CONSTRUCTION AND STANDARDIZATION OF SCHOOL CLIMATE SCALE

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Abstract

School Climate scale is the tool used in measuring the Physical Environment, Academic Environment, Interpersonal Relationships, Institutional support, Safety and security and Professional Development and Teacher Empowerment. The school climate for teachers is a multidimensional construct that encompasses teacher-teacher relationships, teacher-administrator relationship, physical and psychological work environment. The present study was conducted to construct and standardize School Climate Scale for Post Graduate Teachers. Thirty-Eight Post Graduate school teachers were chosen at random from seven higher secondary schools in the Coimbatore District to make up the sample. 51 statements, addressing six dimensions of School Climate, namely: physical environment, academic environment, interpersonal relationships, institutional support, safety and security, and professional development and teacher empowerment for higher secondary school teachers were initially used to construct this tool. This scale was standardized using the item difficulty and discrimination index, and finally, 51 statements were retained for final analysis. With the help of subject experts, face and content validity were established. Validity and reliability of this scale were also measured through a specific procedure. The present study elaborates on the development of the scale to measure the level of School Climate among higher secondary school teachers.
Keywords: School Climate, Post Graduate Teachers, Academic Environment, Professional Development, Teacher Empowerment.

Introduction

School climate refers to the social, emotional, and physical environment of a school that influences student learning, behavior, and well-being (Cohen et al., 2009). A positive school climate is linked to improved teacher morale, reduced stress, and increased student engagement. One of the most important factors affecting student learning outcomes is School Climate. School climate for teachers refers to the social, emotional, and physical environment of a school that influences teacher well-being, job satisfaction, and instructional practices, ultimately affecting teacher retention, student learning, and overall school success. School climate for teachers involves the norms, values, and expectations that shape teacher experiences, interactions, and instructional practices within the school community. By creating and standardising a School Climate scale (SCS), this study intended to close this gap.

Need and Significance of the Present Study

The goal of the current study is to address the urgent need for a thorough understanding of school environment and how it affects student results and teacher satisfaction. Even though the significance of school environment is becoming more widely acknowledged, little study has been done to examine the intricate relationships that exist between student results, teacher satisfaction, and school climate. By offering fresh viewpoints and insights that can guide future research and practice, this study will add to the expanding corpus of knowledge on school climate. This work aims to close this knowledge gap by offering a sophisticated comprehension of the connections among these variables.

Objectives of the Study

Objectives of this study were as follows:

- To Formulate a scale for School Climate to Assess Teachers' Perception relating to Physical Environment, Inter-personal relationships, Academic Environment, Institutional Support, Safety and Security, and Professional Development and Teachers' Empowerment at Schools.
- To standardize the constructed School Climate Scale for the higher secondary school teachers.

Sample of the Study

Random sampling method was used for the present study. There were 38 Post Graduate Teachers from Coimbatore district of Tamilnadu were taken as a sample for the present study.

Construction of the Research Tool

The steps followed for its construction and standardization are as follows

  i) Planning
  ii) Preparation of Preliminary form
  iii) Pre-Try out
  iv) Editing
  v) Pilot study
  vi) Item analysis
  vii) Final Draft

i) Planning

In this step, the items were planned to prepare with reference to the concept of school climate of Post Graduate teachers.

ii) Preparation of Preliminary Form

This preliminary scale consisted of 51 statements on a Likert-type school climate scale. All statements in the questionnaire have five graded options in one, which are 'Strongly Agree', 'Agree', 'Neutral', 'Disagree', 'Strongly Disagree'. Scores were distributed as follows in a scale of 5, 4, 3, 2, 1 against every statement. The scale was reviewed by experts and peers. And then it was piloted for testing it before its administration to the sample.

iii) Pre-try Out

Preliminary form of the School Climate scale was presented to subject experts, Post Graduate Teachers, Teacher educators with a request of their criticism to ensure that clarity of statements as well as suitability of the statement language and subsequent pattern of response against each of the statements given. The School Climate scale was further modified based on their observations and suggestions.

iv) Editing

Based on the criticisms and suggestions of experts involved, 51 items were retained in the scale of School Climate on Post Graduate Teachers.

Distribution of Items under Each Dimension After Pre-Try Out

S.No	Dimensions	Total No. of Questions
1	Physical Environment	8
2	Interpersonal relationships	11
3	Academic Environment	8
4	Institutional Support	8
5	Safety and Security	8
6	Professional Development and Teacher Empowerment	8
	Total	51

v) Pilot Study

For the standardization of the tool, Pilot study was conducted on the preliminary draft of the scale which comprised of 51 items. The goal at this point was aimed to get the irrelevant items out of the procedure. The fine test items were administered to a sample of 38 Post Graduate teachers of working in Higher secondary schools of Coimbatore district. The teachers were asked to mark their scores towards each statement of School climate scale.

The teachers took enough time to complete the tool. The responses were scored according to the scoring norms prepared by the investigator.

Scoring Procedure

The gathered responses were marked with the assistance of scoring key that was made by the researcher. The statement had a scoring in order 5,4,3,2,1 for the options Strongly agree, Agree, Neutral, Disagree, Strongly Disagree in respective total score of SCS vary between 255 to 51. Item Total score as well as the sum of each particular score were computed.

vi) Item Analysis

Item analysis is one of the important steps in tool standardization process. For this purpose the investigator find out item difficulty and discrimination index. The items with difficulty value greater than 0.4 and less than 0.8 were selected and other items were not selected. The items with discrimination index greater than 0.3 were selected and other items were not selected. Based on this criteria, 35 statements were retained and 16 statements were rejected.

Establish the Validity

Validity refers to the degree to which evidence and support the interpretation of test scores entailed by proposed uses of test(Best& Khan, 1999). For the present study the investigator established the face and concurrent validities for the tool.

Establish the Reliability

Reliability refers the extent to which differences in respondents observed scores are consistent with differences in their true scores (Furr & Bacharach, 2008). In order to established reliability, difficulty value and Discrimination index was used for it.

The difficulty value and Discrimination index of School Climate Scale (SCS) was presented in the table.

Table Item Analysis

Q. No	Difficulty value	Discrimination Index	Interpretation
1	0.69	0.30	Retained
2	0.84	0.23	Rejected
3	0.71	0.35	Retained
4	0.82	0.18	Rejected
5	0.73	0.35	Retained
6	0.70	0.40	Retained
7	0.81	0.28	Rejected
8	0.77	0.43	Retained
9	0.78	0.25	Rejected
10	0.77	0.28	Rejected

11	0.75	0.35	Retained
12	0.65	0.35	Retained
13	0.75	0.32	Retained
14	0.70	0.34	Retained
15	0.59	0.40	Retained
16	0.55	0.42	Retained
17	0.77	0.38	Retained
18	0.72	0.43	Retained
19	0.69	0.38	Retained
20	0.72	0.35	Retained
21	0.75	0.38	Retained
22	0.76	0.38	Retained
23	0.74	0.42	Retained
24	0.64	0.48	Retained
25	0.78	0.40	Retained
26	0.78	0.38	Retained
27	0.67	0.42	Retained
28	0.76	0.43	Retained
29	0.79	0.33	Retained
30	0.71	0.48	Retained
31	0.75	0.43	Retained
32	0.67	0.50	Retained
33	0.71	0.45	Retained
34	0.77	0.35	Retained
35	0.74	0.43	Retained
36	0.81	0.33	Rejected
37	0.76	0.40	Retained
38	0.76	0.28	Retained
39	0.81	0.18	Rejected
40	0.76	0.33	Retained
41	0.78	0.28	Rejected
42	0.81	0.23	Rejected
43	0.83	0.20	Rejected
44	0.80	0.30	Rejected
45	0.71	0.35	Retained
46	0.78	0.38	Retained
47	0.69	0.33	Retained
48	0.72	0.25	Retained

49	0.78	0.30	Rejected
50	0.74	0.40	Retained
51	0.80	0.18	Rejected

vii) Final Draft

After the item analysis, the distribution of items of School Climate Scale (SCS) under each dimension was presented in the table

S. No	Dimensions	No of Questions
1	Physical Environment	5
2	Interpersonal relationships	9
3	Academic Environment	7
4	Institutional Support	8
5	Safety and Security	4
6	Professional Development and Teacher Empowerment	5
	Total	**38**

Conclusion

The School Climate Scale (SCS) construct and standardization study has provided valuable insights into the development of a reliable and valid measure of school climate. The findings of this study suggest that the SCS is a multidimensional construct comprising six distinct factors such as Physical Environment, Interpersonal relationships, Academic Environment, Institutional Support, Safety and Security and Professional Development and Teacher Empowerment.

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