2010). Psychometric properties of the satisfaction with life scale among Turkish university students, correctional officers, and elderly adults. *Social Indicators Research*, 99(3), 413-429.
- Gençöz, T. (2000). Positive and negative affect schedule: A study of validity and reliability. Türk Psikoloji Dergisi, 15(46), 19-28
- George, D., & Mallery, P. (2010). SPSS for windows step by step: A simple guide and reference 17.0 update (10th ed.). Baston: Pearson.
- Gilbert, P., McEwan, K., Gibbons, L., Chotai, S., Duarte, J., & Matos, M. (2012). Fears of compassion and happiness in relation to alexithymia, mindfulness, and self-criticism. *Psychology and Psychotherapy: Theory, Research and Practice*, 85(4), 374-390.
- Gorsuch, R. L. (1983). Factor analysis (2nd ed.). NJ: Erlbaum: Hillsdale.
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30(2), 179-185.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language* Scientific Software International.
- Joshanloo, M., Lepshokova, Z. K., Panyusheva, T., Natalia, A., Poon, W., Yeung, V. W., . . . Igarashi, T. (2014). Cross-cultural validation of fear of happiness scale across 14 national groups. *Journal of Cross-Cultural Psychology*, 45(2), 246-264.
- Joshanloo, M. (2013). The influence of fear of happiness beliefs on responses to the satisfaction with life scale. *Personality and Individual Differences*, 54(5), 647-651.
- Joshanloo, M. (2014). Differences in the endorsement of various conceptions of well-being between two iranian groups. *Psychology of Religion and Spirituality*, 6(2), 138-149.
- Joshanloo, M., & Weijers, D. (2014). Aversion to happiness across cultures: A review of where and why people are averse to happiness. *Journal of Happiness Studies*, 15(3), 717-735.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. Educational and Psychological Measurement, 20(1), 141-151.
- Kline P. (1996). The handbook of psychological testing (2nd ed.). London: Routledge.
- Ledesma, R. D., & Valero-Mora, P. (2007). Determining the number of factors to retain in EFA: An easy-touse computer program for carrying out parallel analysis. *Practical Assessment, Research & Evaluation*, 12(2), 1-11.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. Social Indicators Research, 46(2), 137-155.

- Pavot, W., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the satisfaction with life scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality* Assessment, 57(1), 149-161.
- Tabachnick, B. G., & Fidell, L. S. (2012). Using multivariate statistics (6th ed.). Harlow: Pearson.
- Tabachnick, B. G. (2001). Using multivariate statistics (4th ed.). Boston ; London: Allyn and Bacon.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, *99*(3), 432-442.

Appendix-1

	Kesinlikle katılmıyorum	Kısmen katılmıyorum	Biraz katılmıyorum	Ne katılıyorum ne katılmıyorum	Biraz katılıyorum	Kısmen katılıyorum	Kesinlikle katılıyorum
Aşırı keyifli olmayı tercih etmem, çünkü keyifli manın ardından genellikle üzüntü gelir.		2	3	4	5	6	7
. Ne kadar neşeli ve mutlu olursam, hayatımda o ölçüde ötü şeylerin olabileceğine inanırım.		2	3	4	5	6	7
3. Güzel olayları çoğu kez felaketler takip eder.		2	3	4	5	6	7
 Fazla keyifli ve eğlenceli olmak, kötü şeylerin olmasına sebep olur. 		2	3	4	5	6	7
5. Aşırı keyifli olmanın bazı kötü sonuçları vardır.		2	3	4	5	6	7

Mutluluk Korkusu Ölçeği