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Adapting the Parental Attachment Recognition Scale for Parents Nurturing Preschool Children into Turkish

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Abstract

This study aimed to conduct a validity and reliability study by adapting the "Parent Attachment Recognition Scale" developed by Tanaka (2020) to determine the early attachment experiences of mothers with preschool-aged children. The study group consisted of 565 parents, including 321 mothers and 244 fathers with preschool-aged children. The data for the study were collected through the "Personal Information Form" and the "Parent Attachment Recognition Scale" developed by Tanaka (2020). The scale comprises three subscales: parent-child communication, emotional attachment and parent impressions with a total of 27 items. Content and construct validity were examined in the validity study of the scale, while in the reliability study, analyses related to internal consistency were conducted. Expert opinions were utilized for the scale's content validity and both exploratory and confirmatory factor analysis techniques were employed for construct validity. The analyses indicated that the scale maintains its three-subscale structure as in the original form and the fit indices were acceptable. As a result of the analyzes regarding the reliability of the scale, the Cronbach Alpha reliability coefficient for the "Parent-Child Communication" subscale was calculated as 0.966 for mothers and 0.960 for fathers. Alpha reliability coefficient for the "Emotional Attachment" subscale was calculated as 0.960 the mother form and 0.968 the father form. For the "Parental Impressions" subscale, the Cronbach's Alpha reliability coefficient was calculated as 0.875 for mothers and 0.933 for fathers. The scale's overall Cronbach's Alpha value was calculated as (α)=0.979 for mothers and (α)=0.972 for fathers. In conclusion, the scale was determined to be a valid and reliable measurement tool.

Keywords: Attachment, parent, preschool period, validity, reliability.

Okul Öncesi Çocuğu Olan Ebeveynlerin Bağlanma Tanıma Ölçeğinin Türkçeye Uyarlaması

Öz

Bu çalışmada okul öncesi dönemde çocuğu bulunan annelerin kendi ebeveynleriyle olan erken bağlanma deneyimlerini belirlemek amacıyla Tanaka (2020) tarafından geliştirilmiş olan Ebeveyn Bağlanma Tanıma Ölçeği'nin Türkçeye uyarlaması yapılmaktadır. Araştırma okul öncesi dönemde çocuğu bulunan 321 anne ve 244 baba olmak üzere toplamda 565 ebeveyn ile yürütülmüştür. Araştırmanın verileri "Kişisel Bilgi Formu" ve Tanaka (2020) tarafından geliştirilen "Ebeveyn Bağlanma Tanıma Ölçeği" aracılığıyla toplanmıştır. Ölçek; ebeveyn-çocuk iletişimi, duygusal bağ ve ebeveyn izlenimleri olmak üzere üç alt boyut ve 27 maddeden oluşmaktadır. Ölçeğin geçerlik çalışmalarında; kapsam ve yapı geçerliği, güvenirlik çalışması kapsamında ise; iç tutarlık yöntemi ile ilgili analizler yapılmıştır. Ölçeğin kapsam geçerliğine yönelik analizlerde uzman görüşlerinden yararlanılmış olup, yapı geçerliği kapsamında açımlayıcı ve doğrulayıcı faktör analizi tekniğinden yararlanılmıştır. Yapılan analizler sonucunda ölçeğin orijinal formundaki gibi üç alt boyuttan oluştuğu ve uyum indeks değerlerinin kabul edilebilir düzeyde olduğu belirlenmiştir. Ölçeğin güvenirliğine yönelik yapılan analizler sonucunda ise, ölçeğin "ebeveyn çocuk iletişimi" alt boyutunda anneye ait Cronbach Alpha iç tutarlılık katsayısı 0.966 iken, babaya ait iç tutarlılık katsayısı ise 0.960,"Duygusal Bağ" alt boyutunda anneye ait Cronbach Alpha iç tutarlılık katsayısı 0.960 iken, babaya ait iç tutarlılık katsayısı ise 0.968, "Ebeveyn izlenimleri" alt boyutunda anneye ait Cronbach Alpha iç tutarlılık katsayısı 0.875 iken, babaya ait iç tutarlılık katsayısı ise 0.933 olarak hesaplanmıştır. Ölçeğin anne boyutunda toplam Cronbach Alpha değeri (α)=0.979 olarak hesaplanmış iken baba boyutunda ise (α)=0.972 olarak hesaplanmıştır. Sonuç olarak ölçeğin geçerli ve güvenilir bir ölçme aracı olduğu belirlenmiştir.

Anahtar kelimeler: bağlanma, ebeveyn, okul öncesi dönem, geçerlik, güvenirlik.

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INTRODUCTION

While Bowlby (1982, 1980) primarily focused on infants' attachment to their primary caregivers when defining attachment theory, he clearly stated that attachment is viewed as a lifelong framework and the attachment behavioral system guides thoughts, emotions and behaviors in adult close relationships. According to Bowlby, the newborn establishes his/her first relationship with his/her caring mother or another caregiver who can replace her/his mother. When this relationship progresses in a positive process such as meeting the needs of the baby, feeling safe, and receiving emotional closeness, it will enable the person to feel important by thinking that he/she is worthy of being loved, and to perceive other adults who care for him/her and the world as a safe and positive place. This secure foundation creates a basic structure for the person to develop positive models about himself/herself and others, and these models are defined as mental representations (Diehl et al., 1998). Specifically, he assumed that an adult's attachment orientation would influence how they interact with and provide care for their own children (Bowlby, 1988). In other words, attachment theory emphasizes the continuity between an individual's attachment representations and subsequent caregiver representations (Collins & Ford, 2010; Collins et al., 2009). It is accepted that parents' relationships with their attachment figures influence their behavior towards their own children and thus affect the quality of the attachment relationship (Main & Hesse, 1990). Accordingly, since parents with secure attachment representations have positive parenting cognitions, they exhibit positive emotions and behaviors and improve the parent's desire and ability to care for their baby (Jones et al., 2015; van IJzendoorn, 1995). On the other hand, it is noted that insecure attachment representations hinder the ability to provide sufficient care (George & Solomon, 1999; Jones et al., 2015) and the provision of sensitive support (Feeney et al., 2013). This is because caregivers' accessibility and responsiveness to their children are influenced by their mental representations of their relationships with their own caregivers during childhood (George & Solomon, 2008).

In the literature, individuals with insecure attachment are found to experience higher levels of parenting stress and depression (Stern et al., 2018; Jones et al., 2015), while mothers with secure attachment are observed to engage in more positive interactions with their infants (Crugnola et al., 2013; Verhage et al., 2016). Furthermore, research has shown similarities between a mother's attachment style towards her own parents and her attachment style towards her own baby. These studies suggest that mothers transmit their internal working models of attachment developed with their own parents to their own children, thereby passing on their attachment styles to future generations (Cozolino, 2014; Lippe et al., 2010). A meta-analysis study providing strong evidence for the transmission of attachment patterns from parents to their children also exists (Van Ijzendoor, 1995). However, some studies emphasize that parents' attachment styles can influence child-parent attachment styles through parental behaviors (Steele & Stelee, 1994; van Ijzendoor & Bakermans-Kranenburg, 1997).

Adult Attachment Interview Protocol used in these studies (George et al., 1985) allows testing the proposition of transmission from generation to generation, as it is developed based on the continuity of early attachment quality in interpersonal relationships in adulthood (Steele & Baradon, 2004). Within the framework of the interview evaluating the representations of early attachment experiences in adulthood, caregivers, secure/autonomous, defensive/avoidant, obsessive or unresolved trauma/loss-related representations are classified into attachment categories (Main et al., 2002). Caregivers who can speak about their childhood relationships with their parents openly, objectively and convincingly are classified as safe and it is noted that these caregivers are able to sense their children's distressing tips accurately and answer influentially (George & Solomon, 2008; van IJzendoorn, 1995). Therefore, caregivers' representations of their own internal working models of relationships have been accepted as a very strong predictor of the attachment relationship between infant and caregiver (Steele et al., 1996).

In our country, it is seen that the "Experiences in Close Relationships Inventory-II" is used in studies (Ahmadova, 2019; Güner-Algan & Şendil, 2013; Sımsıkı, 2011; Görgü, 2018) to determine adults' attachment relationships. The Experiences in Close Relationships Inventory II, developed by Fraley et al. (2000) and adapted to Turkish by Selçuk et al. (2005), was developed to gauge adult attachment dimensions. Validity and reliability studies of the scale were carried out on university students. Selçuk et al. (2005) emphasized in their study that the scale's lengthy format, the presence of some items with excessive semantic overlap leading to unnecessary repetition and the limitations of the sample consisting solely of university students were noteworthy aspects.

In addition, although many scales measuring adult attachment have been adapted into Turkish (Günaydın et al., 2005; Kırımer et al., 2014; Selçuk et al., 2005; Sümer, 2006; Sümer & Güngör 1999), especially when parents consider their own childhood, no measurement tool was found to determine attachment status. Therefore,

this study aims to adapt the "Parental Attachment Recognition Scale," developed by Tanaka (2020), into Turkish to determine the early attachment experiences of parents with children in the preschool period.

METHOD

Model of the Research

Adapting the Parental Attachment Recognition Scale into Turkish was designed in a general survey model for this study (Karasar, 1995).

Study Group

The study group of the research consists of 565 parents (321 mothers and 244 fathers) who have children in the preschool period. In determining the sample group of the research, the appropriate sampling method was utilized (Büyüköztürk et al., 2020). Among the participants in the study group, 321 (56.81%) are mothers, and 244 (43.18%) are fathers. Among the parents, 466 (82.5%) have children in the 5-year-old , and 99 (17.5%) have children in the 6-year-old. Among the fathers, 44 (18.03%) are aged 20-25, 118 (48.36%) are aged 26-35, and 82 (33.60%) are aged 36-45. Among the mothers, 54 (16.82%) are aged 20-25, 186 (58.40%) are aged 26-35, and 181 (57.94%) are aged 36-45. Among the fathers, 38 (15.57%) have a degree in elementary school, 47 (19.26%) in high school, 117 (47.95%) in undergraduate studies, and 42 (17.21%) in postgraduate studies. Among the mothers, 35 (10.90%) have completed middle school, 41 (12.77%) have completed high school, 203 (63.23%) have completed undergraduate studies, and 42 (13.08%) have completed postgraduate studies. Among the fathers, 165 (67.62%) are civil servants, 40 (16.39%) are laborers, and 39 (15.98%) are from other occupational groups. Among the mothers, 201 (62.61%) are civil servants and 120 (37.38%) are housewives.

Data Collection Tool

Parental Attachment Recognition Scale: Tanaka (2020) developed the scale to assess mothers' early experiences of attachment with their parents during the preschool period. The scale, which consists of three subscales: and parent-child communication, parental impressions, emotional attachment is a 7-point Likert type. The scale's higher scores indicate a stronger understanding of the parent's early childhood attachment experiences. The scale's items 1, 4, 25, 26 and 27 are reverse-coded.

The parent-child communication subscale includes items 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17 and 19 This subscale is related to close parent-child interactions that are important for attachment experience. The emotional attachment subscale includes items 11, 18, 20, 21, 22, 23, 24, 25, 26 and 27. This subscale reflects the attitudes of parents towards their children's initiatives as well as their unpleasant emotions and their behaviors in supporting their children's trust-building process. This subscale includes items like "My family has always given me a sense of confidence that I am loved" and "My family understood my feelings." The parental impressions subscale includes items 1, 2, 3 and 4. This subscale reflects parents' impressions of their own parents, providing descriptive information about the quality of attachment during their childhood. Items in this subscale include statements like "My family supported me / stood by me when I asked them" and "My family enjoyed playing with me or talking with me" (Tanaka, 2020).

The scale's validity and reliability studies were carried out with 639 parents. In the validity studies, it was revealed that the scale consists of three subscales and 27 items. Cronbach's Alpha coefficients for its parental impressions, parent-child communication emotional attachment subscales and whole scale were calculated as 0.83, 0.94, 0.93 and 0.83, respectively in the study. The correlation coefficient between the subscales of the scale is found to be in the range of 0.69 to 0.82. In the conducted confirmatory factor analysis, CFI was determined to be 0.90, and RMSEA was 0.08, indicating that the generated model shows a good fit (Tanaka, 2020).

Analysis of Data

Initial contact was made with the researcher who developed the scale as part of the study and necessary permissions were obtained. The first step was to translate the scale into Turkish and then back-translate it from Turkish to English to ensure linguistic equivalence. In the subsequent stage, the Turkish version was refined based on a comparison with the original scale items, ensuring linguistic validity. After the scale were translated into Turkish, they were further again translated into Turkish by experts of English. The items translated by three experts were then retranslated back into English and a comparison was made between the Turkish-English expressions. The equivalence between the Turkish and the original form has been verified by experts in the field and English language experts.

Content and construct validity analyses were conducted for the validity of the scale and analyses about internal consistency were carried out using Cronbach's alpha method within the reliability analysis. Content validity was ensured through expert opinions, while construct validity was established through exploratory and confirmatory factor analysis techniques. For the exploratory factor analysis on the collected dataset, the IBM SPSS Statistics 25 software package was utilized in the study. This study utilized the principal component method for factor extraction, considering the factor selection criteria to determine an appropriate number of factors. Additionally, a varimax rotation was conducted to enhance the clarity of variables contributing to the formation of each common factor. Confirmatory Factor Analysis was applied to assess whether the factors obtained through EFA are structurally appropriate (Brown, 2015).

Research Ethics

Before starting the research process, permission was obtained from the KTO Karatay University Scientific Research Ethics Committee (with a letter dated 08.10.2021 and reference number E-46409256-300-17338). In the subsequent phases, parents of preschool children residing in the city center and central districts of Konya were approached and provided with necessary information about the study, and those who willingly agreed to participate were involved in the research.

FINDINGS

Findings Related to Content Validity

After it was translated into Turkish by three experts in the field of child development who have a good command of English, the final version of the Turkish version was obtained by translating it back from Turkish to English. The linguistically equivalent scale in both its original and Turkish versions was presented to five academic experts in the field, who were asked to evaluate the appropriateness and comprehensibility of the scale items for the purpose of the study. The Content Validity Index (CVI) was determined using the Davis technique for content validity in the research. In the Davis technique, expert opinions are rated as "Appropriate," "Item needs slight revision," "Item needs major revision" and "Item is not appropriate." A value of 0.80 is accepted as the criterion (Yurdugül, 2005). The average Content Validity Index of the scale was calculated as 97%. Based on these results, it was determined that the inter-coder reliability criterion of 90% or higher specified for the five experts (Polit et al., 2007) was met. Thus, it can be concluded that the content validity is statistically sufficient.

Findings on Construct Validity

Findings Related to Exploratory Factor Analysis: Factor analysis was performed on the obtained data to determine the scale's construct validity.

Table 1. Common Factor Variances and Factor Loads for the Parental Attachment Recognition Scale

Item	Mother			Father		
	Parent-Child Communication	Emotional Attachment	Parental Impressions	Parent-Child Communication	Emotional Attachment	Parental Impressions
1 *			0.620			0.812
2			0.691			0.777
3			0.794			0.811
4 *			0.761			0.839
5	0.798			0.868		
6	0.632			0.761		
7	0.704			0.844		
8	0.701			0.755		
9	0.744			0.830		
10	0.739			0.878		
12	0.583			0.546		
13	0.596			0.832		
14	0.627			0.756		
15	0.643			0.693		
16	0.611			0.570		
17	0.520			0.601		
19	0.778			0.808		
11		0.795			0.813	
18		0.775			0.815	
20		0.750			0.769	
21		0.741			0.803	
22		0.689			0.837	
23		0.640			0.791	
24		0.522			0.658	

25 *		0.732			0.797	
26 *		0.763			0.851	
27 *		0.708			0.880	
Value	7.869	7.494	4.350	8.742	7.961	3.823
Ratio of Variance Explained	29.145	27.754	16.112	32.376	29.484	14.158
Cronbach's Alpha	0.966	0.960	0.875	0.960	0.968	0.933
	Total Explained Variance Rate = 73.011 (KMO) = 0.967 Bartlett Test Value = 9857.117 **p = 0.001** ** Total Cronbach's alpha (A)=0.979			Total Explained Variance Rate = 76.018 (KMO) = 0.949 Bartlett Test Value = 8208.972 **p = 0.001** ** Total Cronbach's alpha (A)=0.972		

p*<0.05; p**<0.01

Taking into account the differences in early attachment experiences to their own parents, the scale was evaluated separately for mothers and fathers in the study. The suitability of the distribution for factor analysis was tested using the KMO test, with a value above 0.80 being considered very good (Akgül & Çevik, 2003). In accordance with the data obtained from mothers in the study, the KMO value was determined as 0.967 and for fathers, it was 0.949. Thus, it can be stated that the obtained KMO values are at a very good level.

The Bartlett's test results were calculated as 9857.117 ($p<0.05$) for mothers and 8208.972 ($p<0.05$) for fathers. These values indicate that the multivariate nature of the measured variable in the population parameter is significant. In this research, no limitation was imposed on the number of factors and factors with eigenvalues greater than or equal to 1 were considered important factors (Büyüköztürk, 2002). Considering that variance ratios above 40% are ideally accepted (Scherer, 1988), the variance amounts obtained in this study are considered sufficient, with 73% for mothers and 76% for fathers.

As shown in Table 1, the "Parental Attachment Recognition Scale" consists of three subdimensions: parent-child communication, emotional attachment, and parental impressions.

Table 2. Parental Attachment Recognition Scale Item-Total Correlation Values

Item	Total Correlation		Item	Total Correlation		Item	Total Correlation	
	Mother	Father		Mother	Father		Mother	Father
1 *	0.740	0.598	10	0.855	0.828	18	0.855	0.770
2	0.681	0.706	12	0.705	0.451	20	0.766	0.804
3	0.661	0.725	13	0.776	0.806	21	0.777	0.795
4 *	0.733	0.701	14	0.784	0.827	22	0.801	0.785
5	0.862	0.826	15	0.781	0.815	23	0.830	0.793
6	0.795	0.783	16	0.716	0.596	24	0.659	0.755
7	0.822	0.809	17	0.763	0.764	25 *	0.843	0.652
8	0.866	0.703	19	0.916	0.869	26 *	0.792	0.682
9	0.809	0.730	11	0.826	0.797	27 *	0.805	0.730

According to Erkuş (2003), a factor with an item-total correlation value below 0.40 is considered not to contribute significantly to the measurement of the intended construct. In light of this, the total correlation values of the items in the scale range between 0.659 to 0.916 for mothers and between 0.451 and 0.869 for fathers. In this context, there was no need for any reduction in the scale items (Table 2).

Table 3. Statistical Values Regarding the Fit of the Model

Measurement	Fit Index Values of the Model
	2.164 **
RMSEA	0.046 **
SRMR	0.029 **
IFI	0.960 **
CFI	0.960 **
GFI	0.855 *
TLI	0.954 **

* Acceptable Fit; ** Good Fit (Şimşek, 2007).

The fit values of the model are observed to have acceptable and good fit values (Kline, 2011). The $\chi 2$ goodness-of-fit test determines whether the observed frequency distribution is equivalent to the expected distribution under the null hypothesis (Tekindal, 2021). RMSEA is a fit index that evaluates how distant a default

model is from a perfect model, whereas TLI and CFI are incremental fit indices that compare the fit of a default model to that of basic model (Xia & Yang, 2019). Standardized effect sizes are preferred over non-standardized measurements as they facilitate interpreting the magnitude of misfit. The most popular standardized effect size for misfit is SRMR, which can be interpreted roughly as the average standardized residual covariance. The main advantage of using SRMR over RMSEA is that its value can be interpreted to a significant extent (Shi et al., 2018). When analyzing the statistical values of the Parent Attachment Recognition Scale model, the following values were obtained: $\chi 2/df$ value of 2.164, RMSEA value of 0.046, SRMR value of 0.029, IFI value of 0.960, CFI value of 0.960, GFI value of 0.855, and TLI value of 0.954.

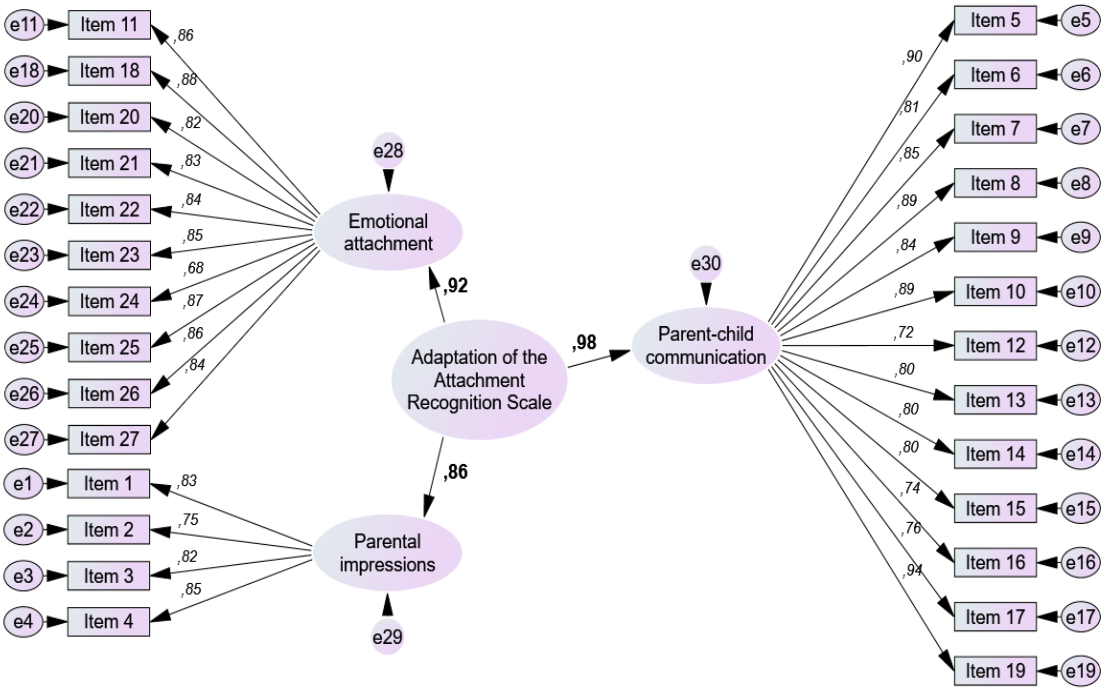

Figure 1. *The Parent Attachment Recognition Scale (a) Model Formed for Mothers*

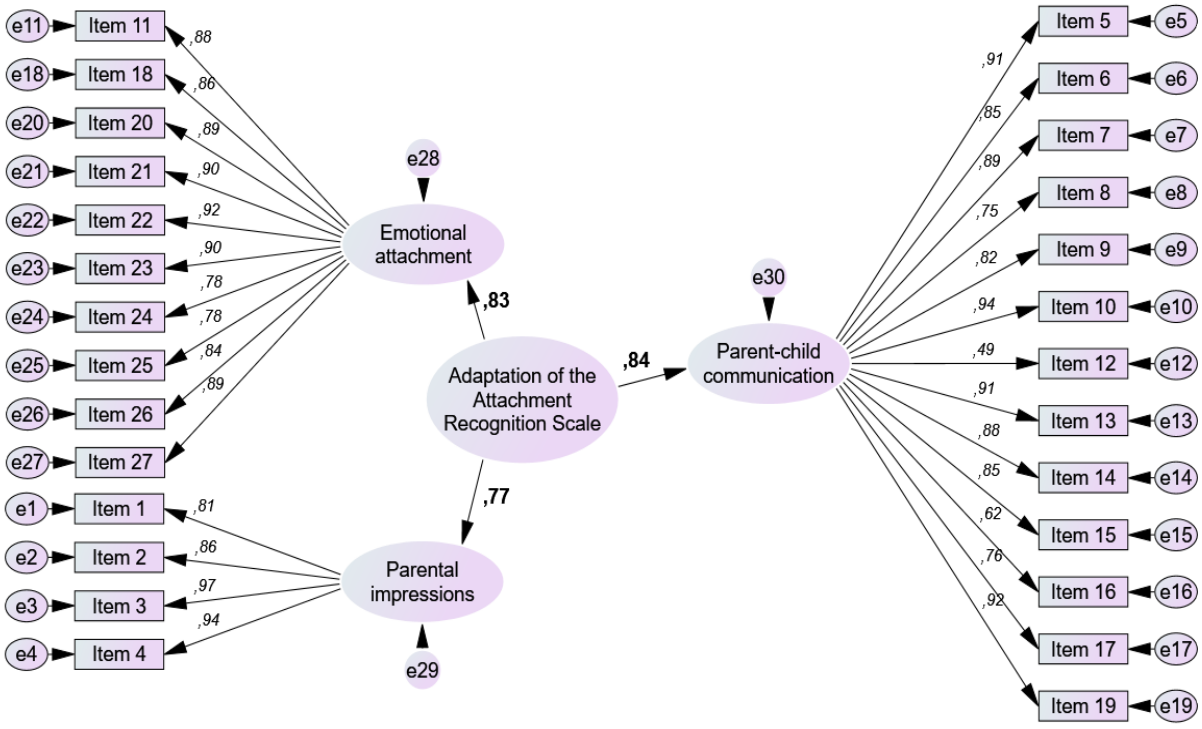

Figure 2. *The Parent Attachment Recognition Scale (b) Fathers*

After constructing the model, the relationships between the scale scores and the sub-dimensions are presented in Table 4, and the evaluation of the scale scores and sub-dimensions according to mothers and fathers is provided in Table 5.

The "Parent Attachment Recognition Scale" is a 27-item measurement tool developed to determine the early attachment experiences of mothers with preschool children. Higher scores indicate a stronger endorsement of mothers' early attachment experiences during their childhood, suggesting that the experiences are validated by the mothers themselves during the early childhood period. Scores that can be obtained from the scale range from 27 to 189. The "Parental Impressions" subscale consists of items 1, 2, 3 and 4. The "Parent-Child Communication" subscale includes items 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17 and 19. The "Emotional Attachment" subscale is composed of items 11, 18, 20, 21, 22, 23, 24, 25, 26 and 27.

Table 4. Evaluation of the Relationships between the Parent Attachment Recognition Scale and the Scale's Subscales (n=565)

	Mother (n=321)			Father (n=244)		
	Parent-Child Communication	Emotional Attachment	Parental Impressions	Parent-Child Communication	Emotional Attachment	Parental Impressions
Emotional Attachment	0.761			0.642		
Parental Impressions	0.705	0.864		0.611	0.672	
Parent Attachment Recognition Scale	0.819	0.973	0.947	0.776	0.931	0.879

When examining Table 4, relationships between the Parent Attachment Recognition Scale, its subscales, and the scores are observed as follows: For mothers, the emotional attachment subscale and parent-child communication subscale have a correlation of r=.76. The parental impressions subscale and parent-child communication subscale have a correlation of r=.70. The total scores of the scale and the parent-child communication subscale have a correlation of r=.81. The parental impressions subscale and emotional attachment subscale have a correlation of r=.86. The total scores of the scale and emotional attachment subscale have a correlation of r=.97. The total scores of the scale and parental impressions subscale have a correlation of r=.94. For fathers, the emotional attachment subscale and parent-child communication subscale have a correlation of r=.64. The parental impressions subscale and parent-child communication subscale have a correlation of r=.61. The total scores of the scale and the parent-child communication subscale have a correlation of r=.77. The parental impressions subscale and emotional attachment subscale have a correlation of r=.67. The total scores of the scale and emotional attachment subscale have a correlation of r=.93. The total scores of the scale and parental impressions subscale have a correlation of r=.87.

Table 5. Descriptive Statistics of the Parent Attachment Recognition Scale (n=565)

	Mother (n=321)		Father (n=244)		Test St.	p
	Mean±SD	Min-Max	Mean±SD	Min-Max		
Parent-Child Communication	25.72±3.33	27 (4-28)	21.79±6.30	24 (4-28)	9.558	0.001 **
Emotional Attachment	83.92±12.21	87 (13-91)	68.51±19.00	74 (13-91)	11.693	0.001 **
Parental Impressions	65.10±9.21	67 (12-70)	59.25±14.06	64 (10-70)	5.967	0.001 **
Parent Attachment Recognition Scale	174.74±23.33	179 (36-189)	149.55±34.93	159,5 (38-189)	10.259	0.001 **

When Table 5 was examined, it was determined that the mother's parent-child communication, emotional attachment, parental impressions sub-scales, and the total score averages of the scale were significantly higher than the fathers' mean scores ($p<0.05$).

Table 5. Cronbach Alpha Values of the Parent Attachment Recognition Scale

	Cronbach Alfa Values Mother dimension	Cronbach Alfa Values Father dimension
Parent-Child Communication	0.966	0.960
Emotional Attachment	0.960	0.968
Parental Impressions	0.875	0.933
Parent Attachment Recognition Scale	0.979	0.972

In the evaluations conducted within the scope of the research for mothers, a Cronbach's alpha the "parent-child communication" subscale has 0.966, the "emotional attachment" subscale has 0.960, and the "parental impressions" subscale has 0.875. The total Cronbach's alpha value of the scale is calculated as (α)=0.978. In the evaluations conducted for fathers, the "parent-child communication" subscale of the scale has a Cronbach's alpha internal consistency coefficient of 0.966, the "emotional attachment" subscale has 0.964, the "parental impressions" subscale has 0.933, and the total Cronbach's alpha value of the scale is calculated as (α)=0.971. In the evaluations regarding the father dimension, Cronbach Alpha was found to be 0.960, 0.968, 0.933 and 0.972 for the parent-child communication, emotional attachment, parental impressions sub-dimensions and total score, respectively. As a result of these evaluations, Cronbach's Alpha values are found to be above 0.70 in both groups, which is considered sufficient (Özdamar, 2002; Tavakol & Dennick, 2011). Furthermore, based on the evaluations, it is concluded that the scale measures distinct characteristics in three subscales and is a valid measurement tool separately for both mothers and fathers.

DISCUSSION & CONCLUSION

In the study, a reliability and validity study of the "Parent Attachment Recognition Scale" developed by Tanaka (2020) was conducted to adapt it into Turkish and assess its reliability and validity. As a result of exploratory factor analysis, it was determined that the scale retained its original structure, consisting of three sub-dimensions: parent-child communication, emotional attachment and parental impressions, along with 27 items.

In the research, the content validity index of the scale was determined using the Davis technique. A value of 0.80 is considered as the criterion for this index (Yurdugül, 2005). When looking at the average Content Validity Index of the scale, it was calculated as 97%. Based on these results, it has been determined that the scale meets the inter-rater reliability criterion of 90% or above, as specified for five experts (Polit et al., 2007).

The study utilized exploratory factor analysis to ascertain whether the scale's items would group into similar subscales as in the original form. The results of the exploratory factor analysis indicated that the scale consisted of three subscales: parent-child communication, emotional attachment and parental impressions. Considering the variations in early attachment experiences with their own parents, the scale was evaluated separately for mothers and fathers in the study.

In accordance with the data obtained from mothers, the Kaiser-Meyer-Olkin (KMO) value was determined as 0.967, and the KMO value was found to be 0.949 for data obtained from fathers. Therefore, it can be said that the obtained KMO values are at a very good level. For factor analysis to be appropriate, Bartlett's Test of Sphericity should be significant ($p<0.05$) (Akgül & Çevik, 2003; Williams et al., 2010). Therefore, in this study, it is observed that the Kaiser-Meyer-Olkin (KMO) value obtained from the evaluation of the scale by mothers and fathers is at a very good level. The Bartlett's Test of Sphericity resulted in 9857.117 ($p<0.05$) for mothers and 8208.972 ($p<0.05$) for fathers. In factor analysis, variance ratios above 40% are considered ideal (Scherer, 1988). Considering this criterion, the variance ratios of 73% for mothers and 76% for fathers obtained in this study can be considered sufficient.

Confirmatory factor analysis aims to test the adequacy of a model in explaining the relationships between items and underlying constructs of a measurement tool. The suitability of the results of the confirmatory factor analysis model needs to be tested, and the fitness of the model is assessed using fit indices (Özdamar, 2011; Çarkçı, 2020). Since the goodness of fit values as a result of the first analysis of this emerging lack of the desired level of the model, merging and corrections were carried out considering the improvement indexes. The fit indices of the sub-dimensions were examined, and the sub-dimensions were combined with each other.

In the resulting model ($\chi2$=1343.334 df=618), the Parent Attachment Recognition Scale consists of three sub-dimensions. When the statistical values of the Parent Attachment Recognition Scale were examined, the ($\chi2$/df) value was calculated as 2.164, RMSEA value as 0.046, SRMR value as 0.029, IFI value as 0.960, CFI value as 0.960, GFI value as 0.855, TLI value as 0.954. RMSEA, SRMR, CFI, ($\chi2$ /df), excess fit index (IFI), (GFI), these fit indices showed that the model was acceptable at an acceptable level (Çarkcı, 2020).

In the scope of the study, when the relationships between the Parent Attachment Recognition Scale and its sub-dimensions were examined, moderate to high-level positive correlations were observed in both the mother and father dimensions. In the study carried out by Cummings et al. (2003), the warm emotional attachment of the parent with the child affects the parent-child relationship. In Öztürk's (2006) study with adolescents, it was determined that family communication had an effect on adolescents' emotional health.

The Parent Attachment Recognition Scale consists of three subscales: “parent-child communication,” “emotional attachment,” and “parental impressions. Cronbach's alpha coefficient was found to be 0.966 for the mother and father form of the parent-child communication sub-dimension, and 0.960 for the mother and father form for the emotional attachment sub-dimension. The parental impressions subscale was found the mother form 0.875 the father form .93. These analyses revealed that both groups’ Cronbach’s Alpha values (), which are regarded as sufficient (Özdamar, 2002; Tavakol & Dennick, 2011), were higher than 0.70. The evaluations also showed that the scale is a reliable measurement tool for both mothers and fathers because it evaluates distinct characteristics in three subscales.

In conclusion, the obtained findings show that the scale is a valid and reliable measuring tool that can be used to determine the early attachment experiences of parents (both mothers and fathers) with preschool-aged children. Future studies can examine the relationships between parents’ attachment tendencies, communication with their children, parenting behaviors, and attachment styles with their own children. Moreover, a comparison of attachment orientations across different generations can also be investigated.

Statements of Publication Ethics

The authors of this article declare that this research has not any ethical conflicts or problems that may limit the publication of the article. Before starting the research process, permission was obtained from the KTO Karatay University Scientific Research Ethics Committee (with a letter dated 08.10.2021 and reference number E-46409256-300-17338).

Researchers’ Contribution Rate

The authors equally contributed to this study.

Conflict of Interest

There is no conflict of interest in this research. The research was carried out without any commercial or financial support from any legal person, institution or organization.

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