The Turkish adaptation of the Mother-Adult Daughter Questionnaire

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Abstract

This study examined the basic psychometric properties of the Turkish version of the "Mother-Adult Daughter Questionnaire (MAD)" by Rastogi (1995). The MAD and Inventory of Parent and Peer Attachment (IPPA) were administered to 185 female university students. The total score of three subscales (connectedness, trust in hierarchy, and interdependency) constitute the strength of mother and adult daughter relationship. Confirmatory Factor Analysis (CFA), Internal Consistency Coefficient (Cronbach Alpha), test-retest reliability and Convergent validity were examined to assess the cross-cultural equivalence of this particular instrument. Based on the results, MAD questionnaire appears to be a valid and reliable scale for Turkish samples.

1. Introduction

Mother and daughters have a stronger attachment and greater intimacy than any other parent/child relationships (Thompson & Walker, 1982; Troll & Fingerman, 1996). Attachment styles to the mothers or any caregivers predict the daughters' quality of future relationships (Bowlby, 1988). Furthermore, the relationship of adult daughters and their mothers frequently has closeness, intimacy, and support which create a shared deep bond across their life-spans (Cochran, 1985; Rossi, 1993; Rossi & Rossi, 1990). In other words, according to Fischer (1991) interdependence and emotional connection are found as higher in mother and daughter relationship than other dyads. Therefore, the nature of the mother and daughter relationship carries a determining role in the life of the daughters in terms of their social and psychological well-beings.

Therefore, it is important to address the nature of this relationship with an accurate operational definition. However the number of the scales specifically evaluates the relationship of mothers and their daughters is not extensive. Rastogi (1995) reports that "Mother-Adult Daughter Questionnaire" (MAD) is unique in terms of its specificity to tap into such relationship, and its culture sensitive nature. It was claimed that MAD measures the adult daughter's perception of her relationship with her mother with regard to connectedness, interdependence and trust in hierarchy (Rastogi, 2002). By closeness subscale, participants' ability to share their feelings and ideas and to make devotion in mother-daughter relationships is measured. Interdependency scale measures the help-seeking and advice

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taking behaviour in emotional and practical issues but at the same time feeling free to make their own decisions both for mothers and daughters. Trust in hierarchy is related with the assumption that older women know the best about their daughters. Rastogi (2002) reports the importance of hierarchy for mother - daughter relationship, especially in collectivistic cultures.

MAD is a culture sensitive questionnaire with its subscales defined in a cultural perspective. However, since the cross-cultural equivalency scale has been tested among the minorities in the United States, international studies are needed to test its cross-national equivalency. Therefore; this study aims to provide information on the cross-cultural equivalency in an international samples; Turkish daughters being an example.

2. Method

2.1. Participants and procedure

The participants of the study were 185 female university students whom reached via convenient sampling. The age of the participants ranged between 18 and 35 ($M = 23.85$, $SD = 4.01$). 161 of the participants were administered the questionnaire twice with three weeks interval in order to provide data to examine test-retest validity.

2.2. Instruments

2.2.1. Demographic information form

This form inquired participants' age, current education level, whether their mother is alive or not, and if they were living with their mother before and during their university education.

2.2.2. Mother-Adult Daughter Questionnaire (MAD)

"Mother and Adult Daughter Questionnaire" was developed by Rastogi (1995) to measure various aspects of current mother - adult daughter relationship. The instrument consists of 25 items with 3 subscales. 8 of the items are multiple choices, and 17 of them are 5 point Likert-type scale. 9 items of the scale are aimed to measure the "Connectedness" (sample item, 'I can share my intimate secrets with my mother'), 3 items aimed to measure the "Interdependence" (sample item, 'I often depend on my mother for advice'), and 6 items aimed to measure the "Trust in Hierarchy" (sample item, 'Sometimes I will give in to my mother out of my respect for her'). Other 7 items are not part of subscales; they provide helpful information about the mother and daughter relationship. The possible score range is 18 to 90. Rastogi (2002) explained the scores of the "Connectedness" subscale ranged from 9 to 45 for closeness, higher scores indicating greater closeness. The Cronbach's alpha value for the connectedness subscale was found as $α = .87$. Scores of the "Interdependency" subscale ranged from 3 to 15 with higher scores reflecting greater dependency. The value of Cronbach's alpha for dependency was $α = .74$. And finally, scores of the "Trust in Hierarchy" subscale ranged from 6 to 30, with higher scores pointing to greater trust in hierarchy. The Cronbach's alpha value was $α = .77$ for trust in hierarchy.

2.2.3. The Short Version of the Inventory of Parent and Peer Attachment (IPPA)

This scale was used to test convergent validity of the MAD. The short version of IPPA measures how the attachment of parents and peers are perceived (Armsden & Greenberg, 1987; Lyddon, Bradford & Nelson, 1993). The original scale was developed and tested with adolescents to assess both the affective and cognitive dimensions of current attachment security and trust in the accessibility and responsiveness of attachment figures. The scale has three parts of 12 items asking attachments to mother, father, and peers. IPPA's Turkish adaptation was made by Günaydın, Selçuk, Sümer and Uysal (2005). Turkish version of this scale (EABE) has only mother and father part with 12 items each. The three factors of the scale were not confirmed with the Turkish sample, and thus the total score of the Turkish version of IPPA is suggested to be used (Günaydın , Selçuk, Sümer and Uysal, 2005). For this study, only the mother part was used to examine the correlation with the MAD.

2.3. Adaptation process of instrument

The first step was the translations of the items into Turkish by three Turkish counselors who are advanced in English. Then, an English literature expert translated the MAD back into English independently. Afterwards, two Turkish literature teachers evaluated the Turkish wording and the basic grammar of the scale.

3. Results

3.1. Descriptive statistics

From the 185 female participants, 82.7% of them lived with their mother before university and 17.3% of them didn't live together at that period. 114 of the participants are not living in the same city with their mothers now; while 71 of them are living in the same city and 55 of them are living in the same home. The age of the participants ranged between 18 and 35 ($M = 23.85$, $SD = 4.01$).

3.2. Confirmatory factor analysis

The original three factor model was proposed by Rastogi (2002). In order to examine the factors structure firstly confirmatory factor analysis (CFA) was conducted. Full information maximum-likelihood method in AMOS was used to handle with the missing data. The goodness-of-fit index (GFI) values above than .90 indicate an acceptable fit (Schumacker & Lomax, 1996).The comparative fit index (CFI) value of .90 or greater indicate an acceptable model fit (Hu &Bentler, 1999). For the root mean square error of approximation (RMSEA), a value of .05 or less indicates a good fit, a value of .08 indicates a reasonable fit, and a value of .10 and higher indicates a poor fit (Byrne, 2001). In this study, results of the confirmatory factor analysis for the three factor confirmatory models indicated an inadequate model fit for the three-factor structure [χ^2 (132) = 486.725, p=.00; χ^2/df- ratio= 3.68; GFI= .78, CFI=.82 and RMSEA= .12].

3.3. Exploratory factor analysis

Since the results of the CFA revealed an inadequate model fit for the original three-factor structure, Maximum Likelihood Analysis with an Oblique rotation was performed in order to determine the better factor structure for the sample of this study. Results of the Exploratory Factor Analysis revealed three factors explaining 56.10% of the total variance. However, the items loaded to these three factors randomly and did not form a consequential factor structure. Therefore, the factor number was forced to two and the analysis was repeated with all items. Items were grouped in the factors depending on their loading values with a criterion of $\alpha > .30$ (Hair, Anderson, Tatham, & Black, 2006).

The "Connectedness" subscale has 10 items (1, 2, 3, 4, 5, 6, 7, 8, 10, and 18) with item loadings ranging from α=.90 to α=.43, and "Trust in Hierarchy" subscale has 8 items (9, 11, 12, 13, 14, 15, 16, and 17) with item loadings ranging from α=.82 to α=.33. Seven additional items were used only for taking information as the original version of MAD. The Cronbach's alpha reliability was $\alpha = .90$ for "Connectedness" and $\alpha = .88$ for "Trust in Hierarchy". Although "Connectedness" and "Trust in Hierarchy" subscales measure different aspects of mother and daughter relationship, they should be positively and significantly correlated. For the inter-correlations of the subscales; the Pearson correlation coefficient between two factors were also found as positive and significant ($r = .41$, $p < .01$).

3.4. Internal and test-retest reliability of MAD

The reliability coefficient for the full questionnaire estimated by Cronbach's alpha was $\alpha = .91$. The internal consistency coefficients for the subscales of MAD was $\alpha = .90$ for "connectedness" subscale, and $\alpha = .88$ for "trust in hierarchy" subscale.

In order to examine the test-retest reliability, the scale was administered to the same participant with three weeks interval. Pearson correlation coefficients between the first and second times was found as $r = .91$ ($p<.01$) for the total score, r=.91 ($p<.01$) for Connectedness subscale and $r = .90$ ($p<.01$) for Trust in Hierarchy.

Results showed that the instrument consists of 25 items with 2 subscales. 8 of the items are multiple choices, 17 of them are 5 point Likert-type scale. 10 items are aimed to measure the "Connectedness" (α = .90), 8 items measure the "Trust in Hierarchy" (α = .88), and 7 items are not part of subscales, they provide helpful information about mother and daughter relationship. The interdependence subscale is not containing in this study. Results of the exploratory factor analysis in this study indicated an adequate model fit for the two factor structure of the MAD for the sample of Turkish university students.

3.5. Convergent validity

For the convergent validity, the scores of MAD were compared with IPPA which is an inventory measures attachment with parents and peers. The Pearson correlation coefficient between MAD and IPPA was found as r = .69 (p < .01) which shows a strong correlation (Green, Salkin, & Akey, 2000).

4. Conclusion

The aim of the present study was to conduct the Turkish adaptation of the Mother-Adult Daughter Questionnaire (MAD) which was developed by Rastogi (1995). The original scale has three factors; "Connectedness", "Interdependence" and "Trust in Hierarchy"; however in the present study the items loaded on two factors; "Connectedness" and "Trust in Hierarchy". Results of the factor analysis provided empirical evidence for high internal validity.

In Turkish culture, family is an important element than Western cultures (Gümüşkılıç, 2007). Turkish families have been traditional and have close ties within family members and relatives which makes the "dependency" term have a different meaning for this culture. Even children live apart from their families; especially in important life events they get the help of their parents and relatives for decision making. This shows us that in Turkish culture connectedness is a more common pattern than dependency (İmamoğlu & İmamoğlu, 1992; İmamoğlu, Küller, İmamoğlu, & Küller, 1993). However, American people are more individualistic and generally less related with family members than the Asian people who are more collectivistic (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Uleman, Rhee, Bardoliwalla, Semin, & Toyama, 2000). These cultural differences may effect the factors defining the mother and daughter relationship. In the adaptation process of a measurement, because of cultural differences it is accepted to use different items from the original scale depending on the literature. Accordingly it is possible to determine cultural differences and similarities (Rastogi, 1995). Similar to the original development study, the Cronbach alpha values were sufficient for the Turkish adaptation. Therefore, it can be suggested that MAD seems to be generalized beyond culture with some corrections. Overall, the results showed that the two factor structure MAD can be used to measure mother and adult daughter relationship among Turkish females.

Some limitations of this study should be considered. The present study was based on participants' self-reports and convenience sampling which limits the generalizability of the findings of this study. Another shortcoming comes from the cross-sectional nature of the study that prohibits from making any longitudinal predictions. Based on these limitations, the findings need to be cross-validated.

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