

## Scale of Assertiveness for Adults in Urdu language: Developing a Reliable Measure

Sadaf Shahid<sup>1</sup>

<sup>1</sup> University of Gujrat, Gujrat Pakistan.

**DOI:** <https://doi.org/10.63163/jpehss.v3i2.483>

### Abstract

**Objective:** To develop a standard scale of assertiveness for adults in Urdu language.

**Study Design:** Cross-sectional study.

**Place and Duration of Study:** Department of Psychology, University of Gujrat, Gujrat Pakistan, from January to October 2019.

**Methodology:** This research was accompanied on the adults, age range of 19 to 60. An item pool of 132 items was developed after the in-depth literature review. Moreover, item pool of 32 items was finalized through statistical evaluation. Subsequently, this scale was administered to 355 individuals of the Gujrat district. Statistical analysis was applied for the confirmation of data such as exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Moreover, Cronbach alpha reliability test signified the reliability of this scale.

**Results:** EFA directed to four factors possessing 80 items. Furthermore, CFA was executed, and the model fit summary presented good range values such as (GFI=0.886, CFI=0.901, RMSEA= 0.41, RMR=0.45) after the removal of 48 items with significance p-value (0.001). The reliability was reported 0.932.

**Conclusion:** A standard scale to measure assertiveness level in adults was successfully constructed with 32 items.

**Keywords:** Exploratory Factor Analysis, scale, Confirmatory Factor Analysis, Scale, Assertiveness.

### Introduction

Lembertz Blight said that, Assertiveness is refers to a term that deal with how people beautifully and calmly interact or behave with other individual in the society. Psychologist study the self-actualization and improvement abilities of persons. That's why, in the 60<sup>th</sup> century, human psychologists showed more interest to study the term assertiveness. Assertiveness ability is related to the cognitive perspective, which involves perception of the events, scenarios. Researchers found out that assertive reactions can be affected by the anxiety in the people with low level self-esteem, they might face difficulties to talk with others face to face and cannot make decisions for themselves. Such individuals give importance to other opinions. These complexes come out as non-assertive behavior.

There are some more categories that defines assertiveness very clearly. One of them is its types, on the basis of the responses it is divided into three categories as positive, negative and self-denial. Positive feelings like respect, harmony, is associated with the positive assertiveness, disparity and frustration are the terms of negative assertiveness, whereas, self-denial is timid behavior, and overrated worry about the others.

Assertive persons can clearly define their perspective with full of confidence have the guts to say no to any event. The behavior of the individual can be modified or changed, after creating the sense of assertiveness so they can express their emotions, feelings in the proper way. This will definitely help the individuals to eliminate the interpersonal conflicts and dissatisfaction.

### Methodology

This study was conducted at the Psychology Department of University of Gujrat, Gujrat Pakistan, from January to October 2019. This research was started properly after getting approval from the head of department and supervisor. Through the purposive sampling the sample of the study was collected from the general population.

**Exclusion Criteria:** Individuals of below 19 years old and above 60 years old were excluded.

**Inclusion Criteria:** Individuals of 19 to 60 years old took part in this study.

In the earliest phase of this study, step-I was to create item pool in our national language Urdu. In-depth study of literature definitions, and gained enough knowledge about assertiveness, enabled us to generate an item pool. In Step-2 Item pool was consisted on 134 items that were finalized by the experts after conducting experts meeting in which they evaluated whether the items are related to the factors or not. This item pool was possessed with four factors that measure the assertive behavior in the individuals. These four factors were passive aggressive, aggressive, passive, and assertiveness. Five point liker scale was used to determine this item pool. Step-3 was to conduct this scale on the population. For this purpose, after getting permission from supervisor, data had been collected from the 355 individuals (107 males and 248 females) by using this item pool of assertiveness. Individual who participated in this study were related to the different fields of the life like educational, health department, laborer government and private sectors. They participated in this study willingly.

102 items were with low correlation so they were excluded after the statistical analysis. A 32-items scale was finalized. Each item was with high correlation score. Data was gone through KMO, EFA, and CFA, to check the relationship of variable, and summaries the data.

---

**Table 1: Cronbach Alpha Reliability of Assertiveness scale for Adults ASA (N=355)**

No. of items	Cronbach Apha
134	.932

---

To check the internal consistency of the data, Cronbach Alpha Reliability test was used for the assertiveness scale for adults. The value of Cronbach alpha reliability test was .932 that indicated the high reliability of this scale.

---

**Table II: Factor Loading of 32 Item on Assertive scale for adults after Varimax Rotation (n=355)**

Sr. No	Item No	Passive aggressive	Aggressive	Passive	Assertiveness
1	32	.475			
2	34	.477			

---

3	<b>47</b>	.504	
4	<b>68</b>	.588	
5	<b>104</b>	.666	
6	<b>110</b>	.710	
7	<b>112</b>	.746	
8	<b>113</b>	.731	
9	<b>114</b>	.560	
10	<b>115</b>	.651	
11	<b>118</b>	..657	
12	<b>122</b>	.590	
13	<b>33</b>	.477	
14	<b>48</b>	.599	
15	<b>52</b>	.423	
16	<b>56</b>	..638	
17	<b>75</b>	.529	
18	<b>85</b>	.543	
19	<b>73</b>	.541	
20	<b>74</b>	.574	
21	<b>77</b>	.569	
22	<b>81</b>	.599	
23	<b>95</b>	.456	
24	<b>125</b>	.587	
25	<b>4</b>	.441	
26	<b>5</b>	.476	
27	<b>18</b>	.571	
28	<b>20</b>	.536	
29	<b>22</b>	.526	
30	<b>26</b>	.514	
31	<b>27</b>	.434	
32	<b>30</b>	.512	

Extraction Method: Principal Component Analysis.

At the preliminary stage, the item pool was consisted on 134 items, but only 32 items remained with high correlational value (above .4), after doing statistical analysis.

To check the adequacy of the data for the factor analysis I used Kaiser Meyer-Olkin and Bartlett's tests. The values of these tests were significant such as the value of KMO was 0.85 that is above the normal value, and the value of Bartlett's Test of Sphericity was also significant ( $p < 0.001$ ). These significant values of both tests suggested that data is appropriate for the EFA.

EFA stands for exploratory factor analysis that discover the fundamental relationship between the responses and variables. EFA comparatively precise the data and make the smaller set. Primarily, 54 items were found with the value of below .4 which indicated low correlation value. Items with low correlation value excluded from the item pool. Furthermore, remaining 80 items regarded with .4 or above value were labelled with the four factors of the assertiveness scale for adults used for furthermore analysis that is CFA.

CFA verify the data if it support the result which is obtained by the EFA. Mainly relationship between two variables or more can be measured by the confirmatory factor analysis. Although, Amos Graphics implemented the confirmatory factor analysis. So, the four factors of assertiveness scale for adults were analyzed by Amos Graphics.

For the purpose of getting better fit model, among the 80 items, 37 more items were excluded while after applying confirmatory factor analysis. 11 more items were problematic so they had been eliminated to get better result. Elimination of the problematic items caused the proficient model fit summary and finally, a scale of 32 items pool was constructed including four factors respectively assertiveness, passive, aggressive, and passive aggressive.

The participants were contacted at any possible settings in their homes, job, any other professional or private setting. After encountered with the interested people, the aim of this study and involvement by choice was discussed with them. The confidentiality and ethical consideration was discussed with the participants that their anonymity and other information will not be disclosed at any cost. They can participate on willing arrangements and without hesitation. While getting consent regarding participating in study, a copy of the scale was given to the participants told them to read the questionnaire carefully and talk over if they found any difficulty while answering the statements. Moreover, they were instructed that how they can choose the right answer according to their mental state relatively to the situation. Subsequently, it was requested to answer each and every statement of the scale.

SPSS-21 and AMOS-21 was used for statistical analysis of the data of the existing study.

## Results

Three hundred and fifty five individuals from the different fields of life, participated in this research study. At initial stage total- item pool was consisted on 134 items. But after applying item-total correlation 54 items had been deleted due to low correlation. Remaining 80 items used for further study such as EFA and CFA. Exploratory confirmatory result supported the 80 items possessing four factors. After implication of CFA 48 more items were eliminated. Finally, a pool of 32 items was developed as Assertiveness scale for adults. Reliability of this scale was more significant 0.932 in Table-I, that showed that the data was reliable for the study. A varimax rotation of four factors of this scale was showed in Table-II. These items were related to all the four factors aggressive, passive, passive aggressive and assertiveness. Furthermore, model fit summary also showed acceptable result in Table-III with significant range ( $p < 0.001$ ).

**Table III: Model Fit Summary of Confirmatory Factor Analysis (N=355)**

P	CMIN/DF	GFI	A GFI	CFI	RMSEA	RMR
Value						

---

.000	1.590	.886	.868	.901	.041	.045
------	-------	------	------	------	------	------

---



---

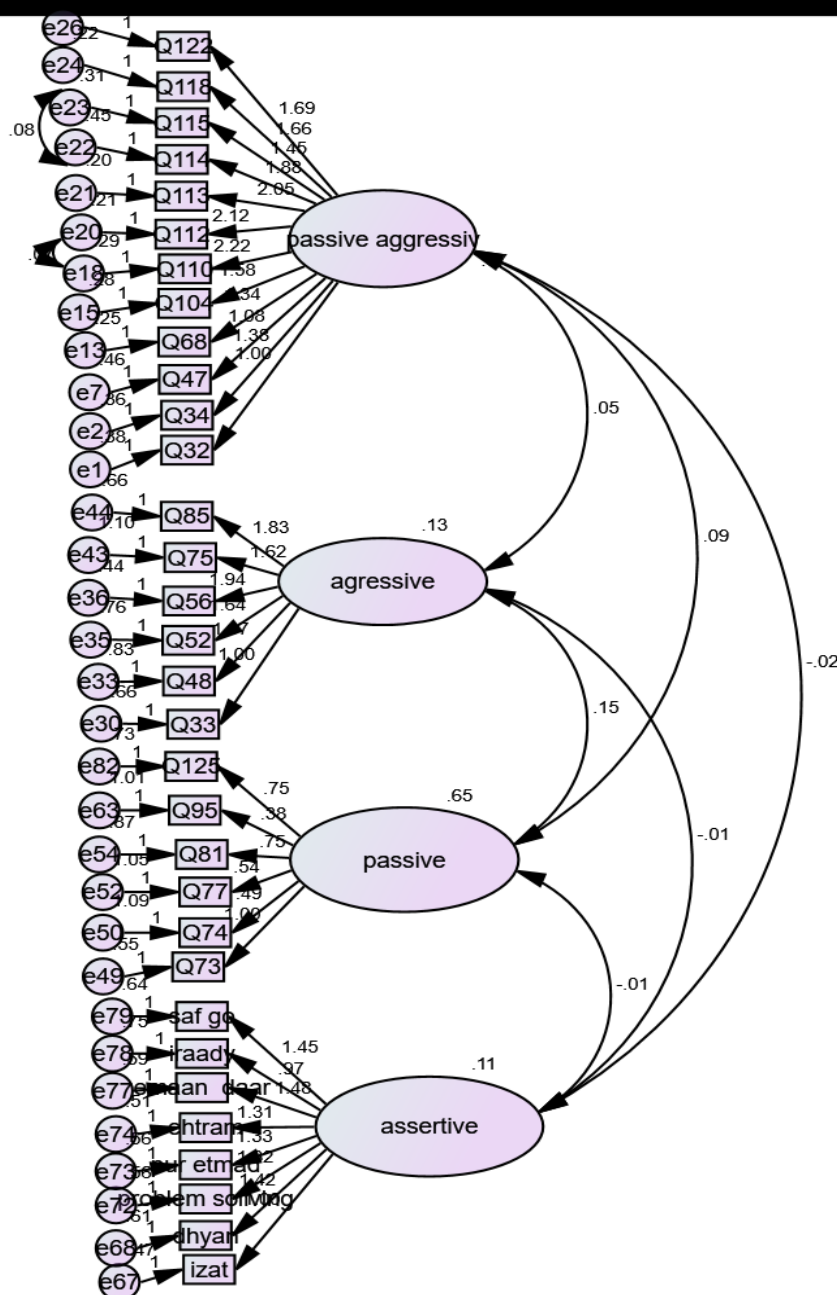
As the studies stated that the CMIN/DF value should be less than 2 or as well should not be above 3, so, in this table the value of CMIN/DF is 1.590 that is less than 2, and acceptable range. The GFI value is .886 which is near to 0.9 and suitable for the data. The other indices were also significant as shown in the Table-III.

---



---

**Table IV: Diagram of confirmatory factor analysis (N= 355)**



EFA headed into four factors comprising of 32 items with a factor loading above and equal to 0.5. Later on, CFA permitted the structure, which was gained by EFA after the exclusion of 54 items. Hence, 32 item-pool was finalized comprising four factors labelled: passive, aggressive, passive aggressive, assertiveness. This scale showed that most of the assertive individuals use the statements, starting with “I”.

As the model fit summary of CFA showed admirable model fit with the value of Comparative fit index of 0.901 and values of GFI and A GFI were 0.886 and 0.868, respectively, with a significant value of 0.000 which indicated satisfactory fit. RMSEF and RMR values are 0.41, 0.45 respectively, which showed acceptable fit model.

The scale on assertiveness for adults containing 32 items, comprising 4 factors was developed successfully with acceptable alpha reliability range. Exploratory factor analysis and confirmatory factor analysis results were also highly acceptable with significant range of values.

## LIMITATIONS OF STUDY

This scale was only developed for adults and could measure the level of assertiveness with the age range of 19 to 60 years old. This developed scale could be used on another culture.

## CONCLUSION

A valid and reliable scale gauging the assertiveness level in adults was effectively developed with 32 items covering four subscales.

**Conflict:** None.

## References

1. Alberti, R. E., & Emmons, M. L. (2008). *Your perfect right: Assertiveness and equality in your life and relationships* (9th ed.).
2. Atascadero, CA: Impact Publishers. Ames, D. R., & Flynn, F. J. (2007). What breaks a leader: The curvilinear relation between assertiveness and leadership. *Journal of personality and social psychology*, Vol. 92,.
3. Adapted from Stein, S. J. & Book, H.E. (2006). *The EQi Edge: Emotional Intelligence and Your Success*. Mississauga: John Wiley & Sons Canada. Ltd.
4. Alberti, R. E., & Emmons, M. L. (1970). *Your perfect right*. San Luis Obispo, CA: Impact.
5. Abed G. A., S. H. El-Amrosy, M. M. Atia, (2015), The Effect of Assertiveness Training Program on Improving Self-Esteem of Psychiatric Nurses, *Journal of Nursing Science*, Vol. 1, No. 1, pp. 1-8.
6. Beck, A., Freeman, A., & Davis, D. (2004). *Cognitive therapy of personality disorders* (2nd ed.). New York: The Guilford Press.
7. Bishop, S. (2010). *Develop your assertiveness* (2nd ed.). London: Kogan Page.
8. Goldsmith JB, McFall RM (2016) Investigating the relationship between Self-Esteem, assertiveness and Academic Achievement in Female High School Students, Vol.10 No.4:9.
9. Hamid, P. (1994). Assertiveness and personality dimensions in Chinese students. *Psychological Reports*, 75(1, Pt 1), 127-130.
10. Hu, L., & Bentler, P.M. (1999): Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives, *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
11. Hooper, D., Coughlan, J., Mullen, M. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
12. Kelleci, M., Avci, D., Ata, E.E, Dogan, S. (2011). The effect of self knowledge and assertiveness course on the assertiveness level of nursing students. *Journal of Anatolia Nursing and Health Sciences*, 14(2), 46-55.
13. Kline, P. (1986). *A handbook of test construction: Introduction to psychometric design*. London: Methuen.
14. Lambertz, M.M, & Blight, M.G. (2016). You don't have to like me, but you have to respect me: the impacts of assertiveness, cooperativeness, and group satisfaction in collaborative assignments. *Business and Professional Communication Quarterly*, 79(2), 180-199.
15. Lewin, Kurt (2010). *Resolving social conflicts and field theory in social science*. Washington, DC: American Psychological Association.

16. Lee, T.Y, Chang, S.C, Chu, H., Yang, C.Y, Ou, K.L., Chung, M.H. (2013). The effects of assertiveness training in patients with schizophrenia: A randomized, single-blind, controlled study. *Journal of Advanced Nursing*, 69(11), 2549-2559.
17. Mendi, B., & Mendi, O. (2015). Evaluation of Validity and Reliability of the Turkish Version of the E-lifestyle Instrument. *Journal of Yasar University*, 10(40), 6624-6632.
18. Mulaik, S., James, L. R., Alstine, J. V., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of Goodness-of-Fit Indices for Structural Equation Models. *Psychological Bulletin*, 105, 430-445. 10.1037/0033-2909.105.3.430.
- Mitamura, T., & Tanaka, Y. (2014). Functional assertiveness training for parents of children with developmental disabilities: A study of interaction-enhanced role-play assessment. *Japanese Journal of Behavior Therapy*, 40, 1–10. (In Japanese with English abstract.)
19. Mitamura, T., & Tanaka-Matsumi, J. (2009). Functional assertiveness training for parents of children with developmental disabilities. *Japanese Journal of Behavior Therapy*, 35, 257–269. (In Japanese with English abstract.)
20. Mitamura, T., & Tanaka-Matsumi, J. (2010a). Experimental studies of the context dependent nature of assertiveness: Perspectives of speakers and listeners. *Japanese Journal of Interpersonal and Social Psychology*, 10, 77–86. (In Japanese with English abstract.)
21. Mitamura, T., & Tanaka-Matsumi, J. (2010b). Functional assertiveness as interaction of speaker 108 T. Mitamura © Japanese Psychological Association 2017.
22. Mitamura, T., & Tanaka-Matsumi, J. (2010c). What is assertiveness? *Journal of Structural Constructivism*, 4, 58–182. (In Japanese, title translated by the author of this article.
23. McCabe C, Timmins F, (2003), Teaching Assertiveness to Undergraduate Nursing Students. *Journal of Nurse Education in Practice*, vol 3, no.1: pp.30–42.
24. Niussha, B., Farghadani, A., Safari, N. (2012). Effects of assertiveness training on test anxiety of girl students in first grade of guidance school. *Procedia Social Behavioral Sciences*, 46(2), 1385- 1389.
25. Obiagel, J.F. (2015). Management of negative self image using ationale motive and behaviouraltherapy and assertivenesstraining. *ASEANJournal of Psychiatry*, 16(1), 1-8.
26. Pfafman, T., &Bochantin, J. (2012). Negotiating power paradoxes: Contradictions in women’s constructions of organizational power. *Communication Studies*, 63, 5.