

## CHAPTER III

THE PRESENT STUDY

---

What is a good school ? Which is a poor school ? How does the public evaluate schools in general terms based on the results produced by the school in the terminal examination ? based on the curricular offerings ? or cocurricular, extra curricular offerings ?

How far is the educational environment or the climate of the school responsible for the differences that exist among the schools ? To what extent is the faculty responsible ? Are there some climates which lead to better teaching-learning process ? Do schools with certain type of climate have a higher faculty morale ? Are schools with certain type of climate more effective from the point of pupil performance in examinations ? Are schools with certain type of climate more innovative ?

To the question 'which is a good school'? Carlson (1965) answers, "a good school is one which meets the ever changing needs and demands of a complex society".

Mort (1965), states "A healthy system would tend to invent new procedures, move towards new goals, produce new kinds of products, diversify itself and become rather more than less differentiated overtime. In a sense, such a system could be said to grow, develop and change rather than remain routinized and standard". According to him, a healthy school is stable, flexible and adaptable - in short-innovative.

The queries mentioned above have not been empirically studied and answered so far in our country. The present investigation sought to examine some of these questions by essentially considering categories of data each reflecting a different facet of the investigation:-

- 1) Perception of school climate by teachers,
- 2) Professional interests of teachers and principals,
- 3) Pupil performance in the external examination,
- 4) Innovativeness of schools and
- 5) some demographic characteristics of the schools, teachers and principals.

It is believed that if the findings of the study would help in answering the queries, it will greatly help educators to understand the concepts of organizational climate and faculty morale and whether they do or do not relate to quality of schools, then there would be justification to strive and increase our efforts <sup>to</sup> open up the climate of schools and improve the morale of the faculty.

#### Statement of Research Problem

"Organizational climate, Teacher morale and school quality".

#### Definition of terms: -

##### Organizational Climate -

Organizational climate is defined by Halpin and Croft (1963) as the personality of the school - "Analogously, personality is to the individual, what organizational climate is to the organization".

In the present study, the term is used in the same meaning as that of Halpin and Croft, and organizational climate is viewed as the product of interplay among organizational principles, individual needs and informal group variables, measured through a number of dimensions and represented on a continuum.

Teacher morale -

In the present study, morale refers to "the professional interest and enthusiasm that a person displays towards the achievement of individual and group goals in a given job situation".

This definition recognizes the satisfaction of both individual and group needs and their effective harmonization as a basis for morale.

School Quality -

Ideally, the criteria for assessing the organizational success of an institution would be in terms of organizational output; in the case of schools, pupil performance or the curricular achievement of the students would be one of the vital institutional expectations and hence quality of school is determined in terms of the product criteria, namely, pupil performance. The second criteria used to measure school quality is the innovative ability of the school, which would indicate to us the process criteria, namely, how healthy the organization is to cope with changes and demands of a growing, complex society.

Major objectives:

The present study was planned to determine the extent to which the organizational climate of schools and faculty morale in the school were related to the quality of schools. To enumerate,

- 1) To investigate the relationship between organizational climate and pupil performance;
- 2) To investigate the relationship between organizational climate and innovativeness of schools;
- 3) To investigate the relationship between faculty morale of the school with the pupil performance of the school.
- 4) To investigate the relationship between faculty morale and the innovativeness of schools.

Specific objectives -

The detailed specific objectives of the present enquiry are:-

- 1) To replicate Halpin and Croft's study in a properly selected random sample of high schools of Tamil Nadu.
- 2) To identify the profile of each school and to place them in the classified climate category.
- 3) To replicate Bently and Rempel's 'Purdue Teacher Opinionnaire' on the same sample of teachers for evaluating the teachers' perception of 'morale' within the school setting.

- 4) To determine the mean faculty morale of each school and categorise them as high, average and low morale schools;
- 5) To determine the 'innovative index' of each school by means of the inventory prepared by the investigator;
- 6) To collect data regarding the pupil performance of each school in the external examination at the end of the school year for the last three years and categorise them as high<sup>s</sup> achieving, average achieving and low achieving schools - and
- 7) To find out the relationship of organizational climate and faculty morale with pupil performance and innovativeness of schools.

Basic assumptions:-

The study started with the following assumptions:

- 1) Each school has a personality, otherwise termed as organizational climate.
- 2) The climate can be determined by the characteristics of the principal as a leader and by the characteristics of the faculty as a group and the existing relationship between the two.
- 3) The organizational climate can be measured.
- 4) Differences do exist among teachers in morale;
- 5) Morale can be measured.

- 6) School Quality can be measured; one of the criteria for measuring school quality would be the pupils' performance in the external examinations; another criteria would be the ability of the school to innovate and thus meet the everchanging needs and demands of a complex society.
- 7) Teachers' perception of the organization of the institution might be an effective discriminator of difference among the degree of success in achieving the objectives of the school.
- 8) Differences among teachers' personality traits and attitudes towards the school might be another effective discriminator of difference among the degree of success in achieving the objectives of the school.

Hypothesis -

The present study examined the following hypothesis:

- 1) There is a significant positive relationship between pupil performance and openness of organizational climate of the school.
- 2) The innovativeness of a school is positively related to the openness of organizational climate.
- 3) Pupil performance is positively related to the high morale of the faculty of the school.
- 4) The innovativeness of a school is positively related to the high morale of the faculty of the school.

Design of the study:-Population

At the time of the study, there were 2635 secondary schools in Tamil Nadu grouped for administrative purposes into 46 educational districts. As it was not feasible to take a sample of schools from all these districts, the sample for this investigation was selected mainly from one revenue district of Madurai and for comparative purposes, schools from the educational districts of Madras and Coimbatore were included. Schools having Classes VI to XI, preparing for different types of examinations, viz., S.S.L.C., I.S.C., Madras Mâtric, Madurai Mâtric and Higher Secondary Examinations were all considered as secondary schools.

Sample -

The sample of the present study constitutes 190 secondary schools, of which,

- 1) 50 schools constitute the entire population of one educational District of Madurai - an exhaustive sample.
- 2) 130 Schools, (consisting about 60% of the total schools) covering the 4 educational Districts of the Revenue District of Madurai -



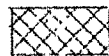
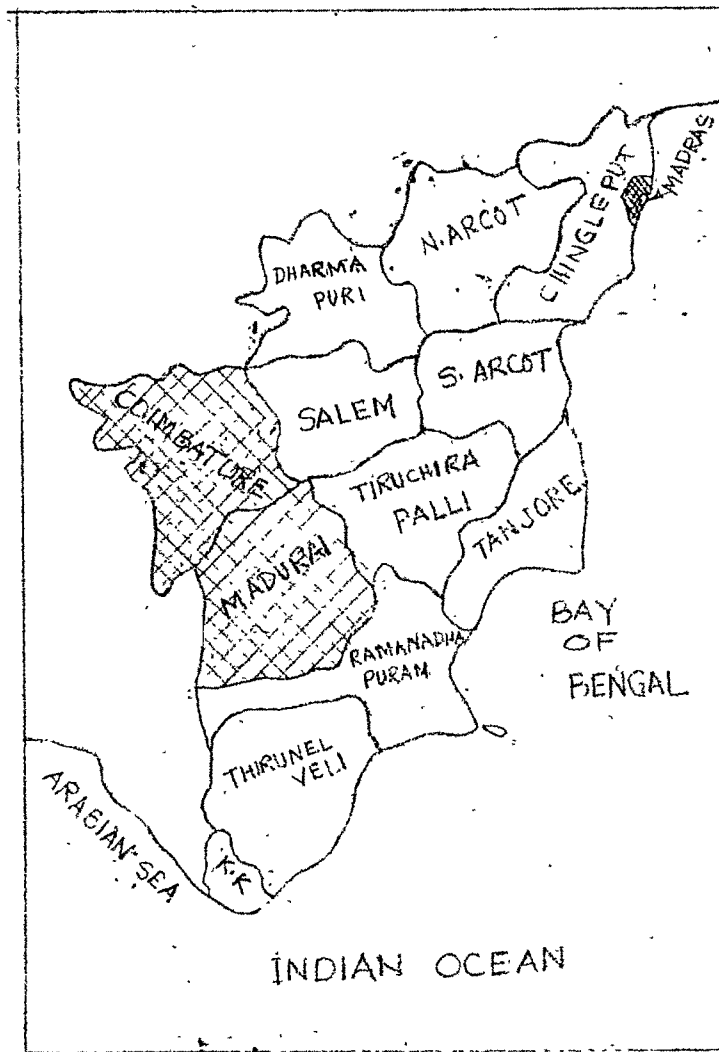
- i) Madurai Educational District
  - ii) Dindigul Educational District
  - iii) Periakulam Educational District
  - iv) Usilampatti Educational District
- Madurai  
Revenue Dt.

and 3) the rest of 60 schools selected from the  
Educational Districts of North Madras,  
South Madras and Coimbatore.

Fig. 3.1: shows the map of Tamil Nadu and the Districts surveyed in the present study.

FIG. 3-1

## DISTRICTS OF TAMIL NADU.



COVERED BY PRESENT STUDY

### Characteristics of the sample -

The sample includes all types of secondary schools, drawn both from urban as well as rural areas, managed by Government, Private bodies as well as Quasi-Government i.e., administered by either Municipalities or Corporation or District Boards or Panchayat Unions; exclusively girls' schools, exclusively boys' schools as well as co-educational schools were studied. The sample includes schools of different size - small, medium and large school complexes having K.G. to Standard XI. Figures 3.2 and 3.3 show the organizational and administrative structure of schools in India.

### Respondents

Two of the three research tools i.e., OODQ and PTO were administered to teachers of the selected schools, taking care to see that at least 66% of the faculty participated in the study. The third tool, viz., the innovative inventory was asked to be filled in by the Principals of all the selected schools.

### Measurement of organizational climate -

Attempts to operationalize the concept of organizational climate provided a number of methods for observing climate variables which included field studies, observational studies, experimental control of organizational variables and perception studies.

Fig. 3.2

## TYPICAL SCHOOL ORGANIZATIONAL STRUCTURE IN INDIA

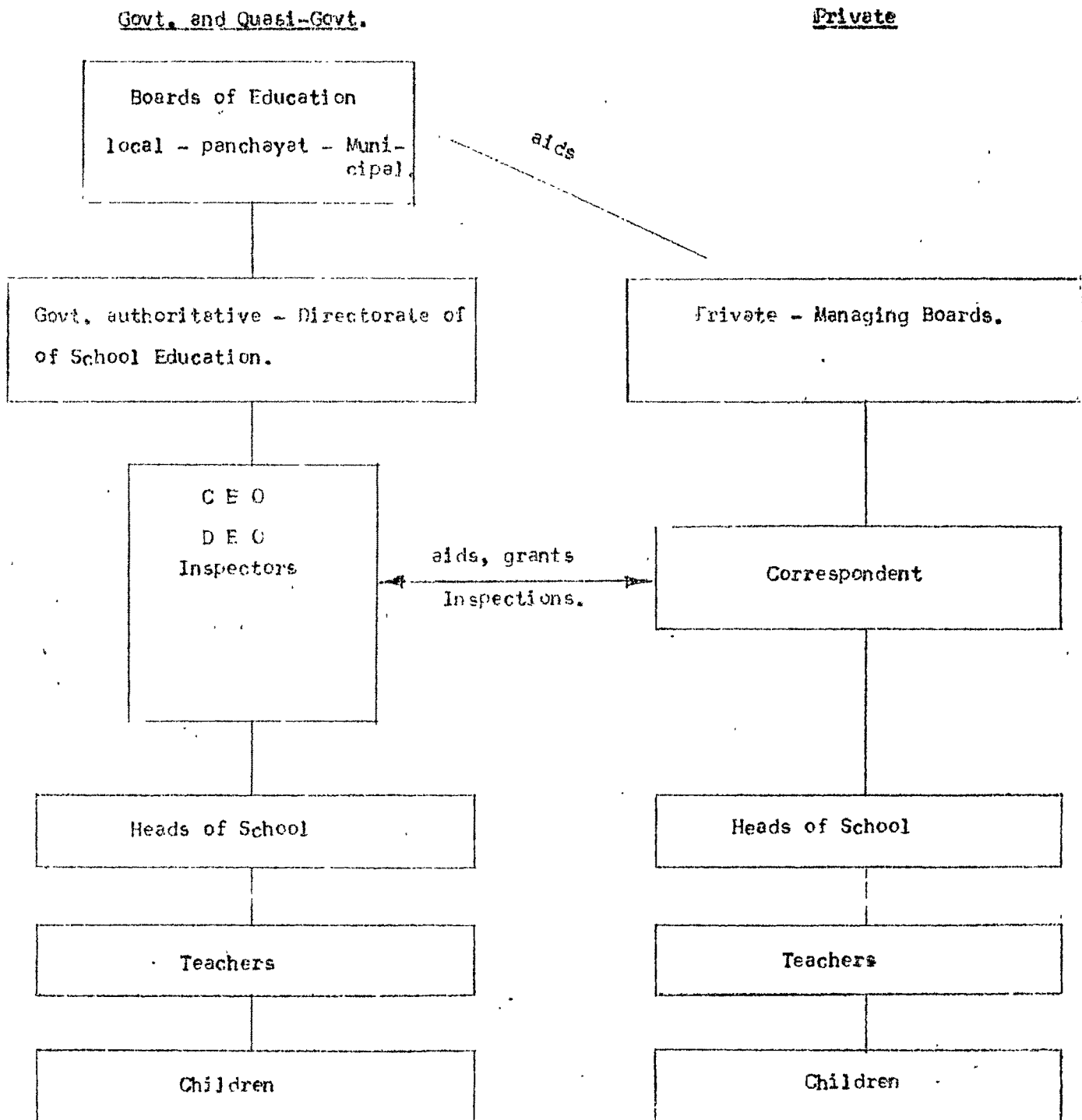
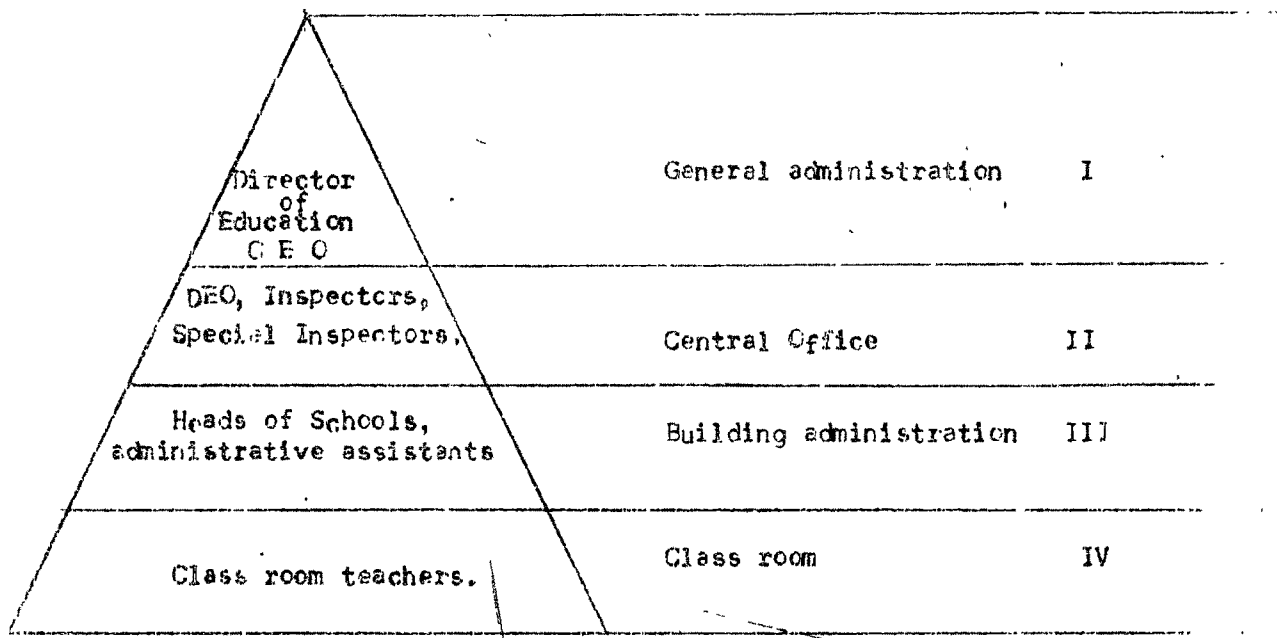


Fig. 3.3

AN ORGANIZATIONAL PYRAMID FOR SCHOOL ADMINISTRATION

Argyris (1958) used the field study approach in his longitudinal study of a bank.

Palmer (1951) Evans (1963) and Paterson (1966) used the observational method and they could cover a wide variety of organizations.

Some of the recent studies by Leavitt and Bass (1964), Glazer and Glaser (1967) used the experimental approach in their study in industry.

Perceptual approach has many advantages over the other methods in terms of money, time, simplicity and efforts. It is not as time consuming as the field study or observational approach and not as complex as the experimental approach. The rationale behind the perceptual approach is that as the assessment is done by means of the perceptions of the participants themselves and not <sup>by</sup> ~~as~~ outside observer, it is more dependable and valid.

Organizational climate is conceived to be the product of the inter play among the participants; perceptions are produced by inter-action between casual variables as structure, objectives, supervising practices etc., with individual personality. Therefore it is only through perceptions, the relationship <sup>between</sup> ~~casual~~ and result variables may be understood. This point of view strengthens the measurement of climate directly,

via the perception of the individuals whose behaviour is being studied. As such, Halpin and Croft (1963) in developing the organizational climate description questionnaire (OCDQ) and Pace and Stern (1958), Pace (1962), and Stern and Steinhoff (1965) in developing the organizational climate index (OCI) based their research on perception by participants.

O C I      Developed by Stern and Steinhoff, this tool is based on personality studies and on the concept of need-press of Henry Murray (1938). Stern and others evolved two questionnaire instruments to determine the need-press factors which they felt influenced development of climate in colleges. The two key dimensions of OCI are development press and control press. By representing these two dimensions along with intersecting axes, the OCI score can be pinpointed and the climate described. The OCI included 300 items with 6 first order variables and 2 second order variables.

#### O C D Q -

Halpin and Croft in a major study of the organizational climate of 71 schools systems developed this tool. By far, this tool seems to be the most popular and widely used technique, because of the clarity of items and relative simplicity with which the technique can be used in practical school situation. It has been used by researchers in India and been found

quite applicable to Indian schools. The present study has used the perceptual approach and the OCDQ instrument to determine the climates of the sample.

#### Measurement of Teacher Morale -

Morale is still an imprecise although highly important concept. It may best be conceived of as a continuous variable. The present study is based on the conception of morale as 'an effect related to the successful interaction among individual needs and incentives and organizational goals'. Many different instruments and devices to measure morale and job satisfaction have been developed. Some have general application to any kind of situation. Some have been prepared for specific jobs like nursing, governmental employment, factories etc., A few scales have been developed designed more specifically to measure teacher morale but they have had limited use since they seem to have unknown validity and reliability. In general two basic approaches have been used. In the first approach, the individual estimates his own morale or job satisfaction, this was the technique used by Hoppock (1935) in his comprehensive study of job satisfaction of teachers.

The other approach consists of asking the individual to make qualitative judgement and express



his feelings about the persons and things in his environment that may be related to his morale. These responses are appropriately weighted and quantified so that a total score or index can be assigned. It was this approach that was used in the preparation of the initial Purdue Teacher Opinionnaire of Bentley and Rempel (1961).

In the present study, to evaluate the teachers' feelings of morale within the school setting the PTO was used. This instrument ascertains teacher reactions to administrators and their policies, to the curriculum, the student and the community, teacher's feelings for other teachers and the physical setting where they work.

#### Measurement of School Quality:

The two criteria used for determining the quality of the school are - pupil performance and innovative index of the school.

#### Pupil performance -

Based on the assumption that a school's success in achieving some of the goals - especially in the curricular area - can be an index of its quality, the present investigator collected data of the performance of the pupils in the external school final examination for the last three years from the Office of the Director of School Education and the mean performance score was taken as the measure of school quality.

Innovative Index -

Many different devices and tools to measure 'adaptability' or 'innovativeness' have been developed since Mort, Vincent and Newal developed 'The Growing Edge' in 1945. Self-appraisal approaches by Mort-Cornell (1937) Mort Pierce Time Scale, the Associated Public School System Time Scale, a refinement of Mort Pierce instrument, Carlson's (1965) measurement of rate of adoption, Marion's (1966) scale of innovativeness, Miller's (1967) inventory of change proneness, Seger and Hollaway's (1968) indices of innovativeness, Roosa's (1969) scale of rate of adoption, Bhogle's instrument (1969) <sup>to</sup> measure acceptance of innovations are some of the existing tools. A study of all these above mentioned tools establishes two considerations; 1) credit is given to <sup>a</sup> number of innovations adopted by a school and 2) the manner of adoption in terms of time, extent, tenure etc.,

The present investigator prepared an inventory slightly modifying and adding a few more items to that of P.Buch (1972) who had prepared it for the state of Gujarat so as to suit the condition of Tamil Nadu. This inventory takes into consideration the number of innovations the school had introduced out of the list

given and to what extent innovations were being utilized - fully or partially and how early or late the innovations have been introduced.

Description of tools -

- Tools
- 1) Organizational climate Description Questionnaire (OCDQ) - of Halpin and Croft (1963) to determine the organizational climate of the school.
  - 2) Purdue Teacher Opinionnaire (PTO) of Bently<sup>e</sup> and Rempel (1970) to compute the faculty morale of the school.
  - 3) An inventory scale to test the innovativeness of the school modified from the scale developed by Buch (1972).
  - 4) Questionnaire included with the above tools to give demographic data and pupil performance in terms of S.S.L.C. results for the past three years as a counter check to the data obtained from the Director's Office.

1) O C D Q

A likert-type questionnaire of 64 items assigned to 8 sub-tests, viz .,

Characteristics of the group -

Disengagement  
Hindrance,  
Esprit  
Intimacy.

Behaviour of the leader -

Aloofness  
Production emphasis  
Thrust and  
Consideration.

The questionnaire could be administered in a group situation and requires not more than 30 minutes for marking.

Respondents were asked to indicate the extent to which each statement - Characterized his school by marking one of the four categories -

Rarely occurs  
Sometimes occurs  
Often occurs  
Frequently occurs

Scoring of these four categories was done by giving four successive integers ( 6, 7, 8, 9 ) to the categories, except for certain items which had to be scored in reverse order. A detailed description of the eight subtests and the six climates have already been discussed in Chapter II under Review of literature.

A sample of the questionnaire<sup>n</sup> is attached as appendix. 7.

The generality, reliability and applicability of the OCDQ has already been discussed in Chapter-II under the section 'Review of Research Studies'.

Mehra (1968) Shama (1970) P.Buch (1972) K. Rai (1972) and Kumar (1972) have used the OCDQ in the various States of India - Delhi, Rajasthan and Gujarat and have reported the suitability and applicability of this instrument to secondary schools in India.

Regarding the validity of the OCDQ, Smith (1967) found the concept of organizational climate as identified by OCDQ to be empirically sound and viable.

Andrew (1965) found that the OCDQ to be as valid for other kinds of schools as elementary schools. He concluded that the subtests of OCDQ provided reasonably valid measures of important aspects of the school principal's leadership, in the perspective of inter-action with his staff.

Plaxton (1965) found a strong relationship between some test scores of OCDQ and external criteria as teacher satisfaction, principal's effectiveness and school effectiveness. So this study confirmed Andrew's findings that the subtests of OCDQ provided valid measures for measuring what they were purported to measure.

Sergent (1967) has also supported the above findings.

Movotoney (1968) Shama (1972) have pointed out that certain items of the OCDQ are less appropriate and some inappropriate. Certain items on the scale are bound to have some limitations especially when the scale is administered in a country like India having different culture and different administrative set up. So the scale would have to be used with caution, may be with some modifications. Regarding the extent validity of the OCDQ, as the climate is defined by the prototype profile, the less valid is the climate classification associated with the profile describing the school. Further research is needed to find out how much variation can be tolerated before deciding that the climate becomes an invalid indicator of the school environment.

About the concurrent validity i.e., how the OCDQ scores relate to other measures which address themselves to the same content area as Halpin and Croft's scale, the most convincing comparison comes from the study of Halpin and Croft with Leadership Behaviour Description Questionnaire. Halpin (1966) reports that Ryan's study on the characteristics of teachers and OCDQ findings correspond in part at least; Ryan's high and low teachers correspond fairly well with the behaviour of teachers in open and closed climate.

Andrews (1965) found very high correlation (.84) between thrust and teacher rated 'Principal effectiveness' thus showing the inter-changeability of the two measures.

Roosevere (1965) in his factor analysis of Esprit-Thrust interview schedule confirmed the validity of their counter parts in the OCDQ subtests.

McFadden (1966) took up Halpin's Challenge to do a criterion study using outside observers in the school and found inter rate agreement to be generally high but only 10-30% agreement with actual climate scores.

D.C. Smith (1967) related the OCDQ to 23 external characteristics of elementary schools and found significant relationship of those variables with specific subtests and significant difference between the variables in different climate schools.

In India there is need to take up more studies before we can finally and definitely establish the validity of the instrument.

#### Purdue Teacher Opinionnaire - (PTO)

The P.T.O. instrument is designed to provide a measure of teacher morale. Not only does the opinionnaire yield a total score indicating the general

level of a teachers' morale but it also provides meaningful subscores which break down morale into some of its dimensions.

The ten dimensions included are -

- 1) Teacher rapport with principal
- 2) Satisfaction with teaching
- 3) Rapport among teachers
- 4) Teacher salary
- 5) Teacher load
- 6) Curricular issues
- 7) Teacher status
- 8) Community support of education
- 9) School facilities and services
- 10) Community pressures.

The instrument is valuable in that it gives an objective and practical index of Teacher morale, by means of perceptions of the participants. The opinionnaire also provides specific and valid information about crucial problems and areas of tension which may have adverse effect on morale. Very basic to improving the level of morale is an adequate understanding and diagnosis of how teachers feel about their particular school situation.



Reliability of the P.T.O. - The opinionnaire was administered to high school faculties in Indiana and Oregon using, test-retest technique and data was obtained for 3023 teachers. The factor correlations were found to be predominantly above .60 level and for the total scores, about 90% of the correlations are .80 and above. It was also found that there was very little difference between the means and standard deviation for both total and factor scores for the test and retest administration of the opinionnaire.

Inter-factor correlations computed from the sample of 3023 secondary teachers range from .18 to .61 with a median correlation of .38. These correlations were sufficiently low to make factor scores meaningful in assessing the status of morale for an individual or for a group.

It was also found on examining the magnitude of the correlations between items and the factor to which they belong, that, in most instances, they contribute significantly to that factor.

Thus on all these four grounds viz., correlation of factor scores and total scores, means and standard deviation of test-retest scores, inter-factor and inter item correlations, the instrument was found to be reliable.

Validity -

In the same study in Indiana and Oregon, the principals of schools were asked to react to the opinionnaire items as they believed the faculty would react. Differences between the median scores for teachers and the median scores for principals were not significant, thus proving the validity.

In various studies, Bently<sup>e</sup> and Rempel (1963) "Time to teach" action report (1966) and Marie Brinkman (1966) in which the PTO has been used it has been found to discriminate sharply among different schools and also among individual teachers in the same school. Also, conditions known to exist in a school situation often have been reflected in the teacher and principal responses to the opinionnaire. When morale scores were low in a particular school, teacher turnover was frequently high the following year.

All these sufficiently confirm that the instrument does measure what it purports to measure.

The respondents were asked to indicate the extent to which each statement characterized his school situation by marking one of the four categories given - agree, probably agree, probably disagree and disagree.

Scoring of these four categories is done by assigning weights 4, 3, 2, 1 if 'A' or agree is the keyed response and 1, 2, 3, 4 if 'D' or disagree is the keyed response.

The factor score is obtained by summing all of the item weights for each factor.

The total score is given by the sum of all the 10 factor scores.

Innovative Index Inventory -

This scale was prepared by selecting two criteria, namely - 1) the number of innovations from the given list which have been introduced in the school, and 2) the extent to which the innovation was being used.

The scale was designed as follows:

No.	Name of Innovation.	Whether introduced Yes or No	Year in which it was introduced	Extent of adaption			
				100 - 75%	75 - 50%	50 - 25%	upto 25%
	1	2	3	4	5	6	7

To prepare a list of innovations, the investigator took into consideration what Tamil Nadu Government Policy has been in the past 10 years. From the circulars and Memos sent out from the Directorate of School Education, the Chief Educational Officer and the Inspectorate of Schools, the innovations and facilities which were encouraged to be introduced in the schools, for some of which specific grants also were available

were noted. At a meeting of the District Administrators' Association, where the investigator happened to be present, a check list of the innovative practices, was presented to these administrators and were asked to mark those which had been introduced, or being introduced in their schools. The ones which were sponsored by state authorities with financial support seemed to be the items which most of the schools had already introduced. The investigator was able to arrive at a list of 30 items. ( A sample is included as appendix 9) Items included innovations in three areas namely - administrative innovations, curricular innovations, and methodological innovations.

Description of items -

1) Planned programme of school assembly -

One of the items recommended by the Tamil Nadu Directorate of School Education. This planned assembly held either every morning or once a week, provides the venue for all the children, staff and principal to meet and any announcements, felicitations, introduction of reports are read out, thus promoting a sense of oneness and loyalty to the institution. This is also used as a training for senior students in planning arrangements of activities and public speaking.

- 2) Educational and vocational guidance - service of career masters to help children select courses and also organize career conferences, occupational and information courses etc.,
- 3) Cumulative record card - a continuous record of pupil's achievement and growth maintained systematically over a period of years.
- 4) Work experience - recommended very strongly by the Indian Education Commission of 1964-66 - participation in productive work in school.
- 5) Work books for students - To stimulate self-study, work books are provided based on the content included in the syllabus.
- 6) Weekly periodical tests - A continuous assessment of the effectiveness of teaching - learning process - very valuable as internal assessment score of academic achievement.
- 7) Unit planning and unit-test - The syllabus is divided into meaningful units and when an unit has been taught, tests based on this unit are framed and administered. The tests are based on a table of specifications incorporating the content, objectives and even test forms.

- 8) Weightage to periodical tests held in the course of the year to decide promotion - recommended by the examination reforms committee, helps internal assessment to be meaningful, reduces the tension due to the bogey of annual examination.
- 9) New type of question paper - recommended by Tamilnadu Directorate of School Education, objective type of questions in addition to the traditional long essay type questions in order to improve the objectivity and reliability of examination. Recommended by the National Seminar on Examination Reforms Committee as well as the Education Commission of 1964-66.
- 10) Open shelf library - free approach to library shelves - to help the child browse among books, to stimulate better reading habit - recommended by Secondary Education Commission of 1952-53 as a dynamic method of teaching, as well as the Education Commission of 1964-66.
- 11) Science Club - recommended by Secondary Education Commission 1952-53 and Indian Education Commission very strongly; to stimulate the interest of children in science and technology and to provide opportunities for the talented students to enrich their experience, science clubs are advocated.

- 12) Language Club - as a forum for debates and training for public speaking and writing and to spot the talented pupils in languages;
- 13) Social Study Circle - a forum for improving general knowledge - to spot the talented; lectures, debates, discussions, contests and quizzes are conducted to improve knowledge of current affairs.
- 14) Hobby Centre - includes art clubs, music clubs, photography club, craft centre etc., all the activities necessary to develop the recreational and creative interest of the students.
- 15) N.C.C. - encouraged by both Central and State Government with financial support - as a training for discipline, civic and social duties and second line defence.
- 16) Boy Scout, Girl Guides - excellent facilities for social service - strongly recommended by all Education Commissions.
- 17) Organized games for all children - recommended by all Education Commissions, sponsored by State Government - so that each child gets the opportunity to develop. growth, and physical development.

18) School Co-operative Stores - facility for students usually recommended to be run by students on non-profit basis -

19) School Museum - provides enrichment experience for curricular activities - of great help in providing instruction materials as a continuous collection of specimens in all areas and knowledge is encouraged.

20) Annual Exhibition by children - provides an opportunity for recognition of the work of the children in the various hobby clubs of the school, by the children, parents and public.

21) School excursion - recommended by Tamilnadu Directorate, facilitates learning experience if well planned, prepared and executed.

22) Use of audio aids films, film strips and slides - The a - v department of the Directorate of school education runs a library of films and film strips and encourages the schools to borrow; a valuable aid to technique of teaching.

23) Inclusion of school broadcast programmes - The All India Radio, Madras, runs a programme based on the school syllabus as well as programmes for



enrichment - could be utilized as an excellent supplement to the class room teaching method.

24) Programme for gifted children - enriched curricula, special guidance or challenging assignments and projects for the talented children.

25) Remedial programme for backward children - to help children who lag behind in the form of special instructional period or special assignments.

26) Parent-Teacher Association - cooperation of both-parents and teachers for better mental health of children - by individual discussion, group meetings and participation in school activities.

27) Regular staff meetings - to encourage participation and involvement of teachers in planning the school activities - staff meeting could be used - but not if they are run as 'Principal report' meeting or business meetings.

28) Annual Seminar of Teachers - held either at the end of the year or at the beginning of the year, instructional programmes and other aspects of the school are reviewed and plans for next year prepared - ensures forward planning and efficiency.

29) Summer Institutes - Refresher courses for teachers in the various curricular areas run by the universities or U.G.C. in collaboration with the Directorate of Collegiate Education - usually the participants are encouraged by stipends or daily and travelling allowances.

30) Experimental and developmental projects - Teachers are encouraged to take up projects and experiments to improve class room practices. This programme was sponsored by the All India Council of Secondary Education and subsequently supported by NCERT.

#### Scoring -

The inventory items were weighted and given a maximum value of eight per item and the innovative index (I.I.) was calculated by

$$I.I. = \frac{\sum X}{N} \text{ where } X = \text{score for each item}$$

N = number of items.

#### Validity of the tool -

A pilot study was conducted on eight schools of Coimbatore District as the investigator knew these schools very intimately as these were the cooperating schools of the Teachers' College.

Of these eight schools, four have a very high reputation as highly innovative schools and the other four as low innovative - according to the teachers' college staff. The scale was administered to these schools and the 't' test showed high significant difference between high innovative and low innovative schools, thus establishing the validity of the scale.

Table 3.1

Criterion group	Mean	Difference between mean	S.E.	C.R.	Result
High innovative	5.9	4.2	1.9	2.2	Significant at .05 level
Low innovative	1.7				

Reliability - The test-retest method was used. The scale was administered to the same schools twice, the second time after a period of six weeks. The pearson 'r' was calculated. The high value of .82 indicates a fairly good reliability of the scale.

The total questionnaire i.e., OCDQ, P.T.O. and the inventory were tried out in the eight schools in Coimbatore as a pilot study and the suggestions by the participants regarding some ambiguities in the language of the questionnaire were noted and explanations were added for the rest of the schools.

Data collection -

Due to quasi-personal nature of the total questionnaire - i.e., OCDQ instrument, P.T.O. and the inventory scale in teacher and principal behaviour, it was felt that a visit to each school would be necessary. In all probability, forwarding the questionnaire by mail would have resulted in a large number of rejections. Furthermore, two sources were involved; the OCDQ and the P.T.O. had to be filled in by the teachers and the demographic information form and the innovative inventory had to be filled in by the head of the school. Hence the investigator personally visited most of the schools to distribute the questionnaire and the inventory scale and explain to the heads and all the staff the purpose and significance of the study. This greatly helped in engendering a better understanding of the study and expedited the data collection process. In some schools, due to various reasons, it was not possible to get the staff to fill in the questionnaire forms at one sitting; in such cases, with the help of an assistant the forms were collected after they were filled in by the participants in their own time. As the Government, Corporation and Municipal schools were rather reluctant to participate, the help of the Director of School Education and the CEOs was sought to send out a circular



to all schools to cooperate in the project. Only when assured that all information would be strictly confidential, some schools agreed to participate. There was complete anonymity as no names were to be entered on the questionnaire forms - this was very necessary as otherwise some teachers hesitated to answer the questionnaire honestly. The field work which was started in January 1972 could be completed only in September 1972 as summer vacation intervened and data collection was done in three different districts. Care was taken to include as many rural schools as possible and also that representative. Samples were there in terms of management, size and sex.

One Educational District of Madurai was exhaustively surveyed, all the fifty schools in that District participating in the study. In the whole Revenue District of Madurai more than 60% sample was surveyed. For comparative purposes, the urban, advanced capital city of Madras was chosen and some schools reputed to be very good, long established and which had developed into big school complexes were selected and included in the study. In all, about 208 schools responded and while scoring, about 18 schools had to be weeded out for various reasons; some forms which were casually and incompletely marked had to be

rejected. If less than 66% of the high school teachers had participated then, as it was not really representative of the school, these schools were not included. In some schools, it was found that the Headmasters had not bothered to fill in the demographic details - these also had to be rejected. So the analysis could be done for 190 schools of Tamilnadu, with about 2200 teachers having completed the questionnaire forms.

Limitations of the study - 1) A number of factors influence the climate of an organization and morale of the faculty. In the case of a school as a social organization, external cultural elements as well as social and economic factors influence the organizational atmosphere and behaviour. It is impossible to include all these factors in a single study. The present investigation is limited to the social and behavioural interactions between teachers and their colleagues and teachers and the principal in both formal and informal contexts. It is also limited in the sense that the perceptions of teachers alone is considered; their personality characters have not been taken into account, and the perception of students, non-teaching staff and the parents have not been considered.

Delimitation -

The study is limited to the secondary schools of few Districts of Tamilnadu.

The general findings of the study and analysis of data are discussed in the next chapter.

: : : :  
: : :  
: : :  
: :  
:  
: