



DEPENDENT PERSONALITY DISORDER SCALE: DEVELOPMENT AND RELIABILITY STUDY

Zaqla Bano^{1✉}, Aqla Shahzadi¹

ABSTRACT

OBJECTIVES: To develop and examine reliability of dependent personality disorder scale for adults.

METHODS: This cross-sectional analytical study design was used to develop a scale, which will measure dependent personality disorder. The data was collected by using purposive sampling technique from different government and private colleges, universities and community of Sialkot. A total of 140 participants, between 19-75 years were enrolled in this study. The item pool of 134 items was generated from literature reviews and people's opinions. Among the 125 items retained by experts, and after a pilot study only 36 statements were retained. The data was analyzed by using exploratory factor analysis, confirmatory factor analysis and reliability.

RESULTS: The final administration of 36 items was handed over to 180 participants. The model fit showed a P-value of <0.001, that established the structure validity and significance of the items to its subscales. At the final stage among the 36 items 21 were considered as reliable.

CONCLUSION: Indigenous dependent personality disorder scale with 21 questions and seven sub-scales was developed in native language Urdu. To evaluate the dependent personality this is a reliable and efficient measure which can be used by the psychologist, psychiatrist, social worker and other mental health professionals.

KEY WORDS: Adults (MeSH); Dependent Personality Disorder (MeSH); Exploratory factor analysis (Non-MeSH); Factor Analysis, Statistical (MeSH); Reproducibility of Results (MeSH).

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also have felt difficulty to initiate the projects or jobs without the help of others. The individual is ready to do anything unpleasant just to get support from others. Further, they sensed overwhelming fears of being unable to care for themselves when alone make them feel helpless and anxious. The individual cannot stay without relationship when it ends, often engaged another relationship to get support and care. Finally, they may have fears of being left to take care of them on his/her own. Further, the problem can severely interfere in the healthy functioning of a person.³ The dependent personality issues directly manifested in family and partners' relationships. The significant person was pushed to take the role of caretakers in order to deal with the emotional and behavioral issues of dependent personality people. This resulted into devastating distress for not only victims, but for everyone nearby. Moreover, if there was detachment from parents in childhood, authoritative or overprotected parenting and unsuitable or lack of rewards can lead to the problem of dependent personality.⁴

There were some studies that reported that males and females showed same prevalence rate of dependent personality disorder.⁵ Now, it is of great importance to have screening scale that can reliably measure the dependent personality disorder in adults.

There were various already known available scales on dependent personality problems but it is important to note that these scales were developed and validated on the western

INTRODUCTION

The personality refers to differences in people's patterns about how he/she thinks, feel or behave.¹ These thinking patterns, feelings and behaviors make one person different from others. In case of dependent personality disorder a person's personality is mainly categorized by the feeling of anxiousness and fear. Further, this disorder is also marked by the feeling of helplessness, submissiveness, an excessive need to be taken care of with constant reassurance and finally, an inability to make decisions. It is important to note that this pervasive and excessive need to be taken care of leads to submissiveness and clinging behavior along with fears of separation.

It is the most frequently diagnosed personality disorder that appears equally in men and women in early to middle adulthood.²

Moreover, the Diagnostic and Statistical Manual of Mental Disorders-fifth edition³ highlighted eight symptoms in the criteria of dependent personality disorder. At least five symptoms must be met for the diagnosis of this disorder. Such as one has great problem in taking their everyday decisions without help and approvals from others. They need other people to take responsibility for their most important life decisions. The person has difficulty to express his disagreement with other's opinions because of excessive fear of loss of support or approval. The person may

TABLE I: DESCRIPTIVE STATISTICS OF CRICKETERS

Q	F-1	Q	F-2	Q	F-3	Q	F-4	Q	F-5	Q	F-6	Q	F-7
10	.428	1	.482	5	.525	4	.500	8	.474	12	.460	16	.716
11	.652	2	.776	15	.580	7	.775	25	.476	13	.710	17	.641
14	.613	3	.767	18	.472	21	.545	26	.731	28	.600	24	.583
22	.685	6	.497	19	.726	30	.600	27	.698	29	.529		
23	.717	9	.486	20	.639								

TABLE II: TABLE II: KAISER-MEYER-OLKIN MEASURE OF SAMPLING ADEQUACY (KMO) AND BARTLETT'S TEST OF SPHERICITY FOR 36 ITEMS (N= 140)

	KAISER-MEYER-OLKIN	Bartlett's Test		
		Chi-Square	Df	Sig
Dependent Personality Disorder Scale	0.827	1880.283	630	<0.0001

TABLE III: MODEL FIT INDICES OF CFA FOR DEPENDENT PERSONALITY DISORDER SCALE (N= 140)

P-Value	df	Goodness of Fit Index	Comparative Fit Index	Root Mean Square Error of Approximation	Root Mean Square Residual
<.001	168	0.871	0.906	0.053	0.110

TABLE IV: RELIABILITY ANALYSIS OF DEPENDENT PERSONALITY DISORDER SCALE

Scale	Total Items	Cronbach Alpha [®]	Test-retest Reliability
Dependent Personality Disorder Scale	21	0.892	0.883

groups. The scales are Dependent Personality Questionnaire based on 8 sub-dimensions of decision-making, responsibility, agreeableness, self-initiation, nurturance, helplessness, relationships and abandonment/self-care,⁶ Dependent Personality Inventory which was based on the 8 symptoms criteria of Diagnostic and Statistical Manual of Mental Disorders,⁷ Dependent Personality Inventory Revised (DPI-R) items were related to Diagnostic and Statistical Manual of Mental Disorders Revised 4th edition (DSM-IV-TR),⁸ A five-factor measure of dependent personality traits was comprised of 12 factors under the domains of extroversion, agreeableness, conscientiousness, and neuroticism,⁹ and Dependent Personality Questionnaire (DPQ) is a screening instrument for measuring Dependent Personality of persons.⁶ However, these developed scale in west

is entirely different of our eastern culture. To measure any construct outside its cultural boundaries leads to biasness problems in the results and interpretation of the concept. Mostly, the assessment tools of dependent personality were developed in other cultures. Further, the problematic to have a competent assessment measure that is culturally and socially valid.¹⁰ Further, it has been established that if a tool developed for a specific population the might not be considered effective and consistent for some other population.¹¹ So, it can easily be said that the an instrument with culture specification are better than else.¹² To deal with this gap of not having a dependent personality scale in Pakistan the current research developed the dependent personality disorder scale that would be a significant tools for measuring adults personality. There is a dire need to develop a measure which

can fit to the culture of Pakistan and can indicate dependent personality disorder accurately. Due to the lake of indigenous personality measures in Pakistan the current research will play a crucial role for the assessment of dependent personality disorder. The objective of the current study was the development and reliability study of dependent personality disorder scale in adults.

METHODS

The study was approved by Departmental Research Review Committee (DRRC) of Department of Psychology, University of Gujrat, Pakistan for ethical concerns and was conducted from 15th December 2017 to 15th May 2018. The study used cross-sectional analytical study design and the data was collected from different government and private colleges, universities and communities of Sialkot, Pakistan. The inclusion criteria was based on age group of adult that were above 19 years and both gender. The reason for taking adults in the study was their matured tendency as children and adolescents were already dependent on others. Purposive sampling technique was used for the selection of the participants due to time constraint. At initial, the researchers developed rapport with the participants while giving their introduction, affiliation information and the aim of the research. The respondents were also informed about anonymity and confidentiality of the information. Both oral and written consent was taken from the participants and only willing persons included in the study. Moreover, the data collected with self-reported questionnaire. The respondents were given the detailed instructions about how to fill the scale after reading the scale items carefully and select the most appropriate

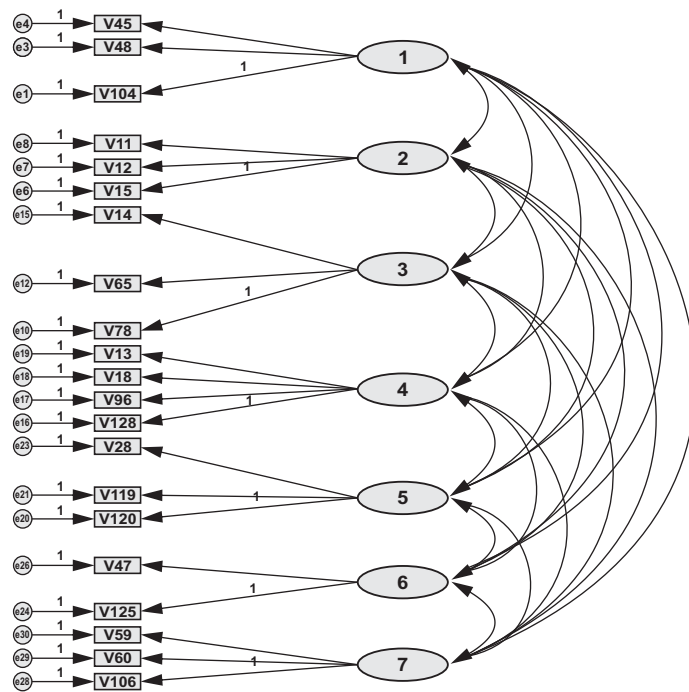


Figure 1: Diagram of confirmatory factor analysis of dependent personality disorder scale

response. The responses of participants were recorded on the questionnaire.

Initially, an item pool of 134 questions was generated after deep study of dependent personality disorder in the Diagnostic and Statistical Manual of Mental Disorders-fifth edition, existing available literature, and people's opinions using both the inductive and deductive approach. The opinions about dependency were gathered by conducting interviews in which respondents were asked to report their dependency patterns. Further, these generated questions were evaluated by the panel of 5 experts in expert evaluation meeting. They were asked for selecting those questions which are clear, important and understandable. Further, experts were also asked to give the suggestion on the 5 point rating scale of 1 (extremely poor) to 5 (very appropriate). After expert evaluation among the 134 question 125 remained by deleting the non-significant question on expert's rating. The average of the ratings of 5 experts was computed and items with above 2.5 scores were retained. Afterward, a pilot study was

done and the data of the pilot study investigated using item-total correlation of the questions. Among the 125 items 36 question were confirmed with correlation coefficients between >0.30 and <0.70 and remaining 89 items were excluded. Further, during data collection the participants were also asked to identify the problematic, unclear, difficult and vague questions and an expert panel of clinical psychologists including three PhD in clinical psychology checked the items detailed and make the necessary modification. These 36 items were reliable for final administration of the scale.

The data analyzed by using correlation, exploratory factor analysis, confirmatory factor analysis and reliability test using Statistical Package for Social Sciences (SPSS-21) and Analysis of a Moment Structures (AMOS-21).

RESULTS

The initial item pool of 134 reduced to 125 by the experts rating. After a pilot study,

only 36 item scale was used in the final administration and a total of 140 participants responded to the questionnaire. Exploratory factor analysis deleted 6 non-significant items from total of 36 items as seen in table I.

In table I, the factor loading value was suppressed to 0.400 and literature suggests a value of 0.400 or above is considered as appropriate.¹³ As mentioned in the literature there were eight major symptoms³ of dependent personality disorder, while Exploratory Factor Analysis (EFA) confirmed the symptoms in 7 factors. EFA and Confirmatory Factor Analysis (CFA) was applied on the same sample and the item numbers 10, 11, 14, 22 & 23 were found to be reliable for the factor I. Further, 1-3, 6 & 9 number items were considered reliable for Factor II. Item numbers 5, 15 & 18-20 were found reliable for factor III. The item numbers 4, 7, 21 & 30 were confirmed to be reliable for factor IV. Additionally, at factor V the item numbers 8 & 25-27 were reliable. The item numbers 12, 13, 28 & 29 were confirmed to be reliable for Factor VI and item number 16, 17 and 24 were included in factor VII. Figure 1 shows the confirmatory factor analysis of dependent personality disorder scale.

Table II shows KMO value of 0.827 that shows the measure sample adequacy, suggesting that the sample is adequate for factor analysis. Bartlett's test is also highly significant at $p < 0.05$. Further, the remaining 30 questions were put in Confirmatory Factor Analysis (CFA). The CFA was applied after running EFA to confirm the factor structure determined by EFA. The analysis showed that 9 questions were problematic hence; deleted and finalized scale consisted of 21 questions. The value of Comparative Fit Index (CFI) was 0.906 which suggesting that model of goodness of fit is absolute fit and significant <0.001 (Table III). The p -value less than 0.001 suggested that the model has a confirmed the structure. If the value of CFI is above 0.900 it is considered as appropriate. The results confirmed the model fit of the scale for dependent personality disorder scale.

The reliability of the full scale was 0.892 whereas the appropriate reliability limit is 0.70 and above. The reliability of the scale was above the stated limit. The test-retest reliability with an interval of 15 days was also above 0.70 (Table III). The final scale is attached as Annexure.

DISCUSSION

The initial item pool of 134 after expert evaluation was kept to 125. Further, after pilot study 36 items showed an item-total correlation of above 0.400 were used in final administration. Moreover, the exploratory factor analysis reduced the items to 30 after deleting 6 items that showed a factor loading below 0.400. Further, the 9 problem creating questions were detected that show high scores on regression weights and covariance in confirmatory factor analysis and hence removed. The CFA result shows a CFI of 0.906 with a p-value <0.001. Further, the other modification indices were GFI (0.871), RMSEA (0.053) and RMSR (0.110). At the end, 21 items were considered as reliable for further use with a reliability of 0.892 that is considered as appropriate. Moreover, this scale included seven domains that can be used for the measurement of symptoms of dependent personality problem in adults. The seven symptoms based sub-scales was comprised of 5, 5, 5, 4, 3, 4 and 3 items respectively.

The current study findings were supported by the previous literature. The acceptable value of the factor loading should be at least 0.4¹⁴ therefore the 0.40 absolute value of suppression were taken. The cutoff value for CFI is good if its range in between 0.90 to 0.95.¹⁶ The effectiveness of the scale was confirmed with a CFI value 0.906. The acceptable value of GFI is considered to be 0.90 or greater.¹⁵ In the current study the values are approximately near to the standard value. Literature has confirmed that the value of RMSEA is good, if it is less than 0.05.¹⁶ The study RMSEA value is near to the suggested value. Further, the reliability of the scale was above .7 and previous literature positively supported the current study as the reliability value of 0.70 or greater is considered as statistically significant.¹⁷ The literature confirmed the number of appropriate items while measuring a construct and it was noted that at least 4 to 5 items must represent a construct while measuring it.¹⁸ Here, two sub-scales comprised of 3 items and previous research supported the assumption that only one item may be adequate for the measurement of a construct.¹⁹

Furthermore, the dependent personality disorder scale was also compared with other developed scales like job demands and resources scale²⁰ and Child

Uncertainty in Illness Scale.²¹ The reliability values and CFI were investigated. If the developed scales CFI is above 0.90 with p-value less than 0.05 than it was considered as an appropriate measure.²² The CFI value of dependent personality disorder for adults were 0.906. Whereas, the job demand and resource scale, and Child Uncertainty in Illness Scale indicated the CFI of 0.92 and 0.97 respectively having p-value less than 0.05. Moreover, the reliability value of 0.70 is statistically significant. In case of reliability of job demand and resource scale the values ranges from 0.70 to 0.92 while Child Uncertainty in Illness Scale and subscales reliability values were in between 0.76 to 0.85. The newly developed scale of dependent personality disorder has statistical values in significant range to others reliable and valid scales.

This reliable measure of dependent personality disorder will be helpful for researchers, clinicians, psychologist and counselors to explore the problematic behavior in adults. Mental health professionals should conduct workshops and seminars which provide awareness and management to control the risk factors that play important role in the development of this psychological problem to make our generation capable to control it and confident to live on their own rather than dependent on others.

There are certain limitations of the present study. The current scale was developed for the adults. So, further research may focus on dependent personality feature in children and adolescent, which will help to measure the dependent feature of personality in early stages of individual.

CONCLUSION

Indigenous dependent personality disorder scale with 21 questions and seven sub-scales was developed in native language Urdu. To evaluate the dependent personality this is a reliable and efficient measure which can be used by the psychologist, psychiatrist, social worker and other mental health professionals.

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AUTHORS' CONTRIBUTIONS

Following authors have made substantial contributions to the manuscript as under:

ZB: Conception, acquisition, analysis and interpretation of data, drafting the manuscript, critical review, approval of the final version to be published

AS: Study design, analysis and interpretation of data, drafting the manuscript, critical review, approval of the final version to be published

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST

Authors declared no conflict of interest

GRANT SUPPORT AND FINANCIAL DISCLOSURE

NIL

DATA SHARING STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.



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Annexure I

نمبر شمار	سوالات					
	بہت زیادہ	اکثر	کسی حد تک	بہت کم	کبھی نہیں	
	4	3	2	1	0	
						درج ذیل بیانات کے آگے جوابات میں سے جو آپ پر قابل اطلاق ہیں ان کے آگے درست کا نشان لگائیں۔
1						میں دور جانے کے خیال سے ڈرتا/ ڈرتی ہوں۔
2						میں پچھڑ جانے کے خیال سے ڈرتا/ ڈرتی ہوں۔
3						میں چاہتی ہوں کہ میں جن رشتوں سے محبت کرتی ہوں وہ میرا ہمیشہ خیال رکھیں۔
4						میں اپنے تمام معاملات کا اختیار اپنوں کو سونپنا چاہتا/ چاہتی ہوں۔
5						مجھے جس سے وابستگی ہو جائے میرا اس سے دور رہنا بہت مشکل ہے۔
6						میں ہر وقت اپنوں کے ساتھ رہنا چاہتا/ چاہتی ہوں۔
7						میں اپنے کئے ہوئے فیصلوں پر ہمیشہ بے چینی محسوس کرتا/ کرتی ہوں۔
8						میں میرا خیال نہ رکھنے کے خوف سے مسلسل بے چین رہتا/ رہتی ہوں۔
9						میں منصوبوں پر نصیحت کو ترجیح دیتا/ دیتی ہوں۔
10						میں ایک بار ہوا انسان ہوں جو کسی کے سہارے کے بغیر نہیں رہ سکتا/ سکتی۔
11						میں اپنے ساتھی سے چھوٹا سا بھی جھگڑا برداشت نہیں کر سکتا/ سکتی۔
12						میں کسی بھی صورت میں اپنے ساتھیوں کو ناراض نہیں کر سکتا/ سکتی۔
13						میں کوئی بھی کام کسی کی مدد کر بغیر نہیں کر سکتا/ سکتی۔
14						میں کوئی بھی کام کسی کی مدد کے بغیر شروع نہیں کر سکتا/ سکتی۔
15						میں ہر وقت سوچتی/ سوچتا ہوں کہ میرا کوئی خیال رکھنے والا ہو۔
16						میرا سب سے بڑا خوف ہے کہ مجھے خود اپنا خیال رکھنا پڑے گا۔
17						میں اپنی کسی بھی چیز کی قربانی دوسروں کیلئے دے سکتا/ سکتی ہوں۔
18						میں بہت جلد شرمندہ ہو جاتا ہوں۔
19						میں اکیلے محفل میں جانے سے گھبراتا/ گھبراتی ہوں۔
20						اپنوں کے ساتھ رہنے کی خواہش میں ہر زیادتی قبول کرنے کیلئے تیار رہتا/ رہتی ہوں۔ میں چاہتی ہوں کہ میں کسی بھی حالات میں صرف میرا ساتھ والا میرا خیال رکھے۔
21						میرے اپنے مجھے کسی بھی حالات میں رکھیں تو میں انکا ساتھ نہیں چھوڑوں گا/ گی۔