Translation and Cross Language Validation of the Revised Adult Attachment Scale among Young Adults in Lahore, Pakistan

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Objectives of the present study were to translate and validate the Revised Adult Attachment scale -RAAS (Collins, 1996) from English language to Urdu language by using Brislin (1976) forward-back translation procedure and committee approach. Convenient sampling technique was used. Age ranges of the participants were varying from 19 to 25 years ($M = 20.63$, $SD = 1.21$). Cronbach's alpha reliability coefficient of Urdu RAAS was found $\alpha = .88$. Results of cross language validation indicates highly significant positive relationship ranges varying from $r = .24$ ($p < .001$) to $r = .66$ ($p < .001$). Inter-item total correlation ranged from $r = .62$ ($p < .001$) to $r = .34$ ($p < .001$). Factor loading were from .28 to .68. Item number 1, 2 and 4 was deleted by the confirmatory factor analysis as it showed $<.2$ factor loading. Finial Urdu translated version of RAAS was consisted of 15 items instead of 18. It was concluded that the Urdu translated version of RAAS is a reliable and valid tool to measure the attachment patterns of Pakistani adults. Implications of the study were discussed in cultural context.

Keywords: Attachment styles, forward-back translation, Lahore, Pakistan

Attachment is an enduring and deep emotional bond connecting individuals across time and space (Bowlby, 1982; Ainsworth & Marvin, 1995). The need for belongingness is part of an evolutionary heritage and everyone needs to be connected with others for survival (Ainsworth,

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Blehar, Waters, & Wall, 2015). These needs are universal in nature, existed in all cultures and societies with only slight variations (Bercheid & Regan, 2005). This need for belongingness motivates us to search the satisfaction in it, and to improve the quality of life. Absence of attachment inculcates the pangs of loneliness in an individual which brings negative physical, emotional, and psychological consequences (Belsky & Nezworski, 2015). Humans need longer dependency period than any other species. Human beings need nurturing relationships for their survival (Asad & Dawood, 2015; Mahmood, Hussain, & Afzal, 2015; Mikulincer & Goodman, 2006). Descendants of relationships took parenting very serious. Initially a mother establishes an affectionate relationship by eyeing at her infant, the infant reciprocates it by smiling and cooing. That is the initiation of all following attachment in the child's life. As the child grows, additional bonding occurs with father and significant others within family or those who care for the child. Throughout life, A normal individual, will look for relationships due to to its biological need for companionship (Laursen, Furman, & Mooney, 2014).

Warmth and personal security offered to a child from each parent is distinctive. Therefore, infants develop different attachment patterns that in turn have significant effect on their relationship as an addiction. Ainsworth et al., (1978) described three different infant attachment patterns such as secure, avoidant and anxious attachment. The secure attachment occurs when the immediate caregiver is available and the infant feels secure in the presence or absence of its parents. It is strengthened when the child's emotional needs are met. The avoidant attachment occurs when the caregiver is detached and unresponsive to the infant's needs. It is reinforced when the infant feels rejected. Insecure attachment leads to premature detachment and self-reliance. An anxious-ambivalent attachment patterns occur when the parent figure is at times available, but at other times not. Therefore, inconsistency remains in meeting the emotional needs of the child. Anxious- ambivalent infant often feels threatened and nervous.

Researchers found that adults continue with the same attachment styles adopted as an infant. Infant attachment styles determine whom one associate with as adults, and the quality of one's relationships (MacDonald, 2015; Munir, Sadeeqa, Nergis, Tariq, & Sajjad, 2015; Hazan & Shaver, 1994). Individuals who were securely attached with their parents in childhood enjoyed more a romantic relationship as an

adult, and they have high self-esteem. The children, who were separated from their parents in childhood, avoided the romantic relationship in their adulthood. Therefore, Anxious-ambivalent individuals avoid the strong commitment with their partners (Feeny, Noller, & Patty, 1993).

Psychoanalysis asserted that adult's behavior is profoundly effected by childhood experiences (Fraley & Shaver, 2003). Similarly according to attachment theorist the relationship styles developed as an infant are stable across the life span of a person. Longitudinal studies have demonstrated that attachment styles that one developed early in life determine later relationship with partner, friends, and eventually to one's own children (Brummett, 2010). Securely attached lovers experienced positive change in personality and it flourished their sense of humor (Aron et al., 2005). Partners acquire emotional maturity, obtain self-satisfaction and enjoy elevated and stable moods through secure attachment.

Researchers discovered (Ainsworth & Marvin, 1995; Goldber, Grusec, & Jenkins, 1999; Beckes, IJzerman, & Tops, 2015) that East Asians experience more simultaneous positive and negative emotions during insecure and dependent attachment, as compared to Western people. Insecure attachment in romantic love reduces the mutual activities of the partners, and lovers become irritated and jealous by each other. They experience hot and chill flashes, low appetites, sleep disturbances, and disorientation in daily routine activities. Their academic grades fluctuate from low to moderate level. They have suicidal ideation and attempting it in extreme cases. These factors decreases the quality of relationship (Fisher, Aron, Mashek, Li, & Brown, 2005; Marazziti & Canale, 2004). Quality of relationship demands to know the attachment patterns of partners. For this purpose, the Revised Adult Attachment Scale is a psychometrically sound measure that can be used to measure the attachment styles in adults. This scale is available in English language. In order to use Revised Adult Attachment scale in Pakistan culture, the researcher translated and validated this scale into Urdu language. So that to help the family therapist and counselors to know the adult's attachment patterns with their partner, to improve their quality of relationship. Therefore, the present study was carried out in an effort to translate and validate the RAAS into Urdu language to measure the attachment patterns of Pakistani young adults in cultural context.

Objectives

1. To translate the Revised Adults Attachment Scale (RAAS) from English language to Urdu language.
2. To determine the psychometric properties of the Urdu translated version of RAAS.

Method

Current study was conducted in three phases. In phase I, forward-back translation, committee approach and pre testing was completed. In phase II cross language validation was carried out and in Phase III psychometric properties of the Urdu translated version was explored.

Sample

In current study three sets of sample was used. $N = 77$ for translation, $N=100$ for cross language validation and $N = 500$ for the construct validation. Participants were approached with the equal distribution of gender (50% men & 50% women). Convenient sampling technique was used. Age ranges of the sample was varying from 19 to 25 years ($M = 20.41$, $SD = 3.43$). Participant's education varied from BSc (Hons) to PhD and they were taken from the Government College University, Punjab University Lahore and Lahore College for Women University.

The Revised Adult Attachment Scale (RAAS)

The Revised Adult Attachment Scale was originally developed by Collins (1996) in English language and translated into Urdu language. Originally it consisted of 18 items, 10 positively worded and 8 negatively worded items. It has three subscales naming Secure attachment, Dependent attachment, and Anxious/anxiety attachment, having six items in each subscale. It has 5 point likert scale response pattern ranging from: 1 = not at all characteristics of me and 5=very much characteristics of me. Negatively stated items were reversed scored and the total score was sum of responses of the scale. High scores indicated the strong attachment on the particular subscale and low scores mean low level of attachment. Cronbach's alpha reliability coefficient of the original and translated version was $\alpha = .92$ and $\alpha = .88$ respectively.

Phase I: Translation and Reformulation of Equivalence of the Revised Adult Attachment Scale (RAAS)

Urdu translation of the RAAS was carried out after seeking permission from the author (Collins, 1996). Two experts (one Ph. D & one M. Phil degree holder) evaluated (1) the appropriateness of content according to cultural context. (2) Whether any item required adaptation before Urdu translation (3) is there any culturally irrelevant item in the scale. After declaration the cultural appropriateness of the RAAS's content five bilingual experts (two with M. Phil in English, two with M.A English & one Ph. D in psychology) were approached for forward translation. These five translations were exposed to the five committee members who critically checked and evaluated the compatibility between the Urdu translated version and original items of the scale. They improved the sentence structure and grammar of the Urdu items. Those Urdu items were selected which conveyed the appropriate meaning of the original items. After finalization of the Urdu translation draft two Urdu language experts (Ph. D in Urdu) requested to rechecked the grammatical structure and rephrased the complex sentences into easy items without sacrificing conceptual clarity and meaning of the items. After the compilation of this procedure test try out was conducted on *n* = 10 participants to identify the difficult items.

Three back translations were carried out to identify the discrepancies indicative of ambiguous wording within the target and source language. Three bilingual experts (M. Phil in English) were contacted for the back translation. Original questionnaire was not showed to them. After back translation original RAAS, final Urdu version of the scale and these three Back translations were presented to the same committee members. All forward-back translations were compared on the basis of following criteria (1) cultural context, (2) conceptual translation, and (3) removing any surplus words or meaning from the items. They ensured equivalence between the target language (Urdu) and source language (English). The results from committee revisions and students discussion during test try out was combined form the final Urdu translated version.

Pre testing

Test try out of the Urdu translated version was conducted on 10 adults. It was instructed to the participants to identify the problematic

and difficult items. Results of test try out showed that 85 % of students found it easy to understand and comprehend, while 15% of the students reported to have some queries related to the item numbers 1, 2, 14, 17 and 18 which were entertained. Findings of pilot study on $n = 50$ participants revealed that 98 % of the students found it easy to mark and understand, while 2 % of them reported to have problem with item number 14. In pilot study all recommended modifications were incorporated. Cronbach's alpha reliability coefficient of pilot study is achieved $\alpha = .86$, which showed that Urdu translated version of RAAS has satisfactory internal consistency for its usage in the present study.

Phase II: To determine the Internal Consistency of the URDU version of RAAS

In phase II, internal consistency of the Urdu translated version of Revised Adult Attachment scale was achieved by computing cross language validation, Cronbach's alpha reliability coefficient, Inter-item total correlation and factor loading.

Procedure

After consideration of ethical procedure, students were approached in their class rooms. They were requested to fill the Urdu and English RAAS without overlooking any item. This procedure took 20 to 25 minute's average. Participants were thanked for their corporation.

Results

Cross Language Validation

To assess the qualitative and empirical equivalence of RAAS (Urdu & English), its cross language validation was carried out.

Table 1

Cross Language Validation of the Urdu & English version of the
Revised Adult Attachment Scale (N=100)

Groups	n	1st Administration	2nd Administration	r
Group I	25	Urdu	English	.24*
Group II	25	English	Urdu	.25*
Group III	25	Urdu	Urdu	.66**
Group IV	25	English	English	.54**

*p< .05. **p< .001.

Table 1 shows correlation between Urdu and English versions of attachment scale which was computed through Pearson Product Moment Correlation Method on group I ($r = .24$, $p < .05$), 2nd Group ($r = .25$, $p < .05$), Group III ($r = .66$, $p < .001$) and Group IV ($r = .54$, $p < .001$). It indicates cross language validated version is conceptually valid tool for measuring the attachment styles of adults.

Table 2

Cronbach's Alpha Reliability Coefficients of Urdu Revised Adult Attachment Scale & its subscales (N=500)

Variables	No of Items	M	SD	α
Attachment	15	51.87	10.30	.88
Close Attachment	5	17.78	4.18	.78
Dependent Attachment	4	17.92	3.88	.77
Anxious/Anxiety Attachment	6	16.16	4.26	.80

Table 2 shows the Cronbach's alpha reliability coefficients of the RAAS Urdu version is $\alpha =. 88$ ($P < .001$) and for its subscales such as close attachment $\alpha = .78$, dependent attachment $\alpha = .77$, and anxious attachment is $\alpha = .80$ respectively.

Table 3

Item-total correlation of Urdu Revised Adult Attachment Scale (N= 500)

Item number	r	Item number	r
1	.20**	10	.16**
2	.19**	11	.18**
3	.10**	12	.14**
4	.06*	13	.19**

5	.24**	14	.19**
6	.18**	15	.26**
7	.19**	16	.24**
8	.24**	17	.12**
9	.24**	18	.14**

*p < .05. **p<.001.* Table 3 shows item total correlation. It ranged from $r = .06$ to $r = .24$ ($p < .001$).

Table 4

Factor Loading of Urdu Revised Adult Attachment Scale (N= 500)

Item number	Factor loading	Item number	Factor loading
1	.07	10	.63
2	.11	11	.55
3	.63	12	.27
4	.60	13	.28
5	.32	14	.03
6	.21	15	.43
7	.47	16	.22
8	.36	17	.31
9	.63	18	.63

A result, which is reported in table 4 indicts the factor loading ranging from .03 to .63 ($p < .001$). Items, which were loaded greater than > .2 were retained.

Phase III: Construct Validity of the Urdu Version of RAAS

The construct validity of the Urdu version of RAAS is conducted on the sample of $N = 500$ by using Confirmatory factor analysis (CFA). Statistical package of AMOS 18 was used for testing the factor model of the RAAS. Missing values were ascribed using regression method. The main variables of the study were derived as latent variables and their respective items were considered to be observed variables in model. Standardized regression weights were identified considering >.2 as acceptable factor loading (Field, 2009). Using suggestive modification indices, only errors covariance were added to get a model fit. The analysis and model path diagrams were developed with AMOS graphics to estimate the chi-square values. This study selected different criterion

indices: the chi-square test ($\chi 2$), and Sorbom's (1989) goodness of-fit index (GFI), Bentler's (1990) Comparative Fit Index (CFI), Joreskog, Bentler and Bonett's, normed fit index (NFI), and root mean square error of approximation (RMSEA) with lower and upper limits of the 90% confidence interval. The criteria used for assessing model fit are with multiple indicators. Hu and Bentler (1999) recommended that Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) values above .95 and RMSEA values less than .06 represent an acceptable fit.

Table 5

Chi-Square And Stepwise Model Fit Indices of CFA for RAAS (N =500)

Scale	Chi-Square	df	GFI	CFI	RMSEA
The Revised Adult Attachment Scale Initial model (18 items)					
	1074.212	135	.880	.689	.081
Final Model (15 items)					
	475.495	86	.942	.854	065

Note. df, Degree of Freedom, GFI-Goodness-of-Fit Index, CFI-Comparative Fit Index, RMSEA-Root Mean Square Error of Approximation,

Results of table 5, shows the chi-square values for Urdu RAAS was significant after deleting item number 1, 2 and 14. It allows modification indices to correlate among items. The recommendation from the review committee for instrument was also incorporated while deciding about items. Item number 1, 2, and 14 were deleted as they have item loading less than .20. The chi-square values for final Urdu RAAS χ^2 (475.495, $N = 500$) =86, ($p < .001$), CFI = .854, RMSEA = .065 was close fit model. Non- significant χ^2 makes a good fit model resulting in the rejection of the null hypothesis. According to the Bentler (1995), with large sample size chi-square become significant while with the small sample the assumption of the chi-square test reveals an inaccurate probability. Results strongly supports that the Urdu version of Revised Adult Attachment Scale is close fit model (for graphical representation see figure 1 & 2).

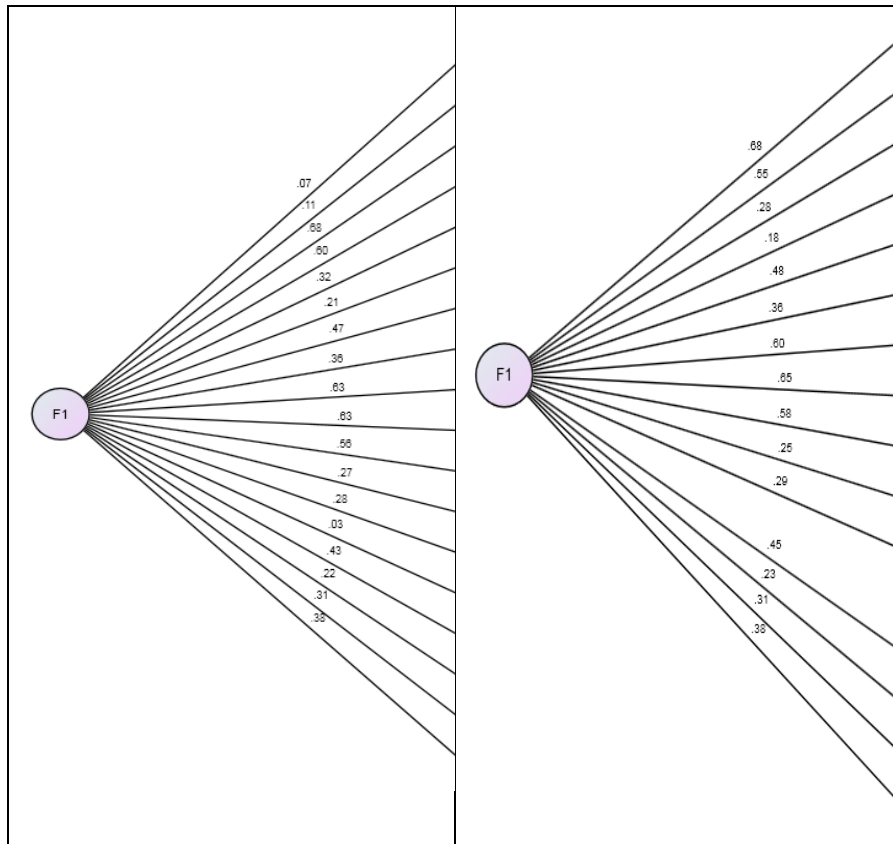Figure 1   Figure 2

Figure1. Initial model of Urdu RAAS (18 items) Figure 2. Final model of Urdu RAAS (15 items)

Discussion

Objectives of the present study were to translate and validate the Revised Adult Attachment Scale from English language to Urdu language. Standard procedure of translation was used by following the guidelines of Brislin (1976). Results of test try out showed that participants found the problem in a content of 1st item i.e. "I find it relatively easy to get close to people" particularly the word 'get close to' make them confuse. Forward- back translation and committee members finalize the Urdu translation of 'get close to' to '*qaarrabaat'*. Participants interpret this word in a sense of sexual relationship of spouse and describe it as a '*miyina bv ki qurbat or bed life*' while the author originate this item in a sense of 'to feel comfortable in social interaction including family, friend and social gatherings, which were clarified after

the correspondence of the author. After test try out, this word was changed from '*qaarrabaat*' to '*ghul mil jana*' than not even a single subject asked for clarification of this item during the data collection of the main study.

In translation procedure, there are 6 items (4, 7, 10, 12, 14, & 17) in the original scale, which required some additional (Urdu) words to clarify the exact meaning of the statement (in Urdu) while it was not existed into the original item. Following are the additional Urdu words (which were given in the brackets) in item number 4, 7, 10, 12, 14, and 17, 'hee, '*maddad ki, maddad ke lie*' '*achhee*' '*taluqat banane*' '*maddad ki, maddad ke lie*' '*aassanni ce*' and '*madad ke lie*' respectively (for detail see an annexure A).

Cronbach's alpha reliability coefficient (Kaplan & Saccuzzo, 1982) of Urdu version of the Revised Adult Attachment Scale depicted the satisfactory level of internal consistency. Results of Cross-language validation (Anastasi & Urbina, 1988) of the Urdu Revised Adult Attachment Scale showed highly significant positive relationship between source language (English) to target language (Urdu). It indicated the cohesiveness and compatibility of both versions (English & Urdu) across the time gap of eight days. Inter-item total correlation of the Urdu RAAS showed highly significant positive relationship between each item to total scores ranges from $r = .64$ to $r = .38$ ($p < .001$).

Construct validity of the Urdu Revised Adult Attachment Scale was carried out on the sample which was 28 times greater than total number of items (Field, 2005). Confirmatory factor analysis proposed the two solutions to adjust the construct validity of the Urdu RAAS. Initial solution was carried out by using 18 items, which showed that item number 1, 2 and 14 were loading less than .2 which were the minimum criteria to retain the items. Therefore these three items were deleted from the second solution, which improved the factor loading, inter-item total correlation and model fit indices. Removal of these three items such as item number 1 (original item: "I find it relatively easy to get close to people" & its Urdu translation was '*main nissbbaaattaa assani ce logou mi ghual mil jata hou*', item number 2 original item: "I find it difficult to allow myself to depend on others" & its Urdu translation '*mere lie dosuru par inhassar karna moshqil hi*', and item number 14 original item: "I know that people will be there when I need them", & its translation was '*muje malooam hi ka jab muje (maddad) ki zarrorat hogi to log waha (madad) ki lie mojooad ho gi*'. Therefore, confirmatory

factor analysis retained the original factor structure of the Revised Adult Attachment Scale. It only discarded the item number 1 from the close attachment, item number 2 and 14 from the dependent attachment, while the anxiety/anxious attachment retains the six items. Theoretical and empirical evidence showed that the Urdu translated version of Revised Adult Attachment Scale has sound psychometric properties and cultural validation to measure the attachment patterns of Pakistani young adults.

Strengths and Limitations

Only young adults were taken from the Lahore city may threat the generalization of the results. Despite of these limitations, this study is important in a sense that it is the first study which translated the Revised Adult Attachment Scale from English language to Urdu language to measure the attachment patterns of young adults in cultural context of Pakistan.

Conclusion

Findings of the present study showed that the Urdu Revised Adult Attachment Scale is a reliable and valid instrument and research tool to measure the attachment patterns of adults in cultural context. Those research scholars and mental health professionals who have the intention to explore the attachment styles of young adults in indigenous perspective can confidently use the Urdu Revised Adult Attachment Scale in Pakistani population.

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