

Construction and Validation of Study Habits Scale for Teacher Trainees

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Abstract

The main purpose of this study was to construct and validate the Study Habits Scale for Teacher Trainees. The researcher did not find any tool in Gujarati language to measure Teacher Trainees Study Habits. There were 20 items measuring some factors of Study Habits. The reliability of the tool was established using these methods. The Cronbach's Alpha value was 0.70, Split-Half Reliability value was 0.47, Spearman Bown value was 0.64 and Cliffs' Consistency Indice- 'C' value was 0.55. These values show the reliability of the tool.

Key Words: Study Habits Scale, Teacher Trainees, Validity, Reliability

Habits are acquired not inborn. A habit is an accomplished form of behavior in which the things are done quickly, accurately, automatically with little voluntary attention. According to Crede and Kuncel (2008) study habits can be termed as study routines or a standard procedure which an individual consistently follow in one's academic journey.

It has been observed that many students fail to maintain expected academic records, in spite of having required intelligence for this one of the main affecting factors is that students do not spend much time in their study as it was argued that study habits play a significant role in students' performance in the academic field (Verma & Kumar, 1999; Vyas, 2002). Therefore it is a very important variable in determining one's academic success and failure. Good study habits ensure the success of any individual as it encourages the students to persist in their efforts to study and aspire to their goal. There are various factors that may influence the proper development of study habits among the most important are: concentration, Motivation, sharp observation, adjustment in school and among friends.

Mehmet Ali Ozturk (2011) developed the Educators' Attitude towards Educational Research Scale for in-service educators (teachers, school counselors, administrators etc.) working at schools in a big mid-Western city in the US. The scale had 29 Likert-type items intended to measure eight dimensions of the variable. Regarding the results of these correlational analyses, there was a high level of agreement between the present study and the previous exploratory factor analytic study which also looked at the same correlations, measuring the related variables in the same way as the present study did.

Alci, B; Karatas, H & Balyer, A (2015) examined the effect of undergraduates' study skills on academic achievement and significances in their study skills in terms of gender and department. The

sample group of the study consists of 210 undergraduates studying in three different departments at School of Education. The results revealed that there was a positive correlation between study skills and academic achievement and also significant differences were found in undergraduates' study skills in terms of gender and departments.

Rao & Reddy (2015) studied on 400 teacher trainees to find out the effect of study habits, mental health and academic stress on academic achievement among teacher trainees of Andhra Pradesh. Results revealed that there is significant impact of mental health on study habits and academic stress of prospective teachers.

Edele Uju F. & Olofu Paul A. (2017) examined the study habits and their impact on secondary school students' academic performance in biology. The main objective of the study was to see the study habits and its impact on secondary school students' academic performance thus it aimed to find out the relationship between study habits and academic performance of secondary school students in Biology. The findings of the study concluded that students with the selected study area had bad study habits and further a significant relationship was found between study habits and academic performance of secondary school students.

Alavi., Lesani.,& Mahdavinia (2017) compared the study habits of two groups of students belonging to the Medical and paramedical field in relation to their achievement. Findings of the study showed a significant difference in the study habits of paramedical and medical students as the study habits of medical students was better in comparison to the other group and the study further revealed a positive significant relationship between the study habits and academic performance of students.

There were many researches conducted on study habits and their relationship with different variables. But the researcher did not find any research tool, which studied the study habits of teacher trainees. The purpose of the present study is to develop a reliable and valid measurement tool in a Likert-type which evaluates Teacher Trainees study habits.

Sample

Table-1 shows the characteristics of the sample.

Table-1
Characteristics of the sample

No	Characteristics	Total	Grand Total
1	Gender	Female	266
		Male	
2	Area of residence	Rural	266
		Urban	
3	Social Category	Reserved	266
		Unreserved	
4	Parents' Education Level	Literate	266
		Illiterate	

Table-1 shows that total 266 teacher trainees were in the sample of the study. Among 266 trainees; 205 were female and 61 were male. 192 trainees were from rural and 74 were from urban area

of residence. 203 trainees were from reserved and 63 were from unreserved social category. Among them 221 trainees parents were literate and 45 were illiterate.

Development of the Scale

The researcher applied self-constructed Study Habits Scale. It was applied as a tool in this research. It was a Likert type three point rating scale. There were 20 items measuring some factors of Study Habits. Each item had three options indicating the degree of agreement. The degree of agreement was 'true', 'sometimes', and 'false'. The respondent had to tick mark (√) in one of the suitable options. Marks were allotted for the statement as True =2, Sometimes=1 and False =0. In this scale, students can obtain maximum 40 marks.

Item Analysis

The present study was focused on the validation of the Study Habits Scale of Teacher Trainees. It was very much necessary to explore how the items of this tool functioned. The result of this analysis is presented in Table-2.

Table-2
Facility and Discrimination Values of items of the Study Habits Scale

Item No.	Facility Value	Discrimination Index
1	0.61	0.44
2	0.58	0.40
3	0.74	0.40
4	0.91	0.32
5	0.76	0.28
6	0.66	0.54
7	0.89	0.30
8	0.91	0.32
9	0.83	0.28
10	0.52	0.17
11	0.64	0.55
12	0.77	0.39
13	0.82	0.40
14	0.62	0.56
15	0.63	0.45
16	0.91	0.33
17	0.70	0.46
18	0.71	0.35
19	0.80	0.45
20	0.74	0.38

The observation of Table-2 shows that the difficulty and discrimination values for all 20 items of the Study Habits Scale. The lowest item difficulty value was 0.52 (Item No.10) and the highest value was 0.91 (Item No. 4, 8 and 16). The discrimination values ranged between 0.17 (Item No. 10) and 0.56 (Item No. 14).

The item difficulty values ranging between 0.20 and 0.80 and the item discrimination values more than 0.20 indicate fitness of the items. The result in the present study showed that according to the item difficulty values 70% items of the Study Habits Scale were fit, while according to the item discrimination values 95% items were fit.

Reliability of the Study Habits Scale

The Study Habits Scale was administered on the sample of Teacher Trainees. It was interesting to analyze the reliability of scores on it. In the present study the reliability of scores on the Study Habits Scale was measured using two methods: (1) Cronbach Alpha reliability and (2) Split half reliability. The results of these analyses are summarized in Table-3.

It can be observed from Table-3 that the value of Cronbach Alpha reliability was 0.70. It can also be observed that the values of reliability of scores according to Split half reliability formula were 0.47 for half test and 0.64 for whole test, using Spearman Brown formula. These values show the reliability of the tool.

Table-3
Reliability of the Scores on the Study Habits Scale

Method	Reliability
Cronbach Alpha	0.70
Split half for half test	0.47
For whole test (using Spearman Brown formula)	0.64

Validity of the Study Habits Scale

In the present study the question of validity of scores on the Study Habits Scale was measured using graph theory based Cliffs' consistency index 'C'.

Cliffs' Consistency Index 'C'. Cliffs' consistency index 'C', based on graph theory is a measure of unidimensionality that shows the consistency of the measurement (Tatsuoka, 1986). In the present study, the index 'C' was calculated using computer programme NRTVB (Rathod, 2000). The execution of the programme provided 0.55 as the value of index 'C'. If the value of the index 'C' is greater than 0.32, it can be considered as an indicator of acceptable validity (Joshi, 1996). As the value of it here is 0.55, it showed high validity.

Discussion

In the present study, the credibility to the construct validity of the present sample's scores on the Study Habits Scale was established. The instrument worked properly and effectively to measure the Study Habits of Teacher Trainees. The instrument is potentially useful for Teacher Education Institutes (TEIs). The finding of this study revealed the importance of item analysis in construction a valid study habits scale. From the study, it is clear that item between (0.20 and above) discrimination index are good for a scale. Therefore item analysis provides an empirical data about quality of the Study Habits Scale items.

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