

# Construction and validation of Self-esteem Scale

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**Abstract** - A likert type scale to measure the self-esteem of high school level students developed. The pilot study conducted with 100 sample and 25 statements. The liker type scale calls for graded response to each statement on a five-point scale ranging from "Strongly Agree" to "Strongly Disagree". The points are usually denoted by "Strongly Agree (SA)", "Agree (A)", "Undecided (UD)", "Disagree (DA)" and "Strongly Disagree (SDA)". The different points on the scale are assigned different arbitrary weights. For example, 4,3,2, 1 and 0 in the order of "Strongly Agree" response to "Strongly Disagree" response for the positive statements. Here the "Strongly Agree" response bears a weight of 4. The total scores for an individual can be obtained by adding his / her scores for all the individual items. The 't' value calculated for the all the 25 items and the items with value higher than 1.75 were retained. Thus the final scale contains 21 statements.

students Cuddalore, District of Tamilnadu, India. The next step in the construction and validation of Self-esteem scale after pilot study is to find out 't' value of each statement which forms the basis for item selection in order to build up the final scale.

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**Key Words:** Self-Esteem, High school students, Construction

Then 25% of the subjects (high) with the highest total scores and 25% of subjects (low) with the lowest total scores were sorted out for the purpose of item selection. The high and low groups thus selected formed the criterion groups and each group was made up of 25 high school students.

## 1. INTRODUCTION

Academic performance (Serrano, Mérida, & Taberner, 2016); emotional intelligence (Rodrguez, 2012); school success and socioeconomic level (Muoz, 2011); stress and coping (Verduzco, Gómez, & Duran, 2004); Many studies have highlighted the importance of self-esteem as a learning catalyst in the context of education (Villarrol, 2001) and as a critical component in schoolchildren's self-construction. As the investigator decided to develop a new tool to measure the Self Esteem, it is decided to construct and validate a self-esteem scale. The first step in the construction of the likert-type scale is the collection of a large number of statements to the object under study. 25 statements revealing the Self Esteem of Students were collected from the following sources:

The following formula was used (Edwards, 1957) to calculate 't' value of each statement. Irjet template sample paragraph, Irjet template sample paragraph . Irjet template sample paragraph. Irjet template sample paragraph

- (i) Teachers
- (ii) Related books and
- (iii) Web sources having articles of Self-esteem of school students

This scale has 25 statements both positive and negative in respect of Self Esteem (Negative Statements: 7,8,9,13,15,16, 20, 21,22). This scale of (25) statements intended for the pilot study was administered to the sample of 100 schools

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}{n(n-1)}}$$

$$\bar{X}_L = \frac{\sum X_L}{n}$$

$$\bar{X}_H = \frac{\sum X_H}{n}$$

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S_H^2}{n_H} + \frac{S_L^2}{n_L}}}$$

Where

$\bar{X}_H$  = the mean score on a given statement for the high group

$\bar{X}_L$  = the mean score on a given statement for the low group

$S_H^2$  = the variance of the distribution of response of the low group of the statement.

$n_H$  = the number of subjects in the high group

$n_L$  = the number of subjects in the low group

Note: if  $n_H = n_L = n$ , as will be the case if we select percentage of the total number of subjects for the high and low groups, then the above formula can be written as follows

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}{n(n-1)}}$$

Where,

$$\sum(X_H - \bar{X}_H)^2 = \sum X_H^2 - \frac{(\sum X_H)^2}{n}$$

$$\sum(X_L - \bar{X}_L)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$$

Thus the 't' values for all 25 statements were calculated Table No.1.

Table 1: Rank Order of Items based on 't' values

S.No.	Statements	"t" Value	Items selection
1.	I am happy about myself.	3.64	Selected
2.	I feel that I am unique.	1.94	Selected
3.	I feel that my decisions are logical.	<b>1.46</b>	<b>Not Selected</b>
4.	I don't need others assistance.	2.37	Selected
5.	I believe that I can earn enough.	2.43	Selected
6.	I believe that I have a number of good qualities.	2.18	Selected

7.	Sometimes I feel desperate. (N)	2.78	Selected
8.	I feel that others are ignoring me. (N)	4.49	Selected
9.	<b>I feel that I cannot succeed. (N)</b>	<b>1.48</b>	<b>Not Selected</b>
10.	I am far better than many others.	4.02	Selected
11.	I have energy to work hard.	2.20	Selected
12.	Many of my peers like my friendships.	3.43	Selected
13.	If I start talking, people started gathering to listen.	2.47	Selected
14.	My physical appearance are appreciated by many.	5.82	Selected
15.	<b>I am worried about my colour of skin. (N)</b>	<b>0.68</b>	<b>Not Selected</b>
16.	I feel that I don't have communication skill. (N)	2.41	Selected
17.	My teachers are curious to listen my answers to questions.	2.17	Selected
18.	My peers wants to keep me in their team.	5.06	Selected
19.	I am one of the important in my family	1.97	Selected
20.	Family members not giving respect to me. (N)	2.74	Selected
21.	I am having many weakness. (N)	2.72	Selected
22.	My language is very poor. (N)	1.69	<b>Not Selected</b>
23.	I don't bather about others thinking about me.	2.19	Selected
24.	I like to be as I am now.	3.56	Selected
25.	I don't have any character to be dropped.	2.91	Selected

The value of 't' is a measure of the extent to which a given statement differentiates between the high and low groups. If the 't' value is equal to or greater than 1.75 it indicates that the average response of the high and low

