



The Adaptation of Adult Interpersonal Acceptance-Rejection Scale into Turkish and the Examination of its Psychometric Properties

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ABSTRACT

This study aims to adapt the Adult Interpersonal Acceptance Rejection Scale to Turkish culture and examine the validity and reliability of the Turkish version of this scale. 653 university students selected by the convenience sampling method constitute the study sample. The original factor structure of the scale was examined by confirmatory factor analysis. The results revealed that the original factor structure of the Adult Interpersonal Acceptance-Rejection Scale was confirmed in the Turkish sample. The internal consistency of the scale items was associated with the Cronbach's alpha reliability coefficient and was calculated as .908. In addition, Cronbach's alpha values were .915 for the mother acceptance sub-dimension, .909 for best friend acceptance sub-dimension, and .911 for the romantic partner acceptance sub-dimension. Correlation coefficients were calculated between the Adult Interpersonal Acceptance Rejection Scale and the Two-Dimensional Self-Esteem Scale, the Interdependent Happiness Scale, and the Life Satisfaction Scale to prove the validity of the criterion. The results showed that the sub-dimensions of the scales were significantly related. These results show that the Turkish version of the Adult Interpersonal Acceptance Rejection Scale is a valid and reliable measurement tool that can be used for research purposes to determine the levels of interpersonal acceptance and rejection of adult individuals.

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Keywords:

Adult Interpersonal acceptance-rejection, validity, reliability, confirmatory factor analysis.

1. Introduction

The need to belong is universally defined as the innate need of individuals to establish and maintain permanent, positive, and meaningful interpersonal relationships at a certain level (Baumeister & Leary, 1995). For maintaining their lives, people need the presence of other people and relationships to be established with them in many aspects of life (Hendrick, 2009). All relationships with family members, romantic partners and friends are of great importance for life (Hendrick, 2009). The existence of social support, social integration, and positive interaction in social relationships is important for individuals to remain healthy in their lives (Cohen, 2004; House et al., 1988). Social relationships benefit not only mental health, but also emotional and physical health. It is stated that individuals with strong social relationships live longer and have lower mortality rates (Holt-Lunstad & Smith, 2012). Social relationships that provide love, closeness, and value influence people's psychological selves (Lansford et al., 2005). Studies have shown that people with positive social relationships also have high psychological well-being (Fitzpatrick et al., 1988; Goswami, 2012; Lucas & Dyrenforth, 2006). Social exclusion, a negative experience in social relationships, negatively affects happiness and well-being by creating a generalized expectation of rejection and non-belonging in the future (Sjåstad et al., 2021).

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On the other hand, individuals experiencing social rejection experience high levels of social distress and even physical pain (Eisenberger et al., 2006). In this context, while it is well known that research on interpersonal acceptance focuses primarily on relationships between children and their parents, it is also noted that acceptance in other close adult relationships is also very important (Rohner, 2016; Rohner & Khaleque, 2002). Examining the relationships with the perceived parent (mother), best friend, and romantic partner in different dimensions and contexts in addressing the acceptance and rejection of individuals in interpersonal relationships during adulthood seems important (Lac & Luk, 2019). Individuals have emotional needs to receive positive reactions and acceptance from the people they consider important in their lives. In the early years of life, children expect to see positive reactions and acceptance from their parents, and they need to feel parental love, care, comfort, support, and acceptance (Rohner & Khaleque, 2005). It is expressed that if important people do not meet the need for positive response, individuals tend to develop socio-emotional and cognitive problems such as aggression, addiction, lack of self-confidence, low self-efficacy, emotional unresponsiveness, and emotional instability (Rohner, 1999). Especially children feel anxious and insecure when they cannot adequately meet that need with their attachment figures (Khaleque & Rohner, 2002). In this sense, there is a relationship between perceived parental acceptance and children's psychological adjustment, and it seems to be important for the individual in whole life in all cultures (Khaleque & Rohner, 2012; Rohner, 2014).

Peer acceptance, another important point in interpersonal relations, expresses how individuals are accepted or rejected by their peer groups (Slaughter et al., 2002). Social scientists have been considering positive peer relationships and acceptance among peers as important developmental achievements for a long time (Mostow et al., 2002). It is observed that popular (accepted) individuals have a high level of social-cognitive functionality and exhibit higher levels of social behavior compared to rejected individuals (Dekovic & Gerris, 1994) and have high self-esteem (Bishop & Inderbitzen, 1995). Peer acceptance-rejection experiences in childhood cause some effects in adolescence and adulthood (Hymel et al., 2002). Various studies have revealed that low peer acceptance in childhood and adolescence predicts individuals' maladjustment and psychopathological patterns in adulthood (Bagwell et al., 1998; Parker & Asher, 1987). It is expressed that exposure to peer rejection at an early age is related to internalizing problems (loneliness, low self-esteem, and depression), academic difficulties, and externalizing problems (aggression, guilt, acting out behaviors) (McDougall et al., 2001). In addition to positive peer relationships, attachment to a best (close) friend is found to be associated with psychological health and adjustment (Doyle et al., 2009; Weimer et al., 2004; Wilkinson, 2010) and quality of life is high for individuals who have positive communication with their best friend (Marsa-Sambola et al., 2017).

Another dimension of acceptance in interpersonal relationships is the experiences of acceptance and rejection in romantic relationships (Lac & Luk, 2019). Romantic acceptance and rejection are powerful clues that affect adults' emotional state, well-being, and reproductive success (Hsu et al., 2020). Romantic rejection is one of the most stressful life events in adults compared to chronic stress and failures, which are more strongly associated with distinct depressive symptom patterns (eg., loss of appetite, guilt), and other symptoms (fatigue, hypersomnia) (Keller et al., 2007). It is stated that close and romantic ties that include positive evaluations can provide individuals with a strong self-affirmation tool (Murray et al., 2001). Partner acceptance is a factor that increases relationship satisfaction in both partners of a romantic couple (Kappen et al., 2018). It is expressed that individuals with a high need for approval in a romantic relationship have high self-esteem and relationship satisfaction (Cramer, 2003). At this point, being accepted by the partner in a romantic relationship seems to be related to positive characteristics.

Scales evaluating acceptance and rejection in two or more relationship categories are on a quite limited level. In the literature, there are various scales that can be related to the assessment of interpersonal acceptance and rejection, such as Adult Parental Acceptance Rejection Scale (Rohner, 2005a), Parental Attachment Scale (Parker, Tupling & Brown, 1979), Parent and Peer Attachment Inventory (Armsden & Greenberg, 1987), Intimate Bond Scale (Wilhelm & Parker, 1988), Partner Behavior Inventory (Doss & Christensen, 2006), Attachment to Parents and Friends Inventory Short Form (Günaydın et al., 2005) and Teacher Acceptance-Rejection/Control Questionnaire (Rohner, 2005b). The scales in the literature generally focus on a kind of close relationship acceptance and those scales mostly include parental acceptance. In the Turkish literature, it is seen that no research has examined interpersonal acceptance in adulthood among mothers, close friends, and

romantic partners at the same time. Thus, this research aims to adapt the Adult Interpersonal Acceptance-Rejection Scale, which examines mother, best friend, and romantic partner acceptance together, to Turkish culture and examine the psychometric properties of the scale developed by Lac and Luk (2019).

2. Methodology

2.1. Research Sample

The research sample included 653 university students who voluntarily participated in the study and were selected using the convenience sampling method. Analyses were conducted with different participants at each step, as the adaptation phases of the scale included different steps. Accordingly, the study group consists of participants in four different groups. The first group consists of 42 university students who speak English. Data for linguistic equivalence of the Adult Interpersonal Acceptance-Rejection Scale were collected from this first group.

The second group consists of 566 university students from two different universities in two different metropolitan cities of Turkey. Data collected from the second group were used for the construct validity of the Adult Interpersonal Acceptance-Rejection Scale. As a result of the evaluation of the data collected at the beginning, it was determined that the data of 59 students were missing, inaccurate, damaged the normality of the data, and removed from the data set. So, the final size of the data set decreased to 507. Of the total 507 participants, 269 (53.1%) were female, and 238 (46.9%) were male. The ages of the participants ranged from 18 to 37, with a mean age of 21.05 and a standard deviation of 2.218. Also, the third group of participants was included in the study for criterion-related validity. There were 62 university students in that group. Finally, the test-retest reliability was examined with the data collected from the fourth group of 42 students. Data were collected two weeks apart from the fourth group of participants.

2.2. Process

For the Adult Interpersonal Acceptance-Rejection Scale adaptation study into Turkish, the authors who developed the scale were contacted via e-mail, and necessary permissions were obtained. In adapting the scale to Turkish, a 5-stage model suggested by Brislin et al. (1973) includes the steps of "translating into the target language, evaluating the translation, translating back to the original language, evaluating the back-translation and getting expert opinion" was followed. The 24-item English form of the scale was sent to 10 experts (one English Teacher, one an expert in English translation and interpreting, one psychologist, and seven psychological counsellors) in the field and they were asked to translate it into Turkish. All the experts, two of whom are particularly familiar with the English language and culture, conduct various scientific researches in their fields and have experience in working with different cultures.. During the adaptation process, the experts were informed about the psychological structure of the items they were asked to translate, what the concepts meant, and what features it was a scale to measure. Then translations were compared, and a common Turkish form was decided. Back-translation from Turkish to English was carried out by four experts, apart from the ten experts at the beginning. After examining the Turkish and English forms, the final version of the scale was decided, and applications were started.

During the application process, the English and Turkish forms of the Adult Interpersonal Acceptance-Rejection Scale were first applied to the language group consisting of 42 students, with an interval of 3 weeks, and the results regarding linguistic equivalence were obtained. Then, Confirmatory Factor Analysis (CFA) was conducted to examine the construct validity of the Turkish version of the Adult Interpersonal Acceptance-Rejection Scale. To determine the criterion validity of the scale, the Adult Interpersonal Acceptance and Rejection Scale was applied along with the Two-Dimensional Self-Esteem Scale, the Dependent Happiness Scale, and the Life Satisfaction Scale to 62 undergraduates, and the correlation values between the scores obtained from the subdimensions of the four scales were examined. To investigate the reliability of the scale, the Turkish form of the scale was applied to 42 students at 2-week intervals, and Cronbach's alpha values and test-retest reliability coefficients were calculated.

2.3. Data Collection Tools

Adult Interpersonal Acceptance-Rejection Scale: This scale was developed by Lac and Luk (2019). It assesses perceived social acceptance by three important types of close relationships in adulthood. The scale consists of

24 items in a 6-point Likert type. The scale has three sub-dimensions: mother, best friend, and romantic partner. The fit indices of the scale's construct validity ($\chi^2=742.75$, $sd=249$, CFI= .96, NNFI= .95, RMSEA= .069) are at an acceptable level. Cronbach Alpha values for the sub-dimensions of the scale were calculated as .97 for mother acceptance, .96 for best friend acceptance, and .97 for romantic partner acceptance, respectively. As a result of the CFA performed during the adaptation process, which is the main purpose of this study, it was discovered that the fit indices ($\chi^2/df= 3.35$, RMSEA= .068, CFI= .920, TLI= .911, SRMR= .042) were at an acceptable level. Also, in the current study, the Cronbach Alpha internal consistency reliability coefficient of the scale was calculated as .915 for the mother acceptance dimension, .909 for the best friend acceptance dimension, .911 for the romantic partner acceptance dimension and .908 for the whole scale.

Two-Dimensional Self-Esteem Scale: Developed by Tafarodi and Swan (2001) the scale was adapted to Turkish culture by Doğan (2011). The scale consists of 16 items in a 5-point Likert type and has two sub-dimensions called self-love and self-efficacy. Fit indices of the scale's construct validity ($\chi^2=258.93$, $sd=98$, CFI= .97, NFI= .95, RMSEA= .049, RMR= .049, AGFI= .91, IFI= .97, GFI= .94) are at an acceptable level. As a result of the analyses performed for the scale's reliability, the Cronbach Alpha internal consistency reliability coefficient was found to be .83 for the self-love sub-dimension and .74 for the self-efficacy sub-dimension. The test-retest reliability coefficient was calculated as .72 for the self-love and self-efficacy dimensions. In the current study, the Cronbach Alpha internal consistency reliability coefficient was calculated as .87 for the self-love sub-dimension and .73 for the self-efficacy sub-dimension.

Interdependent Happiness Scale: Developed by Hitokoto and Uchida (2015) the scale was adapted into Turkish by Ekşi et al. (2018). The scale, which was developed to determine how people perceive their environment and how their environment evaluates them, consists of 9 items prepared in a 5-point Likert type. Item-total test correlations were found to be over .30. The internal consistency reliability coefficient of the scale was calculated as .82. In the current study, the Cronbach Alpha internal consistency reliability coefficient of the scale was calculated as .74.

Life Satisfaction Scale: Developed by Diener et al. (1985) to measure the life satisfaction of individuals, the scale was adapted into Turkish by Köker (1991). The scale consists of 5 items prepared in a 7-point Likert type. The Cronbach Alpha internal consistency reliability coefficient of the scale was found to be .76, and the test-retest reliability coefficient was found to be .85. In the current study, the Cronbach Alpha internal consistency reliability coefficient of the scale was calculated as .84.

2.4. Data analysis

To determine the construct validity of the scale, it was first examined whether the factor loads and sub-dimensions in the study in which it was developed were similar to the scale we adapted. For this purpose, Exploratory Factor Analysis (EFA) was performed. Confirmatory Factor Analysis (CFA) was conducted to examine the construct validity of the Adult Interpersonal Acceptance-Rejection Scale. CFA is an analysis that examines whether the measurement tool created based on a predetermined theoretical structure, based on testing theories about latent variables, is confirmed by the data obtained (Kline, 2016; Tabachnick & Fidell, 2013). Accordingly, CFA was preferred during the Adult Interpersonal Acceptance-Rejection Scale adaptation process into Turkish. Mplus 7.3 program was used to perform DFA. Comparative Fit Index (CFI), Chi-Square Goodness Test, Tucker-Lewis Index (TLI), the Root Mean Square Errors of Approximate (RMSEA), and Standardized Root Mean Square Residual (SRMR) were used to determine the goodness of fit of the model tested in confirmatory factor analysis. Acceptable fit values were considered as <5 for χ^2/sd , .08 for RMSEA, .010 for SRMR, .90 for CFI and TLI indices (Kline, 2016; Sümer, 2000; Tabachnick & Fidell, 2001). For linguistic equivalence, paired-sample t-test and Pearson product-moment correlation analysis were performed; for criterion validity, Pearson correlation analysis was performed; for discriminant validity, average variance extracted (AVE) was performed; and for reliability, Cronbach's alpha reliability coefficient, composite reliability (CR), item analysis, paired-sample t-test, and Pearson correlation analysis were performed. Those analyzes were carried out using the SPSS 23 Package Program.

2.5. Ethical

Ethical approvals and permissions required to carry out this study were obtained by Fatih Sultan Mehmet Vakıf University Research and Publication Ethics Committee (Approval date and number: 18.11.2020 and

protocol number 02/12/2020-45). Confidentiality principles were followed in data collection and data analysis processes. The privacy of all participants was protected. This research was conducted in line with research ethics and publication principles. There is no conflict of interest between the authors.

3. Findings

3.1. Findings Regarding Linguistic Equivalence

Applications regarding the linguistic equivalence of the Adult Interpersonal Acceptance-Rejection Scale were carried out with 42 English Language Teaching students who are fluent in both Turkish and English. First, the English form of the scale was applied to the students, and then the Turkish form of the scale was applied to the same students 3 weeks later. During the application, feedback was received from the participants about whether the items were understandable or not. It was stated that the items in the scale were clear and understandable, and all participants answered the items in about 10-15 minutes. Paired Sample t-test was used to examine whether there was a significant difference between the sub-dimensions of the scale, and Pearson correlation analyzes were performed to determine the relationships between the scores of the sub-dimensions. The results of the statistical analyzes of linguistic equivalence are presented in Table 1.

Table 1. Findings to Determine Linguistic Equivalence

Sub-Dimensions	Practice	\bar{x}	SD	t	df	p	r
Mother Acceptance	Turkish Form	39.0238	7.59489	-.747	41	.460	.895*
	English Form	39.4286	7.73066				
Best Friend Acceptance	Turkish Form	41.9524	5.22635	-1.507	41	.139	.485*
	English Form	43.1429	4.84175				
Romantic Partner Acceptance	Turkish Form	42.5238	6.26737	-.664	41	.511	.575*
	English Form	43.5476	12.19197				

* $p < .001$

Table 1 shows the Paired Sample t-test and Pearson correlation results between the sub-dimensions of the Turkish and English forms of the scale applied at 3-week intervals. According to the results, in the mother acceptance dimension ($t = -.747$; $p > .05$), best friend acceptance dimension ($t = -1.507$; $p > .05$), and romantic partner acceptance dimension ($t = -.664$; $p > .05$), it was determined that the mean score of the Turkish and English forms of the scale did not differ significantly. Between Turkish and English forms of mother acceptance dimension ($r = .895$; $p < .001$), between Turkish and English forms of best friend acceptance dimension ($r = .485$; $p < .001$), and between Turkish and English forms of romantic partner acceptance dimension ($r = .575$; $p < .001$) a significant positive relationship was determined. According to the findings obtained, it can be said that the scale gives similar results in both languages and has linguistic equivalence.

3.2. Findings Regarding the Construct Validity

To determine the construct validity of the scale, it was first examined whether the factor loads and sub-dimensions in the study in which it was developed were similar to the scale we adapted. For this purpose, Exploratory Factor Analysis (EFA) was performed. Then, whether the scale items were appropriate in Turkish culture was examined by Confirmatory Factor Analysis (CFA). Before starting the analysis, the appropriateness of the number of EFA data to the factor analysis was tested with the Kaiser-Meyer-Olkin (KMO) sampling adequacy criterion. The KMO coefficient because of the analysis was found to be .92 (Table 2). For the data set to be suitable for factor analysis, the KMO value should be above .50 and KMO values above .90 indicate a perfect fit (Çokluk et al., 2018).

Table 2. Kaiser-Meyer-Olkin and Bartlett's Values

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.916
Bartlett's Test of Sphericity	Approx. Chi-Square (χ^2)	7452.936
	df	276
	Sig. (p)	.000

Table 2 shows that Bartlett's sphericity test was performed for 507 data and the result was $p < .001$. This result means that the data come from a multivariate normal distribution and another assumption is met to perform the factor analysis (Çokluk et al., 2018).

An EFA was conducted to determine how many subdimensions the scale was divided into, the construct validity of the items, and the factor loadings of the items. The factor loading scores of the adult interpersonal acceptance and rejection scale are shown in Table 3.

Table 3. EFA Results for the Turkish Version of the Adult Interpersonal Acceptance-Rejection Scale

Item Number	Factor Loadings		
	Factor 1 Mother Acceptance	Factor 2 Best Friend Acceptance	Factor 3 Romantic Partner Acceptance
Item 1	.843		
Item 2	.802		
Item 3	.779		
Item 4	.787		
Item 5	.791		
Item 6	.678		
Item 7	.807		
Item 8	.776		
Item 9		.788	
Item 10		.782	
Item 11		.769	
Item 12		.821	
Item 13		.726	
Item 14		.686	
Item 15		.756	
Item 16		.767	
Item 17			.776
Item 18			.786
Item 19			.750
Item 20			.776
Item 21			.733
Item 22			.701
Item 23			.818
Item 24			.809

Table 3 shows a three-factor structure in the Turkish version of the Adult Interpersonal Acceptance-Rejection Scale, just like the original form. The distribution of the items to the factors also overlaps to the original form of the scale. The first factor includes 8 items and explains 33.03% of the total variance. The factor loadings of the items in this dimension range from .67 to .84. The second factor includes 8 items and contributes 12.57% to the explained variance. The factor loadings of the items in this dimension vary between .68 and .82. The third factor comprises 8 items and contributes 16.99% to the explained variance. The factor loadings of the items in this dimension vary between .70 and .82. It can be seen that the scale for interpersonal acceptance and rejection in adults explains 62.59% of the total variance. The scale consists of a total of 24 items and 3 sub-dimensions. The scale items can obtain the lowest 1 and the highest 6 points. Considering the descriptive statistics of the scale items; the mean of the scale items ranged from 4.82 to 5.35, and the standard deviation values ranged from .814 to 1.232. Skewness and kurtosis values are between -1.5 and +1.5. When the skewness and kurtosis values are examined, it is seen that normality, which is one of the CFA assumptions, is provided. Before CFA, we checked for outliers and started the analyzes in this way. Another assumption is that the sample size is sufficient and this study consists of 507 data. These data also meet the assumption that the sample size should be at least 10 times the number of parameters. In order to examine the validity of the original structure of the Adult Interpersonal Acceptance-Rejection Scale in Turkish culture, CFA was conducted. In the original form, there are 8 items in the mother acceptance (1, 2, 3, 4, 5, 6, 7, 8) dimension, 8 items in the best friend (9, 10, 11, 12, 13, 14, 15, 16) acceptance dimension, and 8 items in the romantic partner (17, 18, 19, 20, 21, 22, 23, 24) acceptance dimension. As a result of the CFA performed on the Turkish version of the 24-item 3-dimensional measurement model in the original form, the model fit indices (Model value $\chi^2/df= 3.35$, RMSEA= .068, CFI=

.920, TLI= .911, SRMR= .042) were found to be at an acceptable level. The model fit indices obtained according to the confirmatory factor analysis results are given in Table 4.

Table 4. Fit Indices and Threshold Values Used in Confirmatory Factor Analysis

Fit Indices	Model Fit	Good Fit	Acceptable Fit
χ^2/df	3.35	$0 \leq \chi^2/df \leq 2$	$2 \leq \chi^2/df \leq 5$
CFI	.920	$0.95 \leq CFI \leq 1.00$	$0.90 \leq CFI \leq 0.95$
RMSEA	.068	$0 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$
TLI	.911	$0.95 \leq TLI \leq 1.00$	$0.90 \leq TLI \leq 0.95$
SRMR	.042	$0 \leq SRMR \leq 0.05$	$0.05 < SRMR \leq 0.10$

As seen in Table 4, as a result of Confirmatory Factor Analysis (CFA), fit indices (Model value $\chi^2/df= 3.35$, RMSEA= .068, CFI= .920, TLI= .911, SRMR= .042) were found to be at an acceptable level (Hu & Bentler, 1999; Marsh et al., 2006; Schermelleh-Engel et al., 2003; Sümer, 2000; Tabachnick & Fidell, 2001).

The three-dimensional factor structure of the scale in the Turkish sample and the factor loadings of the items are given in Figure 1.

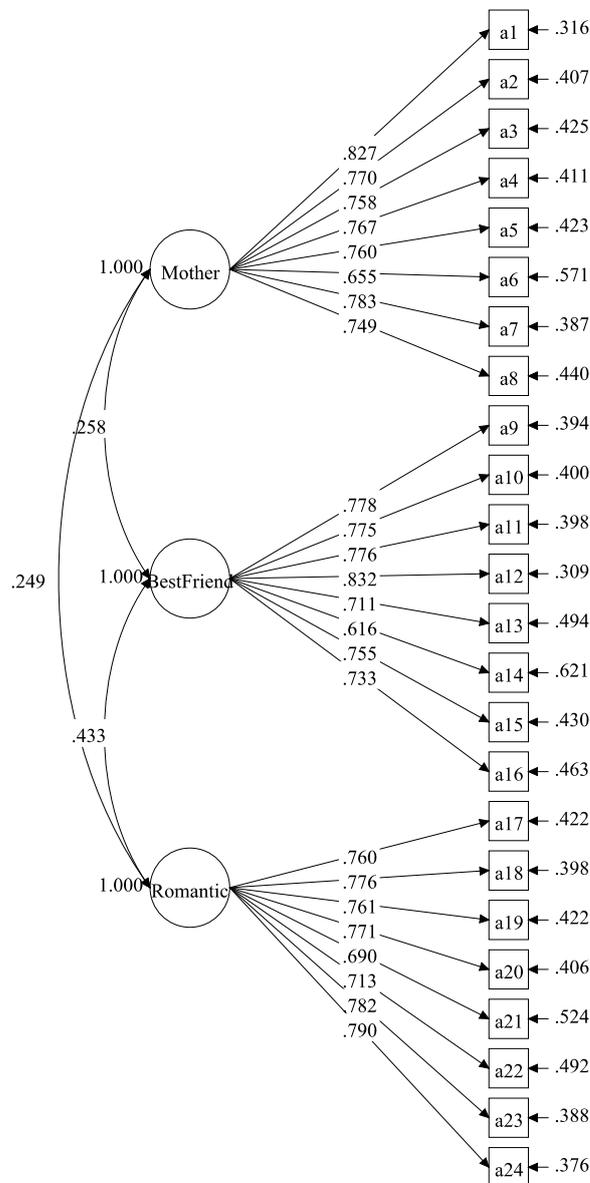


Figure 1. Path Diagram of Adult Interpersonal Acceptance-Rejection Scale and Factor Loadings
(Mother: Mother acceptance, BestFriend: Best friend acceptance, Romantic: Romantic partner acceptance)

As seen in Figure 1, the factor loads vary between .655 and .827 in the mother acceptance dimension. They vary between .616 and .832 in the best friend acceptance dimension and vary between .690 and .790 in the

romantic partner acceptance dimension. All factor loadings proved to be significant at the level of $p < .001$. These results show that each item is sufficiently loaded by the subdimension to which it belongs. In a general evaluation, it can be said that the model was confirmed and the original version of the Adult Interpersonal Acceptance and Rejection Scale was valid for the Turkish version as well.

3.3. Findings Regarding Criterion Validity

To examine the criterion validity of the Adult Interpersonal Acceptance-Rejection Scale, the two-dimensional Self-Esteem Scale, Interdependent Happiness Scale, and Life Satisfaction Scale were applied to 62 students. Pearson product-moment correlation analysis was performed to examine the relationships between the scores of the four scales and the subdimensions. The statistical results for criterion validity can be found in Table 5.

Table 5. Relationships Between Scales

	Two-dimensional Self-Esteem Scale		Interdependent Happiness Scale	Life Satisfaction Scale
	Self-Liking	Self-Competence		
Mother Acceptance	.38**	.29***	.40**	.39*
Best Friend Acceptance	.10	.18	.33**	.22
Romantic Partner Acceptance	.08	.03	.35**	.27***

* $p < .001$ ** $p < .01$ *** $p < .05$

According to the findings in Table 5, the mother acceptance dimension was found to be statistically and moderately correlated with interdependent happiness ($r = .40, p < .01$) and life satisfaction ($r = .39, p < .001$), as well as self-liking ($r = .38, p < .01$) and self-competence ($r = .29, p < .05$) sub-dimensions of the two-dimensional self-esteem scale. While there was a positive significant relationship between the best friend acceptance dimension and the interdependent happiness scale ($r = .33, p < .01$), it was concluded that there was also a positive significant relationship between the romantic partner acceptance dimension and interdependent happiness ($r = .35, p < .01$) and life satisfaction ($r = .27, p < .05$). There was no significant relationship between other dimensions. These results show that the criterion validity of the scale was provided.

3.4. Findings Regarding the Reliability

For the scale's reliability, item analysis was carried out in the first stage. Item analysis was performed to determine the predictive power and distinctiveness of the scale items to the total score of the scale. Corrected item-total score correlations of items in the sub-dimensions of the scale; It ranges from .62 to .78 for mother acceptance, .59 to .78 for best friend acceptance, and .66 to .75 for romantic partner acceptance. The item analysis is presented in table 6.

Table 6. Item Analysis

Sub-dimension	Item No	X	SD	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Mother Acceptance	Item 1	5.17	.991	.786	.898
	Item 2	5.11	.988	.734	.902
	Item 3	5.17	.998	.715	.904
	Item 4	5.18	.949	.734	.903
	Item 5	4.88	1.135	.721	.904
	Item 6	5.31	.908	.623	.911
	Item 7	4.92	1.194	.746	.902
	Item 8	5.07	1.027	.715	.904
Best Friend Acceptance	Item 9	5.35	.836	.722	.896
	Item 10	5.26	.838	.728	.896
	Item 11	5.27	.895	.724	.896
	Item 12	5.35	.814	.781	.891
	Item 13	5.34	.841	.674	.900
	Item 14	5.30	.918	.598	.907
	Item 15	5.27	.897	.725	.896
	Item 16	5.30	.861	.713	.897
	Item 17	5.06	1.010	.722	.898
	Item 18	5.18	.973	.733	.897

	Item 19	5.29	.941	.711	.899
	Item 20	5.33	.863	.725	.899
Romantic Partner Acceptance	Item 21	4.86	1.190	.660	.905
	Item 22	5.25	.949	.671	.903
	Item 23	4.82	1.232	.757	.896
	Item 24	5.13	.962	.755	.896

Table 6 show that item analysis results. This result the corrected item-total score correlation coefficients of the scale vary between .59 and .78. Suppose the item-total score correlation coefficients are positive .30 or above. In that case, it indicates that the items in the scale distinguish individuals well, exemplify similar behaviors, and the internal consistency of the scale is high (Büyüköztürk, 2020). Considering this criterion, it can be stated that the item discrimination of the Adult Interpersonal Acceptance-Rejection Scale is quite high.

Cronbach alpha reliability coefficients and test-retest reliability coefficients were calculated for the reliability sub-dimensions of the Adult Interpersonal Acceptance-Rejection Scale. The findings are presented in Table 7 and Table 8. In addition, the composite reliability (CR) value for the construct reliability and the average variance extracted (AVE) value were calculated for the discriminant validity. CR and AVE results are presented in Table 7.

Table 7. Internal Consistency Reliability, CR and AVE Values

Sub-dimensions	Item Number	Cronbach α	CR	AVE
Mother Acceptance	8	.915	.915	.577
Best Friend Acceptance	8	.909	.910	.561
Romantic Partner Acceptance	8	.911	.914	.571
Total	24	.908		

When Table 7 is examined, Cronbach's alpha values were gained as .915 for the mother acceptance dimension, .909 for the best friend acceptance dimension, .911 for the romantic partner acceptance dimension and .908 for the whole scale. For the scale to be reliable at an acceptable level, the Cronbach alpha coefficient should be .70 and above. In addition, when the sample is large enough, values below .70 can be tolerated because of the small number of items in some sub-dimensions (Kline, 2016). Based on these statements, it can be said that the level of .70 was provided for the whole scale and for each sub-dimension, and it has reliable values. In addition, AVE values were found above .56 and CR values above .90. A composite reliability (CR) value of ≥ 0.70 indicates that construct reliability is achieved, while an AVE value of ≥ 0.50 indicates that convergent validity is provided (Fornell ve Larcker, 1981).

For test-retest reliability, the Turkish form was applied to 42 university students at 2-week intervals. Paired Sample t-test was applied to examine if there was a significant difference between the sub-dimensions in the first and last application of the scale. Pearson Product-Moment correlation analysis was done to determine the relationships between the scores of the scores sub-dimensions. See Table 8 for the results of the analyzes.

Table 8. Test-Retest Reliability

Sub-Dimensions	Practice	\bar{x}	SD	t	df	p	r
Mother Acceptance	Pre-Test	36.6190	8.90040	-.560	41	.579	.838*
	Post Test	37.0714	9.41559				
Best Friend Acceptance	Pre-Test	41.7143	5.14798	.271	41	.787	.622*
	Post Test	41.5238	5.31100				
Romantic Partner Acceptance	Pre-Test	39.1905	6.43253	-.426	41	.673	.817*
	Post Test	39.4524	6.71439				

* $p < .001$

As seen in Table 8, the pre-test and post-test mean scores of the scale do not differ significantly in the mother acceptance dimension ($t = -.560$; $p > .05$), the closest friend acceptance dimension ($t = .271$; $p > .05$), and the romantic partner acceptance dimension ($t = -.426$; $p > .05$). It was determined that there is a positive and significant relationship between the pre-test and post-test scores in terms of the mother acceptance dimension ($r = .838$; $p < .001$), the best friend acceptance dimension ($r = .622$; $p < .001$), and the romantic partner acceptance dimension ($r = .817$; $p < .001$). According to the findings obtained, it can be said that the scale gave similar results in both applications and had reliability.

4. Discussion and Conclusion

The aim of this study is to adapt the Adult Interpersonal Acceptance-Rejection Scale into Turkish. After the backward and forward translation phase of the scale was carried out, the final version of the Turkish form was developed and the main application of the scale was started. Analysing the data obtained in the main application, it was concluded that the English and Turkish forms of the scale measure similar structures, i.e. they are linguistically equivalent. Then, in the construct validity study, Confirmatory Factor Analysis (CFA) was carried out to examine whether the original structure of the scale was confirmed by the data obtained. As a result of Confirmatory Factor Analysis (CFA), it was found that model fit indices (Model value $\chi^2/df= 3.35$, RMSEA= .068, CFI= .920, TLI= .911, SRMR= .042) were at an acceptable level and factor loads of all items were significant at the $p<.001$ level. To determine criterion validity, another component of validity, the Two-Dimensional Self-Esteem Scale, the Interdependent Happiness Scale, and the Life Satisfaction Scale, which are thought to be related to the Adult Interpersonal Acceptance Rejection Scale, were administered simultaneously to a group of 62 students. As a result of the application, it was observed that the sub-dimensions of the four scales had a positive and significant relationship and it was determined that the Adult Interpersonal Acceptance-Rejection Scale had criterion validity. Cronbach Alpha internal consistency coefficients and test-retest reliability values were calculated to determine the Adult Interpersonal Acceptance-Rejection Scale reliability. Cronbach Alpha values were calculated as .915 for the mother acceptance dimension, .909 for the best friend acceptance dimension, .911 for the romantic partner acceptance dimension, and .908 for the whole scale. For the test-retest application, the scale was applied to the same 42 students with an interval of 2 weeks. It was seen that test-retest correlation values were .838 for the mother acceptance dimension, .622 for the best friend acceptance dimension, and .817 for the romantic partner dimension. These results indicate that the scores between the applications show stability and the scale has a reliable structure. The results of all validity and reliability analyzes indicate that the Adult Interpersonal Acceptance and Rejection Scale, which measures adult levels of interpersonal acceptance and rejection with the dimensions of mother acceptance, best friend acceptance, and romantic partner acceptance, is a valid and reliable measurement instrument.

It is observed that acceptance-rejection studies and scales in the literature generally examine the relations of children with their parents, and it is noteworthy that there is a need for studies investigating acceptance in close interpersonal relationships of individuals in adulthood. In the literature, there is the Adult Parental Acceptance Rejection Scale developed by Rohner (2005a) and adapted to Turkish by Dedeler et al. (2017). There is also the Teacher Acceptance Rejection/Control Questionnaire developed by Rohner (2005b) and adapted to Turkish by Yıldırım (2006). However, it turns out that there is no measurement tool in the Turkish literature that assesses three types of basic relationships in interpersonal relationships and measures the acceptance of mother, best friend, and romantic partner together. In this direction, it is thought that the Adult Interpersonal Acceptance-Rejection Scale, which was brought to the Turkish literature within the scope of this study, will make significant contributions to the field and is an important measurement tool that can be used for future scientific studies.

5. References

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