Adaptation of Relationship Assessment Scale to Turkish Culture: Study of Validity and Reliability

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ABSTRACT

The aim of this research was to examine validity and reliability of Turkish version of Relationship Assessment Scale and its Turkish adaptation. Data for this research collected from 336 married couples. For structure validity of the scale, confirmatory factor analysis was done. The reliability of the scale was examined with internal consistency method. Confirmatory factor analysis provided a good fit to the data ($x^2 = 52.87$, df = 13, p = 0.00, RMSEA = .069, GFI = .95, CFI = .97, IFI = .97, NFI = .95, and SRMR = .04). The internal consistency coefficient was found .87. In the result of the item analysis, corrected item-total correlations ranged from a low of .52 to a high of .74, and were statistically significant at the p<0.001 level. These results demonstrated that this scale is a valid and reliable instrument.

1. Introduction

Relationship satisfaction, a response to feeling of experience Caruna, Money,and Berthon, (2000), ismore important because it has been shown tohave a great impact on people well-being. According to Guerrero, Anderson, & Afifi, (201l),relationship satisfaction, defined as aninterpersonal evaluation of the positivity of feelings for one's partner and attraction to therelationship (Rusbult & Buunk, 1993),is associated with better mental and physical health.It may thought as importantthat people have satisfaction in established relationships with other individualsaround themtosurvive ina healthy waybiologically andpsychologically aspects.According to interdependence theory, individualsprefer maximize their rewards and minimize their costs in a relationship. When rewards outweigh the costs, the outcome is positive; on the contrary, when costsoutweigh the rewards, the outcome is negative. But relationship has a positive or negative outcome is not always enough to satisfy people, becausepeople often have prior expectations of what they believe the relationship should be like. This expectation is based on the person's previous relationship experiences and personalobservations of other people's relationships (Guerrero, Anderson,& Afifi, 2011).

The effective measure of relationship satisfaction is a difficult process requiring much effort and energy, because there is not a complete agreement on definition and psychometric aspects about relationship satisfaction (Bradbury, Fincham, & Beach, 2000; Jones, Adams, Monroe, & Berry, 1995; Patrick, Sells, Giordano, & Tollerud, 2007).When it is examined in literature studies, which they are about relationships assessment and relationship satisfaction, it is seen that researches aren't restricted to relationship assessment with married people or individuals whoare linkedto romantic relationship.Relationship quality or satisfaction covers a wide literature and many scale have been developed about this subject.

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The most of the relationship assessment scale are based on self-report measures scale. These scales provide great benefits and conveniences for researchers in terms of measuring a range of variables and implementation. In addition, these tools have a large role in our understanding of marital satisfaction and interpersonal relationships.The most popular ones of those scales are Marital Assesment Test developed by Locke & Wallace (1959) and Dyadic Adjustment Scaleby Spanier (1976). They are used widely in evaluating the marital quality and satisfaction. Furthermore, there are scales like Quality Marriage Index (Norton, 1983) and Kansas Marital Satisfaction Scale (Schumm, Anderson, Benigas, McCutchen, Griffin, Morris, & Race (1985) that used in studies focused on only measuring marital satisfaction. But consisting of many items and difficulties in universal usage couse difficulty in using them. It is reported that these scales are not appropriate measurement tools to measure relationship satisfaction ofunmarried individuals (Renshaw *et al.*, 2011). Due to the fact that we can see the same difficulties in Turkish society as experiencing in other cultures, the Relationship Assessment Scale, which was developed by Renshaw *et al.*, (2011),was adaptedto Turkish.

The validity of the Relationship Assessment Scaleare analyzedby Renshaw et al. (2011), foundsingle factor explaining 50% of the total variance in the result of the exploratory factor analysis.Although this scale was originally created to assess romantic relationships, Renshaw et al. (2011) created a generic version that they found to be sufficiently reliable: Cronbach's α = .89 for parents, .87 for friends, and .90 for romantic partners. Thisscale is 5 likert-type, single-factor and a measuring instrument which it consists seven items. The scale is based on a measurement tool. Furthermore, it provideinformation about the individual himself (self report), based on a measurement tool.

2. Method

2.1. Participants

Study groups of this research consist of married couples living in different parts of Istanbul. Within 336 married couples, 105 of them (31%) are men, 231 of them (69%) are women; 136 of them (42%) are teachers, 15 of them (5%) are personels in Maritimelines, 14 of them (4%) are doctors and nurses, 171 of them (52%) are housewises and other individuals work in different occupation fields.

2.2. Measure

2.2.1. Relationship Assessment Scale (RAS). This is a 7-item scale (Hendrick, 1988) used to assess subjective satisfaction with a given relationship. Answers are rated on a 5-point Likert scale, rang- ing from 1 (not well), to 5 (very well). The respondent's aver-age score is obtained after reverse scoring items 4 and 7. Although this scale was originally created to assess romantic relationships, Renshaw et al. (2011) created a generic version that they found to be sufficiently reliable: Cronbach's α = .89 for parents, .87 for friends, and .90 for romantic partners.High scores of individuals have established relationships with other individuals and have a high level of satisfaction. The possible scores gained from this scale range from 7 to 35.

2.3. Procedure

A communication established through e-mail with Renshaw et al. (2011) who studied on psychometric expects of Relationship Assessment Scale and necessary permission is granted. In the proces of translation of Relationship Assessment Scale in Turkish, at first, 4 expert translators translated them into first Turkish, than into English again to examine their consistence. Necessary corrections are made by 8 expert in psychological counselling and guidance field-by getting their opinion. Scale's Turkish form reexamined and reduced by three expert in Turkish language and literature in meaning and gramer. At next step, pilot Turkish form is applied on 54 married couples and they are asked determine unclear statements. In the end, those unclear statements have been expressed comprehensibly.

In scale development studies, to express the validity of the scale, structure validity, content validity, and compliance validity are used. For content validity of the scale, experts are conselled, for structure validity, explanatory and confirmatory factor analyze are used., Cronbach Alpha and Split-halftest were used to determine the reliability of the scale, and t-test and corrected item correlation were used for item analysis.

3. Results

3.1. Structure Validity

*3.1.1. Explanatory Factor Analysis.*It was made to examine the structure validity of the Relationship Assessment Scale, firstly, it was looked whether there was meaningful correlations in imported quantity or not by examining correlation matrix among all items. It is stated that Barlett test should be meaningful and KMO is higher than .60 to determine that whether datas are suitable for explanatory factor analysis that is determine the structure validity of scale (Büyüköztürk, 2010). In this analysis, that is made for that purpose, KMO example suitable coefficient is .86, Barlett Sphericity test $\chi 2$ value is 1010,00 (p<.001), and answer for the scale are factorable. At first analyze; there was one factor that explained%56.45 of total variance and factor eigenvalue was over 3,95. Item factor loading that belongs to each factor are in Table 1. Also, factor loading of the scale differ from .63 to .82. In addition, in the analyze that was made to determine compliance validity of Relationship Assessment Scale is found .26 with Marital Life Satisfaction Scale.

Table 1. The Items of Relationship Assessment Scale, FactorLoadings, Eigenvalue, Percentagesof Explained Variance, Correcteditem-totalCorrelation, Cronbach'sAlpha, Split-half, and T-test Results

| Items	FactorLoadings	CorrectedItem-TotalCorrelation	T-test
1	.76	.65	18,13***
2	.80	.70	17,54***
3	.80	.70	18,88***
4	.63	.52	16,04***
5	.82	.73	17,93***
6	.73	.62	13,46***
7	.67	.56	11,98***
Eigenvalue	3,95		
Variance (%)	56.45		
Cronbach'sAlpha	.86		
Split-half	.81		

[1]n=327   [2]n1 = n2 =88   ***p<.001, p<.001

3.1.2. Confirmatory Factor Analize. CFA was applied to confirm the single-factor Structure, found in original form of scale for structure of Relationship Assessment Scale in CFA.Confirmatory factor analysis provided a good fit to the data (x^2 = 52.87, df = 13, p = 0.00, RMSEA = .069, GFI = .95, CFI = .97, IFI = .97, NFI = .95, and SRMR = .04). Factor loadings are shown in Figure 1.

Schermelleh-Engel, Moosbrugger, & Müller (2003) stated that reasonable fit indices of model are ranged between 2≤ $\chi 2$/df≤3 for $\chi 2$/df, 0.01≤p≤0.05 for p, 0.05≤ RMSEA≤0.08 for Root Mean Square Error of Approximation, 0.85≤AGFI≤0.90 for Adjusted Goodness of Fit Index, and 90≤GFI≤0.95 for Goodness of Fit Index, 0.05≤SRMR≤0.10 for Standardized Root Mean Square Residual. AGFI values typically range between zero and one with larger values indicating a better fit. A rule of thumb for this index is that .90 is indicative of

good fit relative to the baseline model, while values greater than .85 may be considered as an acceptable fit. Furthermore, Hu and Bentler (1999) gave evidence that .90 might not be a reasonable cutoff for all fit indices under all circumstances. They suggested to raise the rule of thumb minimum standard for the CFI and the NNFI from .90 to .95 to reduce the number of severely misspecified models that are considered acceptable based on the .90 criterion. In this regard, the results indicated that this model has acceptable fit indices.

Figure 1. Path diagram and factor loadings related to Relationship Assessment Scale (RAS)

Chi - Square = 52.87, df = 13, P-value = 0.00000, RMSEA = 0.09
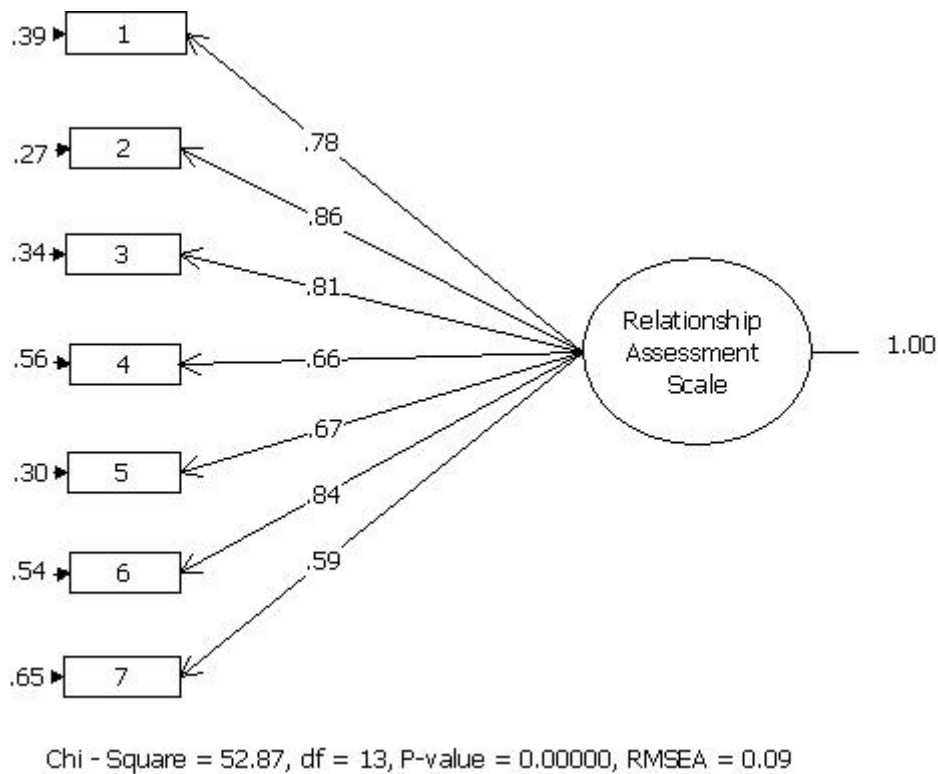
3.2. Reliability

The reliability of the scale was examined with internal consistency and split-half test methods. Scale's internal consistence reliability coefficient wasα= .87. If we consider that preassumed reliability is .60 (Büyüköztürk, 2010),it can be used in research, scale's reliability level is enough. Furhermore, scale's split-half test reliability was .82.We can accept that scale is reliable, according to the result of internal consistency, split-half test result. The findings concerningthe reliabilityanalyzesare shownin Table 1.

3.2.1. Item Analysis

Corrected item-total correlations and t-test results, which compare lower 27% and upper 27% groups, were formed according to total scores of the test, were used for item analysis. In this study, it was found that corrected item-total correlations differed from .52 to .73, and it was seen that t (df=174) values of lower and upper 27% groups werebetween 11,98 (p<..001) and 18.88 (p<.001). We can accept that scale hasdistinguishingitems, according to the corrected item-total correlation and t-test results (p<001).The findings concerningthe item analysisare shownin Table 1.

4. Discussion

It is seen that as a result of exploratory factor analysis of Turkish version of Relationship Assessment Scale that explain 56.45% of total varience which a single factor structure is gained that is suitable for orijinal scale's form. If we think that 30% total variance is suitable for scale development and adoption study we see that there is structure validity (Büyüköztürk, 2010). Also, accordance index for Confirmatory Factor Analysis is in accordence in goal level and it is consistent with original form.

Analysis for scale reliability, internal consistence, Split-half test are high and meaningful makes scale reliable. If we think that reliability level is .70 for the scales used in research (Büyüköztürk, 2010; Çokluk, Şekercioğlu, & Büyüköztürk, 2010; Spahi, Yurtkoru, & Çinko, 2008), reliability level is enough. In interpretation of item total correlation .30 and higher items, it differentiate with its own items, we see that item total correlation is in enough level (Büyüköztürk, 2010). In lower upper 27% groups t-test results have meaningful differences. Internal consistence value in the scale are in coherence so reliability for internal consistence is high. Item total correlation and t-test, which lower and upper 27% groups were compared, results showed that the scale has distinguishing items. We can say that Turkish form of Relationship Assessment Scale can be used as valid and reliable as a result of studies.

There can be some offerings as a result of validity and reliability studies. Applying this scale or different individuals who have different charecteristics can contribute to scale's validity and reliability. With that scale, there can be possibilities to create researches to improve and increase the relationship skills of individuals. It can also be used as a data-collector for the ones who have troubles in marriage, with their partners, the couples having unhappy marriages and helping them. It can be used for psychologial guidence and counselling to improve individual's life. At that phase, this scale may create possibilities in revise studies and increase its affect relation studies and experiments about subject and conparing other results may highly contribute to the scale. Finally, the researches that use this scale may contribute to measure the scale's effect.

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Appendix 1.

Relationship Assessment Scale

1. Arkadaşların/akrabaların ihtiyaçlarını ne kadar iyi karşılıyor.

1_____2_____3_____4_____5_

Hiç iyi değil   Çok iyi

2. Genel olarak arkadaşlarınla/akrabalarınla kurduğun ilişkilerinden ne kadar tatmin olursun.

1_____2_____3_____4_____5_

　Hiç tatmin değil   Çok tatminim

3. Diğer birlikte olduğun kişilerle karşılaştırdığında arkadaşlarınla/akrabalarınla ilişkilerin ne kadar iyidir.

　1_____2_____3_____4_____5_

Hiç iyi değil   Çok iyi

4. Arkadaşlarınla/akrabalarınla ilişkinidevam ettirmemeyi ne sıklıkla düşünüyorsun.

1_____2_____3_____4_____5_

Hiç düşünmem   Çok sık düşünürüm

5. Arkadaşlarınla/akrabalarınla ilişkilerinde beklentilerin ne ölçüde karşılanır.

1_____2_____3_____4_____5_

Hiç karşılanmaz   Çok karşılanır

6. Arkadaşlarını/akrabalarını ne kadar çok seviyorsun.

1_____2_____3_____4_____5_

Hiç sevmem   Çok severim

7. Arkadaşlarınla/akrabalarınla ilişkilerinde ne kadar problem var.

1_____2_____3_____4_____5_

Hiç yok   Çok var