

## Developing and Validating Teacher Effectiveness Scale for Higher Secondary School Teachers

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### Article Info.

**E-ISSN: 2583-6528**

**Impact Factor (SJIF): 6.876**

**Peer Reviewed Journal**

**Available online:**

[\*\*www.alladvancejournal.com\*\*](http://www.alladvancejournal.com)

**Received:** 25/Nov/2024

**Accepted:** 28/Dec/2024

### Abstract

The purpose of the paper is to determine the extent to which the higher secondary school teachers are having the Teacher effectiveness. The teacher in the emerging Indian society has a very pivotal role to play in the social reconstruction and in the transmission of wisdom, knowledge and experience of one generation to another. Children are the potential wealth of a nation. They are always exposed to the influence of the teachers. It is, therefore, necessary to realize that emerging society can achieve all round development, with the help of the teachers who act as a powerful agency in transmitting its cherished values. A well-structured questionnaire was administered to the higher secondary school teachers. Initially, the tool was constructed with 69 statements, posing questions, which are five point scales. To standardize the tool, the researcher used 't' test. Based on the value of 't,' finally 55 statements were retained for the final study. This paper discusses about the development of the scale, to measure the Teacher effectiveness among higher secondary school teachers. The investigator decided to construct and standardize a scale to measure the Teacher effectiveness of higher secondary school teachers. In order to develop the scale at the preliminary stage, the investigator consulted the experts in the professional, referred books; journals related to Teacher effectiveness and also visited websites and gathered a variety of information, regarding Teacher effectiveness. Based on that as many as 69 five point scale questions were selected for the pilot study.

**Keywords:** Teacher effectiveness, Higher secondary school teachers, t –test., etc.

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### Introduction

A teacher is not only a custodian of national values but is also an architect par excellence of new values. But so far, we have not been able to harness this extremely useful manpower. This could be possible, if teacher's role is properly recognized and he is in proper frame of mind to understand the problems of the country. He should make sincere efforts to create a climate in which the society can move forward. The investigator decided to construct and standardize a scale to measure the Teacher effectiveness of higher secondary school teachers. In order to develop the scale at the preliminary stage, the investigator consulted the experts in the professional, referred books, journals related to Teacher effectiveness and also visited websites and gathered a variety of information, regarding Teacher effectiveness. Based on that as many as 69 five point scale questions were selected for the pilot study.

### Methodology

The important objective of this present study is to find out the Teacher Effectiveness of higher secondary Teachers, Working in various higher secondary schools of Ariyalur and Perambalur District, Tamil Nadu. The investigator referred all the tools available to measure Teacher Effectiveness of higher secondary school teachers. Most of the tools available are not suitable for the present study. Hence, the investigator has constructed a tool to measure the Teacher Effectiveness of higher secondary school teachers. The Teacher Effectiveness scale has been developed by the investigator, under the guidance of his supervising teacher. The procedure and techniques followed for the development of the tool are discussed below. For the construction of Teacher Effectiveness scale, the Likert's method has been followed. Large numbers of statements pertaining to various dimensions of Teacher Effectiveness were collected by asking the

teachers and the experts in the field of education. They were supplemented with statements taken from relevant literature. After a careful scrutiny of the statements by the investigator, 69 items were selected. Each item is followed by five responses such as Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree and the scores are given in the order of 5, 4, 3, 2 and 1 respectively. A pilot test was conducted on a random sample of 200 teachers' higher secondary teachers who are working in the selected schools of Ariyalur and Perambalur District of Tamil Nadu. The sample includes both male and female Teachers. Item analysis was carried out on the basis of the try out.

For the Item analysis 't' value of each item was found out, by analyzing the responses of the 27 percent of the subjects with

the highest total scores and also the 27 percent of the subjects with the lowest total scores. These two groups formed the criterion groups. According to Edwards (1957) the value of 't' is a measure of the extent to which a given statement differentiates between the high and low groups. As a crude approximate rule of thumb, we may regard any 't' value equals to or greater than 1.75 as indicating that the average response of the high and low groups to a statement which differs significantly, provided, we have 27 or more subjects in the high group and also in the low group. 85 items with 't' value more than 1.75 were selected and other items with 't' value less than 1.75 were eliminated. The item analysis and selection of items for final study is given in Table 1

**Table 1:** Item Analysis for Teacher Effectiveness Scale

| S No. | 't' Value | Selected/Not Selected |
|-------|-----------|-----------------------|
| Q1    | 3.586     | Selected              |
| Q2    | 3.487     | Selected              |
| Q3    | 2.289     | Selected              |
| Q4    | 2.417     | Selected              |
| Q5    | 2.463     | Selected              |
| Q6    | 0.63      | Not Selected          |
| Q7    | 2.188     | Selected              |
| Q8    | -0.211    | Not Selected          |
| Q9    | 3.443     | Selected              |
| Q10   | 3.169     | Selected              |
| Q11   | 1.613     | Not Selected          |
| Q12   | 3.001     | Selected              |
| Q13   | 2.59      | Selected              |
| Q14   | 2.95      | Selected              |
| Q15   | 4.303     | Selected              |
| Q16   | 2.175     | Selected              |
| Q17   | 3.222     | Selected              |
| Q18   | 3.364     | Selected              |
| Q19   | 3.551     | Selected              |
| Q20   | 3.933     | Selected              |
| Q21   | 2.282     | Selected              |
| Q22   | 4.054     | Selected              |
| Q23   | 0.604     | Not Selected          |
| Q24   | 2.638     | Selected              |
| Q25   | -0.54     | Not Selected          |
| Q26   | 2.155     | Selected              |
| Q27   | 4.176     | Selected              |
| Q28   | 3.059     | Selected              |
| Q29   | 2.727     | Selected              |
| Q30   | 6.659     | Selected              |
| Q31   | 3.433     | Selected              |
| Q32   | 3.78      | Selected              |
| Q33   | 4.118     | Selected              |
| Q34   | 2.667     | Selected              |
| Q35   | 3.342     | Selected              |
| Q36   | 5.031     | Selected              |
| Q37   | 6.285     | Selected              |
| Q38   | 1.663     | Not Selected          |
| Q39   | 2.054     | Selected              |
| Q40   | 1.663     | Not Selected          |

|     |        |              |
|-----|--------|--------------|
| Q41 | 0.313  | Not Selected |
| Q42 | 4.23   | Selected     |
| Q43 | 4.993  | Selected     |
| Q44 | -0.205 | Not Selected |
| Q45 | 2.406  | Selected     |
| Q46 | 4.271  | Selected     |
| Q47 | 2.341  | Selected     |
| Q48 | 0.21   | Not Selected |
| Q50 | 3.234  | Selected     |
| Q51 | -0.553 | Not Selected |
| Q52 | 5.199  | Selected     |
| Q53 | 2.079  | Selected     |
| Q54 | 3.194  | Selected     |
| Q55 | 2.458  | Selected     |
| Q56 | 2.997  | Selected     |
| Q57 | 4.144  | Selected     |
| Q58 | 4.572  | Selected     |
| Q59 | 5.883  | Selected     |
| Q60 | 4.934  | Selected     |
| Q61 | 3.651  | Selected     |
| Q62 | 1.599  | Not Selected |
| Q63 | 2.214  | Selected     |
| Q64 | 2.057  | Selected     |
| Q65 | 4.411  | Selected     |
| Q66 | 0.831  | Not Selected |
| Q67 | 3.369  | Selected     |
| Q68 | -0.124 | Not Selected |
| Q69 | 3.485  | Selected     |

Based on the item analysis, 55 items were retained and 14 items were eliminated out of 69 items in the pilot scale. Hence, the validated scale consists of 55 items.

### Reliability

Reliability refers to the accuracy (Consistency and Stability) of measurement by a test. In the present study, the reliability coefficient of internal consistency was determined by, split-half method and it is found to be 0.92. The splitting of sample was done on odd-even basis to calculate the reliability by split half method. The co-efficient of stability was determined by test-retest method and it is found to be 0.78. The test-retest reliability was determined by administering the retest, after two weeks' time from the first test.

### Conclusion

This tool will be very much useful to measure the Teacher effectiveness, among higher secondary school teachers. Teacher effectiveness is one of the important psychological factors, which are closely related to the achievement of higher secondary school teachers. Under such circumstances, this tool will be immensely useful for the researcher, who would like to study the Teacher effectiveness of higher secondary school teachers.

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