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The validity and reliability of the Turkish version of the relational-interdependent self-construal scale

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Abstract

This study investigated the validity and reliability of the Turkish version of the Relational-Interdependent Self-Construal Scale (RISCS; Cross, Bacon, & Morris, 2000). The participants of this study included 335 university students. Results of language equivalency showed that the correlation between Turkish and English forms was .96. Fit index values of the model were RMSEA=.046, NFI=.98, CFI=.99, IFI=.99, RFI=.96, GFI=.97, AGFI=.95, and SRMR=.036. For concurrent validity the relationship between RISCS and UCLA Loneliness Scale was calculated as -.52. Internal consistency reliability coefficient of the scale was found as .85. These results demonstrate that this scale is a valid and reliable instrument.

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1. Introduction

Self-construal is defined as “the degree to which people see themselves as separate from others or as connected with others” (Markus & Kitayama, 1991, p. 226). It serves people’s fit with their environment, governs their perceptions of reality, mediates and regulates their behaviors, thoughts and emotions (Higgins, 1996). Researches have mentioned traditionally two different types of self-construal, independent and interdependent (Singelis, 1994). Within a culture, social customs, institutions, and beliefs revolve around the dominant self-construal (Kashima & Hardie, 2000). Thus different cultures have valued and emphasized differential development of the two self-construal (Kitayama, Markus, & Matsumoto, 1995).

Western cultures emphasize the independence of persons, including attending to the self and its uniqueness and experiencing distinctive inner characteristics. Cross and Madson (1997) described the independent self-construal as “the self as separated from others.” The independent self-construal is constructed based on the individual’s traits, attributes, and abilities (Kanagawa, Cross, & Markus, 2001). The independent self-construal involves defining the self as separate from the social context and seeing the self as bounded, unitary, and stable across situations (Cross & Morris, 2003).

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On the other hand, East Asian cultures emphasize the interdependence between the individual and his/ her group. These cultures tend to value persons' interdependence, including the tendency to attend to others, fit into group norms, promote others' goals, and maintain harmony with others. As a result, individuals in collectivist societies tend to define the self in terms of public statuses, roles, and relationships. The self is connected with others in individuals with highly developed interdependent self-construal so that boundaries between the cognitive representations of the self and important others can be thought of as flexible (Triandis, 1989).

For the independent self-construal, internal characteristics (e.g., abilities, opinions, and personality traits) control individuals' behavior. In contrast for the interdependent self-construal these inner attributes are seen as situation-specific and unlikely to regulate social behavior, especially when significant others are involved. As a result, an independent self-construal is associated with a tendency to see the self as independent of context whereas an interdependent self-construal is associated with seeing behavior in context. Additionally the way in which interpersonal communication has taken place is different for two types of self-construal. For the interdependent self-construal, reciprocal interdependence with others involves constant engagement in the form of taking the others' perspective. It is expected that persons "read" the other's mind and thus understand what the other is feeling or thinking. In contrast for the independent self-construal it is one's responsibility to say what one is thinking or feeling if one expects the other to understand (Bacon, 2001).

The type of interdependent self-construal constructed by individuals in non-Western cultures and Western cultures is not the same. Individuals in non-Western cultures tend to construct interdependence in terms of memberships in larger social groups, which does not entail personal relationships with other individuals. This view of interdependence is referred to as a *collective self-construal*. In contrast people in Western cultures tend to construct interdependence in terms of dyadic, close relationships. For example Americans are more likely to have a number of individual relationships (e.g. mother, best friend, and spouse) incorporated into the self rather than in groups. Thus, in Western cultures, interdependence is viewed in terms of a relational dimension or the relationship between the individual and other individuals (Kashima et al., 1995). This form of interdependence is referred to as a *relational self-construal* (Cross, Bacon, & Morris, 2000).

"Including other in the self" does not happen only for individuals with well-developed interdependent self-construal (Aron, Aron, & Smollen, 1992). Significant others such as mothers, friends, and romantic partners tend to be incorporated into the self by most people (Aron, Aron, Tudor, & Nelson, 1991). What separates individuals with well-developed interdependent self-construals from those with poorly developed interdependent self-construal are how that information stored in the self is used and when it is activated (Singelis, 1994). For individuals with high relational-interdependent self-construal, representations of important relationships tend to guide thoughts, motivations, and behaviors. Thus, it is not the case that individuals who do not have a highly relational-interdependent self-construal are unable to form meaningful relationships; rather these relationships are not as central to the motivation and behavior of the individuals as they are for the person with a highly relational self-construal (Cross & Madson, 1997).

It is possible that relational self-construal is associated with particular forms of emotional distress. When things go worse in close others' lives or in close relationships, individuals have little control to right things and may experience a sense of helplessness, which is a central feature of depression. Similarly, the personality dimension of sociotropy or importance of close others and close relationships to individuals well-developed relational self-construal serves as a vulnerability factor for the onset of depression (Dutrizac, 2005). However Cross et al. (2000) found no evidence for a direct relation between relational self-construal and depression, but it is more likely that relational self-construal moderates the relation between the quality of close relationships and depression. Eating disorders may be another form of emotional distress to which individuals higher in relational self-construal are especially vulnerable. It has been assumed that individuals higher in relational self-construal are vulnerable to others' judgments of the self and readily consider close others' viewpoints. As a result, when distressed they may be more likely to focus on external standards for attractiveness and engage in dieting and other behaviors connected with eating disorders (Green et al., 2006).

Given the critical role of relational-interdependent self-construal in understanding of the influence of culture on defining the self, it is important to measure this construct as a valid and reliable way. Thus the aim of this research is to adapt Relational-interdependent Self-construal Scale (RISCS; Cross et al., 2000) to Turkish and to examine its psychometric properties.

The Relational-Interdependent Self-Constraint Scale (RISCS; Cross et al., 2000). The Relational-interdependent Self-construal Scale was designed to assess the degree to which important relationships are incorporated into the self-concept. The RISCS is an 11-item measure containing nine positively worded items and two negatively worded items. The negatively worded items are reversed before scoring. Participants indicated the degree to which they agree with each item on the RISCS using a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The possible range of scores is from 11 to 77. High scores indicate higher levels of interdependence. Cross et al. (2000) used principal components exploratory factor analysis on the combined data from the eight samples. Examination of the scree plot revealed a single factor before the elbow of the plot. In addition, only one factor had an eigenvalue greater than 1.0, accounting for 47 % of the variance. The 11 items all loaded on the first factor between .59 and .77.

Cross et al. (2000) found that the RISCS was moderately correlated with the Communal Orientation Scale (Clark, Ouellette, Powell, & Milberg, 1987; $r=.41$), the group-oriented Interdependent Self-construal Scale (Singelis, 1994; $r=.41$), the Expressivity subscale of the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974; $r=.32$), the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992; $r=.37$), the Optimism subscale of the Life Orientation Test (Scheier & Carver, 1985; $r=.16$), the Extraversion ($r=.28$), the Agreeableness ($r=.35$), and the Conscientiousness ($r=.23$) subscales of the NEO-FFI (Costa & McCrae, 1992). Furthermore the RISCS was not related to the Independent Self-construal Scale (Singelis, 1994; $r=.08$), the Instrumentality subscale of the Personal Attributes Questionnaire (Spence et al., 1974; $r=-.06$), CES-D Depression Scale (Radloff, 1977; $r=.03$), Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985; $r=.07$), Rosenberg Self Esteem Scale (Rosenberg, 1965; $r=.01$), Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960; $r=.05$) and the Neuroticism ($r=.08$) and the Openness to the experience ($r=.09$) subscales of the NEO-FFI (Costa & McCrae, 1992).

Cross et al. (2000) reported coefficient alphas ranging from .85 to .90 for the eight samples which ranged in size from 271 to 940. Cross et al. (2000) tested the test-retest reliability of the RISCS by administering the RISCS at one or two month intervals to participants in two of the samples. The one-month test-retest reliabilities were .74 and .76. The two-month test-retest reliabilities were .73 and .63.

2. Method

2.1. Participants

Validity and reliability studies of RISCS were executed on two sample groups. The first group was 335 university students from different programs of Education Faculty of Sakarya, Kocaeli, and 9 Eylul Universities in Turkey. These programs were psychological counseling and guidance ($n=55$), science education ($n=73$), pre-school education ($n=87$), computer and instruction technology education ($n=64$), and Turkish language education ($n=56$). Of the participants, 134 were male and 201 were female and the mean age of the participants was 20,3. In this study, construct validity, concurrent validity, and internal consistency reliability coefficients were calculated according to data obtained from the first group. The second group was 60 English teachers (34 female, 26 male) and the mean age of them was 33,4. To examine the language equivalency of the scale the correlation between Turkish and English forms was calculated according to data obtained from the second group.

2.2. Measures

UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978). The 20-item UCLA Loneliness Scale was used to measure participants' experience of loneliness. Respondents indicated on a 4-point scale (1=never to 4=always) how often they felt as described in each item. Scores on this scale could range from 20 to 80. This measure provides a continuous score and high scores indicate greater feelings of loneliness. Construct validity of the scale has been supported by significant positive correlations with other measures of loneliness (e.g., Differential Loneliness Scale, $r=.72$, $p<.01$) and negative correlations with reported social support (Russell, 1996). Russell reported coefficient alphas ranging from .89 to .94. Demir (1989) reported an internal consistency of the Turkish version of loneliness scale to be .96, and test-retest (one-month interval) reliability coefficient to be .94.

2.3. Procedure

Translation of the RISCs into Turkish was based on the recommendations of Hambleton and Kanjee (1995). As the first step two specialists who were a native Turkish speaker fluent in English translated English version into Turkish. Discrepancies in initial translations were addressed with the assistance of a third independent translator. The Turkish version of the RISCs was then translated back into English by two English-speaking language specialists who were blinded to the original scale and the objective of the study. The differences between translated versions were evaluated and a satisfactory compliance with the original scale was achieved by consensus of the translators. The completed Turkish version was evaluated for cultural appropriateness by three academicians from department of English Language and Literature, controversial items were determined and necessary modifications were done. The updated version was reevaluated by the original group of expert reviewers, to finalize the Turkish version used in this study.

After that a study of language equivalence was executed and then the validity and reliability analyses of the scale were examined. In this study confirmatory factor analysis (CFA) was executed to confirm the original scale's structure in Turkish culture. Also concurrent validity and internal consistency reliability were examined. Data were analyzed using LISREL 8.54 and SPSS 13.0 package programs.

3. Results

3.1. Construct Validity

Confirmatory factor analysis showed that the model was well fit. Also, Chi-Square value ($\chi^2=193.04$, $p<0.001$) which calculated for the adaptation of the model was significant. The goodness of fit index values of the model were RMSEA=.046, NFI=.98, CFI=.99, IFI=.99, RFI=.96, GFI=.97, AGFI=.95, and SRMR=.036. Factor loads of items belonging Turkish version of RISCs are presented in Figure 1.

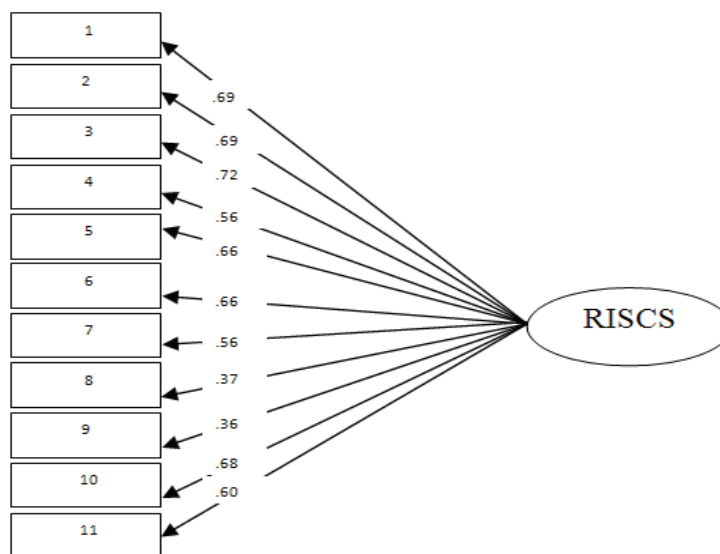


Figure 1. Factor Loadings for the RISCs

3.2. Concurrent Validity and Reliability

For concurrent validity, the relationships between UCLA Loneliness Scale and the RISCs which was translated into Turkish were calculated. Results demonstrated that RISCs was negatively associated with UCLA Loneliness

Scale ($r=.52$). For reliability of the Turkish version of the RISCs internal consistency coefficient was calculated. The internal consistency coefficient of the RISCs was found as .85.

4. Discussion

The purpose of this research is to adapt the RISCs to Turkish and to examine its psychometric properties. Results of language equivalency showed that the correlations between Turkish and English forms were high ($r=.96$). These results confirm that Turkish and English forms of the RISCs might be regarded equivalent. In this study, factor structure of the Turkish version of RISCs was examined via confirmatory factor analyses. The confirmatory factor analysis showed that the factorial model of RISCs that consists of one factor was at an acceptable degree of goodness of fit for Turkish sample (Hu & Bentler, 1999). For concurrent validity, correlation between UCLA Loneliness Scale and the Turkish version of the RISCs was calculated. Cross et al. (2000) stated that individuals with highly developed relational-interdependent self-construal tend to establish and maintain close relationships. Therefore, it was hypothesized that RISCs would negatively correlate with the UCLA Loneliness Scale. As expected, RISCs was negatively associated with UCLA Loneliness Scale. The internal consistency coefficient of the RISCs showed acceptable reliability. According to these findings RISCs can be termed as a valid and reliable instrument that could be used in fields of education and psychology. However, because participants were university students, examination of the factor structure of RISCs for targeting other populations should be made. Also, further studies that will use RISCs are important for its measurement force.

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