



Self Esteem Scale for Adolescents: Reliability and Validity

¹Tanu

*¹Assistant professor, Doaba college of education, Mohali, India.

Note: * Indicates corresponding author

ARTICLE DETAILS	ABSTRACT
<p>Article History: Received Date: 14/06/2019 Revised Date: 21/06/2019 Accepted Date: 26/6/2019 e-First: 28/06/2019</p> <hr/> <p>Keywords Self esteem; General self esteem; self esteem at home; self esteem at school; adolescents</p> <hr/> <p>*Corresponding Author (Tanu)</p>	<p>This paper reports the development as well as evaluation of reliability and validity of Self esteem scale for adolescents. Content validity of the scale was assessed by experts. t- values and item to total score correlation were calculated to ascertain the intrinsic validity of the scale. The Self esteem scale for adolescents demonstrated good internal consistency. The final draft of self esteem scale was comprised of 33 items with good validity and reliability index.</p>

1. Introduction

Self-esteem is a popular and important construct in the social sciences and in everyday life worldwide. Its utmost importance can be easily seen in the states like California where the government has already established a "Commission on Self-Esteem," presumably to devise and implement policies to increase feelings of self-worth among its citizens. They believe intuitively that "poor" or "low" self-esteem is undesirable, and indeed research links low self-esteem with loneliness (Peplau and Perlman, 1982), depression (Blascovich and Tomaka, 1991), social anxiety (Leary, 1983) and alienation (Johnson, 1973). A diverse array of classic and contemporary psychological theories converge on the notion that people have a strong and pervasive need for self-esteem (e.g., Allport, 1961; Becker, 1962; Rogers, 1959; Snyder, Stephan and Rosenfield, 1976; Steele, 1988; Tesser and Campbell, 1983). From William James's Principles of Psychology to the most recent issues of scholarly journals, one can find a multitude of conceptual analyses and empirical studies in which a need for self-esteem has been used to explain various forms of behaviour. Indeed, Scheff (1990) has noted that there are over 10,000 published studies concerning self-esteem and its correlates. Given this consensus that self-esteem is a vital human need, it is important to have a sound tool to measure this construct (Greenberg et al., 1992). Despite the popularity of this construct and its potential value in understanding the positive aspects of human nature, the measurement of Self esteem has been problematic for decades. A proliferation of poorly validated scales has posed significant challenges for scholars trying to investigate the consequences of self-esteem for behaviour, thought, and emotion. Moreover, an important issue in the self-esteem literature is whether self-esteem is best conceptualized as a unitary global trait or as a multidimensional trait with independent subcomponents. There exist a number of unitary and multidimensional Self esteem tools which have been standardized in foreign countries on either children or adults. Very few Self esteem scales are available which have been made to measure Self esteem of Indian adolescents. Investigator thoroughly evaluated these tools and felt a need for a new measure. Keeping in consideration this paramount need, the present venture has been undertaken to fill the gap. Self-esteem scale developed by the investigator purports to measure the self-esteem of adolescents.

2. Steps for Development and Standardization of Self esteem scale

2.1 Step1: Planning of the scale

After examining and thoroughly reviewing the available tools on Self esteem and deep understanding of the concept from available literature, researcher has proposed three facets for the multiple anxiety scale. Initially, 50 items were framed by the investigator under these three dimensions. Brief descriptions of the dimensions of Self esteem scale are given below:

General Self esteem- General Self esteem is the individual's evaluation of himself or herself or how one feels about oneself (Harter 1983; Wigfield and Karpathian, 1991). It is a subjective emotional evaluation of his or her own worth. According to Shavelson, Hubner, and Stanton (1976), general Self esteem is believed to be at the top of the hierarchy among all other types of Self esteem.

Self esteem at home- Self-esteem of adolescents at home refers to internalized feelings of mastery, value, and self-acceptance that are derived from individuals' assessment of their personal value based on implicit and explicit messages provided by his or her family members (Hill, 1999; Whaley, 1993). an evaluative aspect of Self esteem at home was measured rather than a cognitive dimension of self-esteem that can be conceptualised as self-efficacy, referring to the person's conviction about own capacity to actualize a desired outcome and manage prospective situations (M Bong and Clark, 1999).

Self esteem at school- It is a sense of positive school, peer connectedness and a feeling that one fits in. High Self esteem at school increases the likelihood that youth will connect positively to peers, teachers, and the school as a whole. It also decreases their risk taking behaviour by providing youth with pro-social and empowering opportunities. Keeping these dimensions in consideration, items were framed to measure Self esteem in adolescents. The dimension wise item distribution of the Self esteem is presented in table 1.1 below:

Table 1 Dimension wise distribution of items for the Self esteem scale (Preliminary draft)

S.No	Dimension	No. of positive items	No. of negative items	No. of items
1.	General Self esteem	1,2,3,4,5,6,7,8,9,11,12,13,17,18,20,22,23,24,25,26	10,14,15,16,19,21	26
2.	Self esteem at home	30,31,32,33,36,37,38,39	27,28,29,34,35	13
3.	Self esteem at school	40,46,47,48,49,50	41,42,43,44,45	11
	Total	34	16	50

2.2 Step 2: Content validity and pilot study

To establish content validity, investigator requested various experts to critically examine the current tool. These experts were from Department of education, Panjab university Chandigarh, Government College of education, Chandigarh and the research scholars of department of psychology and education, Panjab university, Chandigarh. They carefully examined the sentences in the preliminary draft of the 50 item scale and offered some deletions and modifications. On the basis of their comments and suggestions, some of the statements were modified and 4 statements were removed from the scale. Language experts were also consulted to seek their feedback so to remove any linguistic ambiguity contained in the items. Thus, the content validity of the tool was established. Further this draft of 46 items obtained after the expert opinion, was administered to a small sample of 20 adolescents studying in the government model senior secondary school sector 20, Chandigarh. The main purpose of this pilot study was to check the level of complexity and ambiguity of items, if persists. 1 item was modified in terms of language and 2 items were omitted as for these two items children encountered trouble in understanding. The first draft of 44 items was thus prepared where 29 items were positive in nature and rest 15 were negatively framed items.

2.3 Step 3: Item analysis

The first draft of the 44 items was administered on 200 adolescents of IX grade studying in two government schools of Chandigarh. The scale was administered with proper instructions and in a relaxed, calm, noise free and comfortable environment. Afterwards, the response sheets were collected and scoring was done in accordance with the procedure given below:

The scoring of the current scale was based on the method of summated ratings as given by Likert (1932). Each item on the inventory was rated on five consecutive points (strongly disagree, disagree, uncertain, agree, and strongly agree). For the positive items, the scores were given as 1 (Strongly disagree), 2(Disagree), 3(Uncertain), 4(Agree) and 5 (Strongly agree). For negative items, scores are coded reversely as 1 (Strongly agree), 2 (Agree), 3 (Uncertain), 4 (Disagree) and 5 (Strongly disagree).

The responses of the subjects were scored as per the above mentioned procedure. For testing the consistency of each statement in the draft scale, the investigator used t ratios and item vs. total correlation method.

The total score for each subject were recorded and the scores were then arranged in descending order from highest total scores to the lowest total scores. The investigator then computed t- values for each item. For this 27% of the high scores (high group) and 27% of the low scores (low group) were identified and middle 46% slot was weeded out (Kelley, 1939). t-values were then calculated item wise and is provided in the table 1.2. It was found that the subjects' responses for 8 items were not showing significant difference between the upper and lower groups. Hence only 36 items were retained as rest 8 items were found either very easy or very difficult and these items were seen inefficient to differentiate the difficulty level for the students (Table value for t at 0.05 level is 1.96 and 2.59 at 0.01 level). Item to total correlation was also worked out to check internal consistency of the scale. Items with lower values of r lack consistency and can be discarded. Calculated values of Item to total correlation are presented in the table 1.2. It can be inferred that correlation values ranges from 0.012 to 0.642 and only 33 items were significant at 0.01 level and the rest 11 items were not measuring the same construct that the whole scale and the respective subscales are measuring. t- values and correlation of each item of Self esteem scale with the total score are presented below in table 1.2:

Table 2 t- values and correlation of each item of Self esteem scale with the total score (first draft)

Item No.	Correlation with whole scale	t-value	Remarks	Item No.	Correlation with whole scale	t-value	Remarks
1.	0.642*	2.424*	Accepted	23	0.368*	2.591**	Accepted
2	0.215*	3.192**	Accepted	24	0.327*	2.113*	Accepted
3	0.022	-.444	Rejected	25	0.453*	3.482**	Accepted
4	0.060	0.247	Rejected	26	0.512*	4.271**	Accepted
5	0.104	1.492	Rejected	27	0.333*	4.444**	Accepted
6	0.206*	2.141*	Accepted	28	0.263*	2.187*	Accepted
7	0.306*	3.189**	Accepted	29	0.301*	2.001*	Accepted
8	0.209*	2.852**	Accepted	30	0.234*	2.721**	Accepted
9	0.411*	3.621**	Accepted	31	0.276*	3.123**	Accepted
10	0.477*	2.184*	Accepted	32	0.082	1.002	Accepted
11	0.331*	3.187**	Accepted	33	0.244*	3.209**	Accepted
12	0.286*	2.112*	Accepted	34	0.411*	3.641**	Accepted
13	0.200*	2.129*	Accepted	35	0.401*	2.450*	Accepted
14	0.238*	2.521*	Accepted	36	0.234*	2.121*	Accepted
15	0.229*	4.278**	Accepted	37	0.299*	4.298**	Accepted
16	0.231*	4.878**	Accepted	38	0.216*	2.111*	Accepted
17	0.217*	3.156**	Accepted	39	0.213*	3.765**	Accepted
18	0.130	0.590	Rejected	40	0.334*	2.333*	Accepted
19	0.105	1.880	Rejected	41	0.012	2.198*	Rejected
20	0.025	0.998	Rejected	42	0.127	1.900	Rejected
21	0.208*	5.545**	Accepted	43	0.198	2.864**	Rejected
22	0.257*	2.651**	Accepted	44	0.043	3.342**	Rejected
* 0.05 level of significance				**0.01 level of significance			
Table value for t at 0.05 level =1.960				Table value for t at 0.01 level = 2.590			
Critical value for Item – total correlation = 0.20							

2.4 Step 4: Final draft of the scale

After conducting item analysis of the first draft of Self esteem scale, total of 33 items were selected for the final draft of the multiple anxiety scale and rest 11 items were weeded out. Out of these, 17 were negatively framed and rest 16 were positive in nature.

2.5 Step 5. Reliability

Reliability is one of the most important characteristic of a test. A well made scientific instrument should yield accurate results both at present as well as overtime. Ebel (1951) defines reliability as the consistency with which a set of test scores measures whatever they do measure. According to Anastasi (1968) reliability refers to the consistency of the scores obtained by the same individuals when re-examined with test on different occasions, or

with different sets of equivalent items, or with different sets of equivalent items or under other variable examining conditions. In the current study, the reliability of Self esteem scale was established by following methods:

3. Test-retest reliability

For obtaining test retest reliability, the test was administered twice to the sample of 200 students with a time gap of 20 days. The two set of scores were then correlated using Product Moment correlation. The value of test retest reliability i.e., the reliability index for this Self esteem scale was found to be 0.86 which is regarded good and significant at 0.01 level. This indicates that the Self esteem scale is appreciably reliable in measuring Self esteem among adolescents and there is a good stability in Self esteem scores of the subjects over different times.

4. Internal consistency

Internal consistency implies that the questions intended to measure the same concept do so on a consistent basis and in a consistent way (Colosi, 1997). The internal consistency of Self esteem scale after being administered to 200 adolescents, revealed high values of Cronbach's alpha as presented in table 1.3:

Table 3: The internal reliability coefficients (Cronback alpha) of the Self esteem scale and its sub dimensions (N=200)

S.no.	Area/ Dimension	'r' value
1.	General Self esteem	0.81
2.	Self esteem at home	0.79
3.	Self esteem at school	0.88
	Total Self esteem	0.82

Significant at 0.01 level of significance df=198

The Cronbach's Alpha value of the Self esteem scale was came to be 0.82; and for its dimensions- General Self esteem, Self esteem at home and Self esteem at school were calculated as 0.81, 0.79, 0.88 respectively. Taking these values in consideration, it could be stated that the internal consistency of both the scale as a whole and its dimensions was at acceptable level (Devellis, 1991). The findings obtained indicate that the scale is highly reliable.

The Self esteem scale for adolescents showed good validity and reliability values.

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