

Adaptation of the Incomplete Stories with Doll Family Scale to Turkish Children

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Abstract

In this study, information was given about the adaptation studies of the “Incomplete Stories with Doll Family Scale” which was developed for determining attachment at the age of six in terms of social and emotional development. 60 students from preschool departments of primary schools in Muş Province participated in the study. As a result of exploratory factor analysis, the variance of one factor was computed as 55.92%. Confirmatory factor analysis results confirmed that tested data fit well with the data. Cronbach alpha coefficient (.83) and Spearman Brown split-half correlation (.83) were computed. As a result of these analyses, it is concluded that the scale is accepted to be reliable, valid, and suitable for Turkish children.

Key Words

Attachment, Attachment Style, Social and Emotional Development.

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In recent years, attachment appears to be one of the important issues of psycho-social development. Attachment is described as “a process of proximity seeking to an identified attachment figure in stressful situations, and a lasting emotional bond characterized by the purpose of survival” (Bowlby, 2003). Ainsworth, Blehar, Waters and Wall (1978) define attachment as “a lasting bond between child and mother” while they define attachment behavior as “a shaped bond that mediates experiences of later relation.”

Attachment behaviors are predictable behaviors which are the products of increasing proximity towards the attachment figure (generally to the mother). Some attachment behaviors like smiling and sounding give mother some warning alerts about the child interest for the interaction, so mother keeps the child's needs (Cassidy, 1999). Children establish attachment relation with people who are important for them. This is the first social experience of their life (Bush, 2001). According to Bowlby (1980), personal attachment to other people is an emphasis center that changes life and is not an effect that is only valid for infancy and school-age but influential throughout the life. This beginning attachment will draw a way that shapes the vital force of the person and the situation of his enjoyment of life.

Ainsworth goes beyond Bowlby and is interested in the measurable respects of attachment and begins to use the method of “Strange Situation” as an epoch-making study (Cassidy, 1999). Based on the observations of this method, Ainsworth and his friends divided attachment into three types (Ainsworth et al., 1978; Cassidy, 1999): Secure attachment, anxious-resistant, anxious-avoidant. Main and Solomon (1986) added disorganized-disoriented attachment as the fourth attachment type to this attachment classification. In 1988, Welch developed a different classification from Ainsworth and Main-Solomon. According to him, attachment is divided into four categories as secure, resistant, avoidant, and disorganized (Ryan, 2004).

Studies conducted in recent decade show that the basic principles of Bowlby's attachment theory are experimentally supported (Hertzig, & Farber, 2003). Ainsworth affects the direction of attachment studies and expansion of this theory by experimentally examining Bowlby's ideas for the first time (Bretherton, 1992). Ainsworth defined different attachment techniques with story-based observation and observed the proximal signs coming from the mothers of small children. Ainsworth con-

ceptualized secure attachment figure in a way that the child will discover the world. In addition to observing infants' different attachment behaviors, Ainsworth and his friends (1978) developed a number of dimensions that evaluate different behaviors peculiar to the mother at home.

In her studies, Ainsworth developed a method that stimulates attachment behaviors of the North American babies whose attachment behaviors at home are little noticed due to the stress. Also, he designed a new laboratory based technique called "Strange Situation" by evaluating the attachment shaped between adult and infant. In this technique, typically babies between 10 and 24 months and mothers as adults are taken. Almost all research are rooted in "Strange Situation." However; some researchers are questioning the validity of these research. According to them, "Strange Situation" is artificial. It is formed by short and controlled eight parts and the effects of attachment can come true in a broader period than "Strange Situation." Some researchers complain that this method is not broad and sensitive enough, and does not deal with infant interaction in its natural environment (Papalia, Olds, & Feldman, 2004).

As an alternative to the categorical approach, Waters and his research friends developed "the Attachment Q-set" (AQS) Scale. This is a lasting scale that measures attachment related behaviors (Waters, & Deane, 1985). Q-set is composed of 90 items that include a number of gradual dimensions reflecting secure attached behaviors. Waters (1995) developed new criteria for structure of attached behaviors subsequently. Studies about the AQS are related to the secure-insecure classification done with "Strange Situation" scale in infants. Moreover, the AQS is consistent with measuring mother's sensitivity, but there are some sides of these methods that differentiate them from each other (Solomon, & George, 1999). Donating home and laboratory environment in different contexts can be seen as the causative factor.

Cassidy and Marvin have developed new methods for measuring the quality of attachment at the ages of 3-4, and Main and Cassidy have done so for the ages of 5-7 (Belsky, & Cassidy, 1994). These methods are based on the separation from parents in the laboratory environment and coming together again. In this method, children are divided into four attachment groups. Although attachment behaviors in small children are different from the ones in infants, the organization under these behaviors of small children is thought to be close to infants'. The indication of seeking proximity suitable for the age is organized at the

attachment types like maintenance of relation, avoidance, resistance, secure avoidance and ambivalence. Besides, some children (named as insecure/disorganized control) show some disorganized behaviors as infants, and/or they take their relations under control.

In recent years, a model which enables the identification of internal representations of attached figures via some reflecting methods has been improved. A number of scales have been developed in the scope of this model. From these, Main, Kaplan and Cassidy (1985) developed a scale which consists of several photographs in order to identify the attachment state of children at the age of six. In this scale, it is aimed to identify detachment relation with the attached figure. On the other hand, the Incomplete Stories with Doll Family Scale which was developed by Bretherton and his friends for using children at the age of three was re-organized by Cassidy and implemented to the children at the age of six (Cassidy, 1988). Cassidy, (1988) has proved the validity of the scale by comparing the information about level of attachment which has been obtained based on the method of separating from parents in the laboratory atmosphere and reunion.

No published scale developed and adapted in order to measure attachment in early childhood has been encountered in Turkey. However, in recent years, several scales measuring adult attachment have been adapted to Turkish in lead of Nebi Sümer (Günaydın, Selçuk, Sümer, & Uysal, 2005; Selçuk, Günaydın, Sümer, & Uysal 2005; Sümer, 2006; Sümer, & Güngör, 1999).

Although in international literature wide ranges of scales about attachment are developed, there are almost no valid and reliable scales that can be used at present in Turkey. That is why it seems considerably important that new scales for attachment be generated and the current samples of scales whose validity are proven in the world literature be adapted to Turkish and Turkish Culture. In this study, information related to adaptation of "Incomplete Stories with Doll Family" is provided.

Method

Working Group

The working group consists of 60 children, 28 females and 32 males, who are at the age of six from Merkez İlyas Sami Primary School, 75th Year Kindergarten, 75th year IMKB Primary School, Yavuz Sultan Selim Primary School and Tandoğan Primary School.

Instrument

The Incomplete Stories with Doll Family (ISDF) has been developed by Cassidy (1988) for children at the age of six. This scale is a kind of scale which is applied as baby's telling six stories, each of which lasts about three minutes, relevant to her family. Children are expected to word their mental representation about their attachment state via these stories. Through this scale, children's confidence relation with their mothers can be discovered.

Procedure

Validity and Reliability Studies: The validity and reliability study of the scale was studied by Cassidy (1988). The consistency of the scale with "Cassidy Puppet Interview", "the Harter's Scale of Perceived Competence and Social Acceptance for Young Children" and "Cassidy Self- Interview" scales is found to be between .47-.67. On the other hand, Alpha reliability coefficient is identified as .78 and test-retest coefficient as .63. The ISDF is prepared through these stages:

1. First, a correspondence with Jude Cassidy took place, the developer of the scale, in terms of its adaptation to Turkish. After getting the permission, the ISDF was translated. In this scope, the scale was translated into Turkish by two English Language Experts and the researcher. The items that were translated into Turkish are edited by a field expert and then back translated into English again by another English Language expert. Each translation was looked for their meaning correspondence by compared with each other and it was determined that there was no difference between Turkish and English forms. The scale translated into Turkish was checked by a Turkish Language expert and it was redesigned in accordance with the suggestions of the experts. Finally, the researcher overviewed first its English then Turkish meaning correspondence and did necessary editions.
2. Whether the expressions in the scale were suitable for Turkish culture and were adequate for measuring required characters were checked in the light of the views of eleven experts working in the area of child development and preschool education. The experts were asked to evaluate each item in the scale as coherent or incoherent and

make suggestions in order to improve the items. Although the forms were sent to eleven field experts, feedback was not received from four experts; therefore, the evaluation of the scale was done according to the views of seven field experts. Since all experts marked the ISDF as “coherent”, the evaluation process was not done.

3. In order to identify intelligibility of the texts and determine possible potential breakdowns based on the application of the scales, pre-pilot application first was done on randomly selected thirteen children at the age of six and their teachers from Muş Merkez İlyas Sami Primary School in the scope of validity and reliability studies of the scales. According to the pre-application, the breakdowns in the ISDF scale related to application atmosphere and intelligibility of the texts were identified. Identified problems in application atmosphere and texts were edited.

Application: During pre-application, dolls and their houses were designed compatible with the stories. Then, the child was given instructions to think herself in a doll house with a doll family. To do this, the child was asked to represent the dolls that looked like her. The child was given permission to play freely for a short time so as to know the dolls, their houses and families.

Pre-pilot application was done in an empty room entirely far away from classrooms. A table was prepared for the placement of dolls and their houses. A model house with two rooms and a garden was put on the prepared table and the dolls were arrayed in front of this model house. When there was a dog, a tree and a doghouse in the garden, it was found that these distracted children's attentions. Hereupon the model house was changed with a model house having simple facet with two windows and a door but no garden. With the new house figure, the distraction of children's attention was prevented. During application:

- It was found that children who focused on any activity could not focus during application. In following applications, children who finished their activity were chosen.
- It was found that some children hesitated to enter the room when the chosen child was brought to the researcher waiting in the room. In following applications, the researcher made some explanations and then took the children to the room.

In pre-pilot application children generally could understand the instructions. However, children could not make sense of the third item in the scale so it was changed. Telling stories in an order is important for flow and also it help the child focus more. Since the time of the incidence was different in the changed story, the narrating order of the third item was changed as five. After editing and checking the problems, the application for validity and reliability of the scale was done.

Grading: Each scale was graded compatible with their detail by five graduated scale. Stories reflecting secure relation with attachment figure were given grades upper end of the scale (4-5). Moreover, each story can be placed practically into three classified groups.

In stories classified as secure, the character the child identified in the name of the doll was valuable; its relation with her mother was important, special and warm. The child was open to meet her mother in stressful situations. The child had a tendency to return to her mother in order to protect against stressful situation and to be in safe. Generally there is a positive result. In the stories classified as avoidance, the child talking in the name of the doll separated from the mother and/or was pushed and did not accept the significance of the relation. In stressful situations, the child denied the existence of obstacle coming inside or outside the family. She didn't accept her need for family help. If there is a successful solution, it is completely belong to her. In the stories classified as negative/hostile, the child that represented the doll had behaviors including violence, hostility, negative and strangeness. She didn't have good normal relation with her mother.

Coding was done word for word by the ones who have never met the child before. Each story was coded individually by encoders who didn't have prior information about the child. The aim of coding each story independently is to protect the coding of answers given to stories from halo effect.

Data Analysis

Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were employed to determine validity. Reliability was found by Cronbach alpha coefficient and Spearman Brown test correlation.

Findings

The suitability of the data for EFA can be tested with Kaiser Meyer Olkin (KMO) coefficient and Barlett Sphericity Test. If KMO is over .60 and the Barlett Test is significant, this shows that data are suitable for the factor analysis (Büyüköztürk, 2002). KMO was .83 and the Barlett test was significant for this study. EFA analysis was conducted to determine the construct validity of the ISDF by using principle components analysis which revealed a single factor structure. The evaluation of results from the factor analysis was done based on the factor loadings. The items' factor loadings ranged between .60-.85. Explained variance of one factor was computed as 55.92%. In literature (Anderson, & Gerbing, 1984; Cole, 1987; Marsh, Balla, & McDonald, 1988), that the GFI value is over .85, the AGFI value is over .80, RMS value is below 5 is considered as a criterion for the harmony of the model with real data (Jöreskog, & Sörbom, 1993; Sümer, 2000). CFA was calculated for confirming ISDF's single factor. CFA results are as follows: $\chi^2=12.09$ (N=60, sd=9, p=.21), (χ^2/sd)=1.33, GFI= .94, AGFI= .85, SRMR= .05 and RMSEA= .07. CFA analysis's results confirmed that tested data have well accordance with the ideal data. These findings indicate that single factor structure of ISDF scale has a valid structure. Both Cronbach alpha reliability coefficient and Spearman Brown test correlation were found .83. These reliability coefficients prove that ISDF is satisfactorily reliable. On the other hand item total correlation scores were ranging from .64 to .86. As a result of these analyses, this scale is accepted to be reliable and valid.

Discussion

Using reflective techniques in the studies done in the area of attachment is common in the literature. However; in Turkey, there are almost no scales that can be used for measuring attachment characteristics of different age groups. This is a disadvantage for the ones who want to study the attachment state of children at young age group. As a result of this study, evidence relevant to the validity and reliability of the ISDF scale has been obtained and it has been proven that this scale can be used in Turkey.

It is hoped that scores obtained from the ISDF will lead to studies that are going to be done about the attachment of six year old children.

In this sense, it is thought that this scale is useful for several research studies which will describe the relations between different variables and attachment. Besides, with the application of this scale to an extensive sampling, reliable information related to attachment styles of the six year old children in Turkey will be obtained. On the other hand, researchers are expected to improve or adapt similar scales for the children not at the age of six.

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