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Separation Anxiety Inventory: Validity and Reliability Study

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Abstract

This study was conducted to examine the validity and reliability of the separation anxiety inventory. The study was carried out on the data gathered from 490 parents having children at puberty between the years of 2003-2004. Separation Anxiety Inventory is a five-point Likert type scale with 47 items. Cronbach alpha coefficient calculated for determining the internal consistency of the scale is .91. Reliability coefficient obtained by means of split half method was found as .71. The correlation coefficient between the total scores of the two scales is $r=.29$ in the study of examining the similar scales developed by State Anxiety Inventory. The correlation coefficient between the total scores of the two scales is $r=.40$ in the study of examining the similar scales developed by Constant Anxiety Scale. The scale was found to be uni-dimensional as a result of the basic component analysis carried out with the aim of construct validity. The obtained findings show that it is a valid and reliable scale.

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1. Introduction

Puberty, which is one of the developmental stages, have both critical and interesting characteristics with its distinctive qualitative features. The whole psychological state that experiences a complete break at this period gets a more crystallized and more stable quality that hardly changes later in life (Otrar, 2002; Öztürk, 2001; Arı, 2003).

Parents in family have an important role in their children's personality form and develop, and shaping their behaviors. Puberty, in which lots of changes occur at the same time, increases especially the importance of the parents' role in children's personality development (İçli, 1994). Parents of adolescents are at middle-age period. Parents experience the anxieties stemming from their physiology and psychology increasingly at that period. Especially the anxiety stemming from the fact that their children at puberty will separate or separated from themselves affects their role in their children's development (Aydın, 2002). Late 1910s and early 1920s is a period themed as leaving home. It is also a transition period between a family-oriented life and stepping into adulthood.

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Young girl or boy could choose a transition institution such as university, marriage, or military service; or they could set out to work by continuing to stay at home (Onur,1987).

Several researchers with different theoretical perspectives agree on the fact that the results of the studies about parents-child separation are a center to understand the psycho-social development in the life process. The approaches towards the existing separation cases are related with the trust and dependence quality. The concept of separation anxiety involves the anxiety stemming from being away from the important parts of life, the sorrow stemming from a sudden or existing loss, and a negative mood stemming from the inability to find the same intimacy. The anxiety that the parents feel because of their separation with their children is associated with 'separation anxiety'; and it is defined as 'An unpleasant situation related to separation experience'. There are lots of studies about the separation of parents and child. However, so far few studies have been conducted to examine the moods stemming from the parents' separation from their children at puberty. This situation is very surprising in one way. Because adolescence is the period in which the parents will encounter the separation-related problem focuses. The separation of adolescents from their parents is sudden. Even though it is sudden, separation represents a distinct large period afterwards. The ones at puberty go through a process in which they review their relationships in that developmental transition period. The parents are the active participants of this reviewing practice. So the feelings, opinions, and attitudes of the parents should be determined (Hock et al., 2001).

There hasn't been a measurement tool designed for measuring the attitudes of children adolescents towards their parents' separation anxiety in our country. The aim of this study is to contribute to the studies to be conducted in this field, and to develop a valid and reliable attitude inventory to be used for determining the reaction levels that the adolescents show against their parents' separation experiences.

2. Method

This part is left to the practices such as sampling, data collection, data analysis, and developing the inventory.

2.1. Subjects

This study was conducted on the data collected from the groups of adolescents between the years of 2003-2004 (N=490). This number is the total sample of the six stages carried out for developing the inventory.

2.2 The Practices For Developing the Scale

Separation Anxiety Inventory used in the study was developed in six stages. In the first stage, 'Separation Anxiety in Parents of Adolescents: Theoretical Significance and Scale Development'-an inventory of 2 sub-dimensions and 35 items- developed by Hock et.al (2001) in America to measure the separation anxiety of the parents of adolescents, and Separation Anxiety Interview Form (Separation Anxiety Disorder, SAD) with 21 items developed according to DSM III-R to be filled by mothers for school-age children were examined and the related items were used after that. In the second stage, 'Separation Anxiety' was defined; and 80 parents and 70 adolescents were asked what their attitudes (feelings, opinions, and behaviors) are in case of separation. After grouping their answers to this question in itself, a list of 106 items was formed. In the third stage, this list of 106 items was applied to 141 people by asking them to evaluate the expressions with one of these: () measures, () slightly measures, () does not measure. A draft form of 60 items was developed with the changes and additions on the expressions done in the liant of parents' evaluations. In the fourth stage, the obtained list of 60 items was presented again the experts' opinion after being graded with one of the followings: () measures, () slightly measures, () does not measure. The number of items was decreased to 55 in line with the experts' opinions about whether they measure the separation anxiety of the parents of adolescents. Besides, some changes were made on the expressions of the items in accordance with the experts' suggestions. In the fifth stage, this form of 55 items was applied to 150 parents of adolescents by asking them to grade the items with one of the followings: () Totally inconvenient, () Slightly inconvenient, () Neutral, () Quite convenient, () Totally appropriate. As a result of the item analysis, a form of 47

items was obtained by eliminating the items whose correlation coefficient is below .30. In the last stage, a Likert-type scale was prepared by grading the inventory of 47 items with a number from 1-5. The validity and reliability study of the inventory was carried out on a group of 150 people. Similar inventories validity and factor analysis were looked at within the validity study. Split-half method and Cronbach alpha coefficient were calculated for reliability.

3. Data Gathering Tools

Beside the Separation Anxiety Inventory whose validity and reliability are being examined, State-Constant Anxiety Inventory (STAI) that was adapted to Turkish by Öner and Compte (1998) was also benefited from as an equivalent form in the validity study of this inventory.

3.1. Separation Anxiety Inventory

Separation anxiety inventory was developed for determining the level of separation anxiety of the adolescents' parents. The inventory is composed of 47 items and a single dimension. The subjects are given some expressions related to the situations that they would experience, and they are asked to grade the convenience of those expressions by marking one of the followings: (5) Totally convenient, (4) Quite convenient, (3) Neutral, (2) Slightly convenient, (1) Not convenient. The highest score to get from the inventory is 235, and the lowest score is 47.

3.2. State-Constant Anxiety Inventory (STAI)

For our country the inventory of which the study of validity and reliability was carried out by Öner and Compte (1998), involves 20 items for each. The inventory of Constant and Stationary Anxiety inventory evaluates the state of anxiety that the individual experiences because of the stressful situation he/she is in, the individual's tendency for anxiety experiences, and the constant anxiety. The study of validity and reliability the inventory was carried out on the data collected from both healthy individuals, and the ones who got psychiatric diagnosis. Cronbach alpha coefficient was calculated between .94 - .96 for the State Anxiety Inventory, and between .83-.87 for Constant Anxiety Inventory. Item reliability correlations are between the values of .43 - .85 for the State Anxiety Inventory and between the values of .34-.72 for the Constant Anxiety Inventory. Test-retest reliability was calculated to be between the values of .26 - .68 for the State Anxiety Inventory, and between the values of .71 - .86 for the Constant Anxiety Inventory. Construct validity, experimental concept validity, and criteria validity of the State and Constant Anxiety Inventory were examined. It was found that the correlations between the scores of state and constant anxiety are at around .62 in average, and they are at an important level. Those data were found to be qualified to strengthen the hypothetical construct validity of the State-Constant Anxiety Inventory. As for the criteria validity, it was confirmed that the score averages of state-constant anxiety inventory distinguish the normal individuals from those who have psychiatric diseases significantly (Öner ve Compte, 1998).

4. Data Analysis

Separation Anxiety Inventory was applied to the parents of adolescents. The parents of adolescents who were willing to participate in the study were told about the aim of the study and explained how to answer the questions.

Reliability of the Separation Anxiety Inventory was carried out by calculating the split-half and internal consistency coefficients. As for the validity practice, a similar inventory method was used, while basic components factor analysis was implemented for the construct validity. SPSS 13.0 package program was used for the data analysis.

5. Findings

This part is left to the total score correlations of the items in the Separation Anxiety Inventory and the findings related to the validity practices.

5.1. Practices for the Total Score Correlations of the Items in Separation Anxiety Inventory

The number of the items in inventory was decreased to 47 by eliminating the ones of which correlation coefficients between total item-scores are found as below .30 after the implementation of 55-item-test form of the Separation Anxiety Inventory (Not convenient, Slightly convenient, Neutral, Quite convenient, Totally convenient). Item-inventory correlations of that 47-item-inventory change between the values of .52 - .75.

5.2. Findings Related to Reliability of The Separation Anxiety Inventory

Cronbach alpha coefficient was calculated for the internal consistency of the inventory. Internal validity coefficient of the inventory with 47 items was found to be .91, and its reliability coefficient determined by means of split-half method was found to be .71. Those obtained values are considered to be sufficient for the reliability level of the Separation Anxiety Inventory.

5.3. Findings Related to Validity of The Separation Anxiety Inventory

The relationship between the total scores taken from the separation anxiety inventory for similar inventories validity and the total scores taken from the parallel form was calculated with the help of Pearson Product-Moment Correlation coefficient. State-constant anxiety inventory was used in similar inventory validity practice. The correlation between the state anxiety inventory and the separation anxiety inventory is .29 ($p < .001$) while the correlation between the constant anxiety inventory and the separation anxiety inventory is 0.40 ($p < .001$). In order to examine the factor structure of the separation anxiety inventory and to determine its sub-dimensions, basic components analysis and varimax rotation technique were used. It was ensured with varimax rotation technique to distribute the items whose factor load is above .30 to the factors. After implementing the factor analysis, it was found that the inventory is uni-dimensional.

6. Results and Discussion

Parents of adolescents encounter their children's many non-domestic problems such as independence, disagreement, decision making, personal responsibility, girl-boy relationships, etc. in the periods in which they are stepping into adulthood. As the nature of parents-child relationship changes during puberty, the structure of parents' separation anxiety become different in parallel with the changing parents-child relationship. Therefore, the structure of adolescents' parents separation anxiety is an important research topic (Hock ve ark., 2001).

Separation anxiety inventory is a uni-dimensional 5-point Likert-type inventory. For reliability of the inventory, internal consistency coefficient and reliability coefficient was calculated with split-half method. To determining its validity, similar inventories validity and construct validity were used.

The correlation between the separation anxiety inventory and the state anxiety inventory is .29 ($p < .001$) while its correlation with the constant anxiety inventory is .40 ($p < .001$). Construct validity of the inventory was examined by factor analysis, and the results of the factor analysis carried out on the inventory show that it is a uni-dimensional inventory. Parents who have experienced separation may show anxiety symptoms. However, the intensity of the symptoms change according to the parents and the separation.

Internal consistency coefficient of the inventory applied to the parents of adolescents was found as .91. Reliability coefficient, on the other hand, was found as .71 as a result of the reliability practice carried out with split-half method. Those obtained values are considered to be sufficient for the reliability level of the separation anxiety inventory.

Separation anxiety inventory, which is a valid and reliable inventory in general, can be beneficial for examining how the parents make sense of the separation in such a case, determining their attitudes and the quality of the psychological support to be given (Cognitive, Individual-oriented, or Psychodynamic approaches). Those at the advanced ages are more fragile with the experiences such as loneliness, separation and sorrow. It was also discovered that high level of separation anxiety would lead to the psychological reasons that cause anxiety disorders for parents (Wijeratne ve Manicavasagar, 2003).

Anxiety level of the parents after separation should be determined with the Separation Anxiety Inventory, and the individuals should be helped to get their anxiety feelings under control by grounding on the group therapies for parents and individual cognitive-behaviorist therapies.

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