CHAPTER II
REVIEW OF RELATED LITERATURE

INTRODUCTION

This chapter includes a review of several studies made in the area of Teacher-behaviour, classroom climate, various aspects of innovations, certain components of pupils' psychic world. A study of these research work conducted in various areas will help the researchers to develop insights into the nature of the problem and the other technicalities he has to deal with.

The present study attempts to understand how certain selected variables gets manipulated in a so called innovative classroom. The various variables that are chosen for the present study are classroom climate, pupils' psyche, teacher behaviours. An earnest effort has been made to review studies conducted in all the above mentioned areas. A number of studies in the field of classroom climate, teacher behaviour and pupils' psyche have been conducted both in India and abroad. An attempt has been made to review these studies which have used various variables to study classroom climate, teacher behaviour and pupils' psyche. Studies have been discussed in the present chapter in two phases:

1. Studies conducted abroad in various variables.
2. Studies conducted in India which are almost in line with the variables chosen for the present study viz., classroom climate, teacher behaviour, pupils' psyche and innovative classrooms.

It is the opinion of the investigator that Indian studies which are in line with the chosen variables should be critically and analytically studied because these studies are more relevant and the results could be implemented in our classrooms too because the operation, organization and structure of the Indian classrooms are more or less similar when compared with the classrooms abroad.

Brewer and Brewer developed 26 teacher behaviour categories and 29 children behaviour categories by which both teacher's

and pupils' verbal and non-verbal behaviour might be categorised.
Teacher behaviour was divided into two integrative and dominative
and the authors demonstrated that children's behaviours were
consistent with the kind of personality the teacher displayed in
the classroom.

Bales' interaction process categories was primarily designed
to observe and understand group process of problem solving. It
includes 12 observational categories which could be combined
suitably to study (a) Social-Emotional areas including positive
and negative reactions (b) task areas including questioning and
attempted answer (c) dimensions of orientation, evaluation, control
decision, tension management and integration. These categories
are comprehensive and provide valuable data for judging and
analysing group processes.

Amidon and Elizabeth Hunter have extended FIAC to develop the
verbal category system contains five major categories for analysing
classroom verbal behaviour. They are: (1) Teacher initiated talk
(2) Teacher responses (3) Pupil responses (4) Pupil initiated talk
(5) Other, it includes 17 categories of behaviour in all. The
authors identify seven major teaching activities —— motivating,
planning, informing, leading discussion, disciplining, counselling
and evaluating. To study these activities the VICS is recommended.

A study of all these observational schedules will enable the
researcher to know what aspect of teacher behaviour can be
observed and how it could be observed. This study of the schedules
has enabled the investigator to develop a deeper insight into the
processes of these schedule which has facilitated to modify the
schedule given by which would meet the need of present study. A
detailed description of the modified observation schedule is given
in III Chapter of the present thesis.

2 : 1 STUDIES ON TEACHER BEHAVIOUR

Tanner and Lindgren (1971) strike the following note in discussing the impact of teacher behaviour.

"The teacher is the most powerful person in the classroom. Psychologically speaking his ability to reward and punish is usually greater than that of any individual in the class room, he sets the pace; he takes the initiative. The teacher's power is such that even when he does nothing he does something to the class. He even has an effect on the class when he is not present".

The above paragraph clearly indicates the importance of teacher behaviour with regard to his positive and negative attitude towards the class and towards the pupil's achievement. The fore-going chapter on Review of related literature reveals the various aspects of teacher behaviour and the influence it has on pupil's growth and achievement and the influence on classroom climate.

Various studies in the field of teacher behaviour give evidence that amongst direct and indirect behaviour of the teacher the indirect behaviour can influence better classroom climate. The following are the few studies.

Singh trained 30 student teachers of a college in Jaunpur in Flander's interactions, analysis category system and micro-teaching. As a result of the training they modified the behaviour in the direction of using more and more acts of praising and encouraging the pupils, accepting, clarifying and building up ideas of their pupils, providing opportunities for flexible inter-communication and pupil initiation.

Desai (1971) conducted an experiments on Developing Motivation through new circulum inputs in high school pupils of Baroda. He trained the teachers in achievement motivation programme and studied the gains in various components of achievement motive and the change in pupils' behaviour. The treatment affected the

achievement motivation level of the pupils. There was an
increase in the scores in their academic performance and there
was a change in their classroom behaviour in terms of goal
setting, and aspirations.

Endeavours of Withall, Flanders and Thelen to measure the
classroom climate: Thelen conceived the idea of measuring the
classroom climate through the perception of teachers and pupils
regarding the Authenticity, Legitimacy and Productivity of the
classroom activities. Desai (1976) ventured to construct tools
to measure classroom climate in the Indian conditions on the
basis of Thelen's idea. She selected the components for the tool
and conducted detailed statistical analysis of responses on
their validity and reliability. Two scales were used to measure
classroom climate. The findings of her research show that accord-
ing to pupils there are three criterias and twenty two components
for classroom climate. The classroom climate profiles of each of
the five classrooms that were studied, differed from each other.
Mehr (1978) who used same type of tools conducted similar type
of study concluded that climate of the class varies from class
to class within the school.

Daymakumar (1980) took up study "factors affecting fluctuations
in the classroom climate" who concluded that there is no signi-
ficant relationship between classroom climate and academic moti-
vation classroom climate and anxiety and classroom climate and
perception.

Desai (.1979) studied the classroom ethos, pupils' motivation
and academic achievement. She too used the scale developed by
De Sales to measure the classroom climate. Her results indicate
classroom climate is positively related to pupils' motivation
and academic achievement. This meant that the pupils who are
highly academically motivated got high score on classroom climate.

The teacher is a vital factor in the classroom. He is the person who sets in patterns of behaviour to bring about desired changes in the pupils. Walberg and Herbert (1967) studied the teacher's personality and classroom and suggested several predictable relationship between them. Several kinds of tension in the teacher's personality appear to be associated with patterns of climate as perceived by students. Teachers with need to interact with others both aggressively and affiliatively tend to have controlled goal directed classes. Students in these classes may feel less personal intimacy with one another. The self-centred teacher make loose supervision of students' work and lower group states are to be found.

Patel (1977) found that indirect teacher influence had favourable effect on the pupils' attitude towards teachers as well as the classroom climate.

Classroom trust reflects the security the pupils feel and the freedom with which they interact with teachers and pupils. Initiative is the tendency of a pupil to undertake any action. Pareek's (1971) research project measured the trust of the pupils in teachers and pupils with whom they interact constantly. The results of the study revealed that when teachers used greater indirect behaviour the pupils were more adjusted and had higher trust. The results were supported by Choksi (1976) and Dave (1973) in their studies. So also it was found that the increased indirect behaviour affected pupils' classroom trust and initiative positively and significantly. Raijiwala (1976), Desai (1977) and Pavanasam (1977), Flanders (1951) concluded students in general are more concerned with the problem of adjusting to the teachers, along with the problem of learning. He further observes that in a teacher centred classrooms there is more student hostility towards themselves, other students or other teacher, more tendency to withdrawal, more apathy, aggressiveness, or even emotional disintegration. In another study Flanders classified types of teaching communication

and found direct influence to restrict student freedom of action while indirect influence to increase it.

The researches of these observational studies propose, that teachers who are directive have students who do not initiate, achieve poorly and dislike school, unlike teachers who are collaborative experimental research suggests control influence attempts to generate resentment and to deteriorate the relation-ship between the influence and influenced.

Passi and Padma (1975) tried to summarize and classify the several studies at CASE. They could identify three classifications in which the teacher behaviour was treated as (1) independent variable or (2) dependent variable or (3) in relation to demo-graphic personality and attitude variables. The conclusions were: Teacher behaviour is positively related to pupil motivation, classroom climate, classroom organisation, pupil achievement, perception of teacher about himself, classroom management, attitude towards democratic classroom procedures.

Roy (1972) investigated the differences in teacher behaviour patterns in teaching different materials and the role of sex in the behaviour pattern. The sample consisted of 43 teachers. The author concluded that there are significant differences between the teacher behaviour patterns in the different subject matter areas. It also states that sex of the teacher has a role in teacher's behaviour.

The study of Passi and Malhotra (1975) aimed at exploring the effect of Authoritarian-Democratic teacher behaviour upon the likings of the students towards their teachers, variables studied were sex, age and training of teachers. The results show that students have higher levels of liking for teachers with indirect behaviour than the teachers with authoritarian behaviour. Increas-ing age of teacher is positively associated with the authoritarian teacher. Sex and training of teacher did not exhibit any

significant relationship with teacher behaviour.

Madhu Puri (1977) conducted a useful study on 'Classroom Climate' and academic motivation of Gujarathi medium schools of Baroda, employing the tools classroom climate scale of Sr.Marie De Sales (1976) and pupils' Academic Motivation Scale (1961). The scope of the study was limited to measure the level of three types classroom climate namely authenticity, legitimacy and productivity and to measure the six major components of pupils' Academic Motivation towards school.

The major findings in the area of classroom climate were as follows:

1. Girls found classroom climate more useful, better for socialization and adjustment, more productive and better for thinking than boys.

2. Boys and girls both found less authenticity type of classroom climate in comparison to other two types of classroom climate.

3. There was not much difference in various age groups as far as types of classroom climate is concerned.

Studies by Lippit and White (1943) on the effects of democratic and authoritarian leadership styles in the student groups are also historically significant in focussing attention on the instructional groups. The laboratory approach used had certain advantages in studying the effects of the adult leaders' behaviour. They discuss the findings on group climate obtaining in a setting other than the classroom situation.

Perkins (1951) using Withall's technique studied groups of teachers organized to discuss the topic of child growth and development. He found that greater learning about child growth and development occurred when group discussion was free to focus on that topic; groups with an integrative type of leader were able to do

this more frequently than were groups led by a dominative type
of leader.

Santhanam's (1972) study was a descriptive correlational
study with age, sex, marital status, subject taught, experience,
and recency of training as independent variables and teacher
behaviour as dependent variable. The study included a sample of
174 teachers with random orientation towards subject taught.
The sample was drawn from the schools of Gujarat. This sample
was used for studying the non-personality variables with respect
to the classroom influence. A second sample of 32 teachers who
were teaching all the six school subjects were drawn randomly from
schools in the city of Madras. This sample was used to study the
classroom interaction patterns vis-a-vis subjects taught. Class-
room observations were made through FIACS.

The qualitative growth that takes place in pupils due to a
particular climate existing in a classroom depends on the relation-
ship between the teacher and pupils and among the pupil themselves.
This relationship can be investigated into variables such as trust,
dependency, expectancy etc. Does a high trust in pupils for
teachers cause a change in classroom climate? Do pupils having
more independency affect the atmosphere of a classroom? Do fulfilled
or unfulfilled expectancies of pupils have anything to do with a
climate of classrooms?

Previous studies of Pareek (1971) and Kokila (1973) have also
proved that a higher trust was generated by pupils who were better
adjusted to their teachers. There is no Indian research on class-
room climate and origin climate of the school. This is the first
attempt of the investigator to study the level of an origin climate
and the relationship of origin climate with classroom climate and
pupils' psyche.

Decharms (1965) developed a questionnaire for pupils to fill
out which focussed exclusively on the extent to which the teacher

had fostered 'origin climate'. By an original climate he meant
one in which pupils felt that they were in control of what they
did in the classroom that they could set their own goals, find
their own means of obtaining them, feel rewarded for doing things
on their own and develop self-confidence.

He found that the teacher who had been trained in achievement
motivation tended to operate classrooms which were by the pupils
as encouraging more origin behaviour.

It was also found that classrooms with high origin climate
scores tended to contain pupils who gained more in school learning.

2 : 2 TEACHER BEHAVIOUR INFLUENCES PUPILS' PSYCHIC WORLD

The integration of cognitive learning with affective learning
would be natural out growth of humanistic education. It would
require a major change in the role of the teacher who at present
mostly tries to shape the students according to the academic goals
frequently ignoring the aspect of growth of the individuals affective
domain. A teacher should respect a child as a human being and
should assist him in unfolding his dormant potentialities through
appropriate activities. At present, schools have neglected their
roles of preparing students, psychologically for life during their
schooling. These are problems of motivation, adjustment, class-
room trust. So the teacher should bring about desirable changes
in the psychological domain of a pupils' personality. This means
that teachers' classroom work needs to be restructured as also
behaviour in classroom.

RESEARCHES ON TEACHER BEHAVIOUR ON PUPILS PSYCHOLOGICAL TRAITS

Choksi (1976) studied the classroom trust of pupils after
administering a psychological input programme on primary children
of Baroda. As a result of this programme, she found a significant
difference in the pupils' trust. It helped to trust their teachers
more.

After training twenty one teachers of Class VII of Municipal Corporation Schools of Surat City in Indirect Influence, Raijiwala (1975) studied the effect of the training on pupils' classroom trust. He found that the teacher behaviour training significantly increased the classroom trust of pupils.

Pavanasam (1976) gave FIACS training to eighteen teachers of grade VII in Coimbatore and studied the effect of the teacher behaviour training on pupils' classroom trust. As a result of the training in teacher behaviour and feed back there was a significant increase in students' classroom trust.

H.B. Desai (1975) studied the effect of the Indirect Influence of the teachers of grade VII of Municipal Corporation Schools of Surat City on pupils' classroom trust. The teachers were trained in FIACS. He found that there was a positive increase in the classroom trust of the pupils.

The studies of Rosental and Jacbson (1968) and Gumpert and Gumpert (1969) concluded that positive expectations of pupils would improve the atmosphere of a classroom. Jangira (1975) and Pavanasam (1976) trained teachers for indirect behaviour and studied their effects on the dependency level of the pupils. Both the studies showed a significant increase in independency level.

Pareek's (1971) and Desai's (1976) studies have proved that higher climate scores generate greater independency in pupils.

Given the right type of encouraging and views the students can succeed gradually only when the teachers express positive remarks about them. Another characteristic which can be created in the classroom is the climate of acceptance, and interpersonal support. If teacher learns to accept pupils as they are, they, in turn, could reflect mutual acceptance and all other positive behaviour related to it. Acceptance could leed to support encouragement, mutual correction, mutual help etc., and pupils grow well in such

a climate and manifest them best to each other and to the teachers.

Jangira (1972) studied the effects of teacher behaviour, training of teachers on pupils' adjustment level. The study revealed that the experimental treatment significantly increased the scores of students adjustment.

H. B. Desai (1975) studied the effect of the indirect influence of the teachers of grade VII of Municipal Schools of Surat, on classroom trust. The teachers were trained in FIACS. He found out that there was a positive increase in the classroom trust level of pupils.

Pareek (1971) studied the effect of motivation training on the mental health of pupils. Some of the variables selected for his study were: a) Adjustment of the children towards their homes, school friends and teachers; b) Trust in teachers as well as peers.

Choksi (1976) studied the effect of the input curriculum on pupils' initiative and found out that there was significant difference in their initiative level.

Pavanasam's (1976) experiment on teacher behaviour training and its influence on pupils interaction level revealed that teachers' indirect influence have significant effect on pupils initiative.

Raijiwala study on effect of teacher behaviour training on pupils initiative. As a result of the indirect influence of teachers the initiative level rose significantly. (11.310 - 14.560). There is considerable evidence to support the assumption that a psychologically safe and supportive learning situation encourages students to grow academically as well as in feelings of personal worth. Cogan (1958) reported that students with warm considerate teachers produced unusual amounts of original poetry and art.

Independent study programmes are another educational procedure ideal for students with high achievement behaviour. They are better able to handle independent-study programmes than low achievement-motivated students. (Heckhansen 1967). This findings confirms McKeachies (1961) research. Students with high achievement motivation perform better than low achievement motivated students in classrooms where teachers emphasize more self-instruction.

Desai (1979) surveyed classrooms in order to find out the nature of classroom climate in relation to academic motivation academic achievement, pupil's socio-economic status, sex medium of instruction, type of school, sample was of 41 classroom from 26 high schools, using Marie De Sales' scale for class room climate. It was found that academic motivation and achievement vary according to climate. Gujarathi medium schools showed climate that English medium schools. SES had no bearing on the climate. Climate scores where only boys were there had high scores than just in girls school or in boys and girls school.

Another attempt at studying climate with the same instrument was made by Thangam (1980). It was an experiment conducted in which classroom climate was studied under two manipulated conditions, viz., teacher behaviour training through interaction analysis along with and without psychological education inputs for pupils. Two class groups were subjected to the experimental conditions and one was taken as a control group. All teachers dealing with different subjects in these groups were given behaviour modification training through FIACS. Later, they were observed in their classrooms with a view to analysing their behaviours. Teachers of one group were provided with feed back. Pupils of the same group were given psychological education inputs developed by Choksi (1977) which aimed at enhancing pupils' need achievement, self-concept and clarify their perceptions of self, class, school, family. Measures of classroom climate were taken subjecting the group to experimental treatments. Manipulated behaviour of teachers improved climate in the class and especially in 'authenticity' which suggests that

continued indirect behaviour of teachers chances involvement
of pupils in classroom activities.

Rao (1976) explored into the factors that go to make class-
room climate based on the opinions of teachers, teacher educators
and other experts. This yielded four sets of variables which
were the factors of classroom climate (1) general information
about the class (2) teacher variables, like age, experience,
qualification, attitude towards profession, teacher-pupil agreement
(3) class variables such as strength of the class, number of sub-
group, liking for the subject and teacher (4) teaching variables
which as the D/I ratio and the T/S ratio in teachers verbal
behaviour as obtained by the adapted form of FIACS used in the
study. One hundred classrooms in Coimbatore District were subjected
to systematic observation in order to examine the climate in those
classrooms. Sample were men and women teacher, rural, urban,
studied all the subjects taught in the school. The findings reveal
the following: Women teachers create better climate. Classrooms
in Municipal Schools have better climate than those in Government
Schools. Variables like teachers' academic achievement, professional
qualification, age and experience have no influence on the classroom
climate. Teacher talk is less in high climate groups and pupils
work is more. This study reiterates the outcomes of several
teacher behaviour studies in that it shows more pupil involvement
and better climate are co-existent.

Singh (1971) study of socio-emotional climate of a classroom
deals with the various factors which affect the classroom climate.
The author exphasizes (a) teacher pupil relationship (b) what do
pupils like about teachers (c) relationships among pupils (d) social
interaction in the classroom (e) social needs (f) socio-metric
acceptance and rejection (g) school staff relationship. The author
has high-lighted the multi-dimentional nature of the classroom
climate.

Leroy (1973) compared the classroom climate as measured by the
social-emotional climate index of Withall (1939) with pupil

perceptions of classroom in five open space and five self contained third grade classrooms. Data were collected for a minimum of three hours during reading, mathematics and study periods in a two week duration, which were analysed according to the Withall categories. Student perceptions were assessed by classroom self perception report, a 25-item, yes-no format instrument specifically designed for the study. The aspects covered were enthusiasm, self-direction confidence, comfort satisfaction and overall positiveness of perceptions. It was orally administered to children. It was revealed that climate did not differ significantly in the two types of classrooms.

Goyal (1973) has made a study of creativity and school climate using a sample of 300 boys selected from three schools. One of the schools which was designated as a "high creative school". The climate in this school had been relatively 'open' and 'responsive'. Other school designated as 'average creativity school' was a traditional urban school. The third was a rural high school. It was thought to be closed type where conformity receives the greater emphasis; school was labelled as "low creative school".

The author brings to light the following points in the way of results of the study. Creative potentialities unmask in an 'open system' of education and flourish in a 'responsive' and 'stimulating' environment. Creative potentialities are completely destroyed in a school where the environment is dominated by rigidity, confirmity, and traditionalism.

Solomon and Kendall (1975) compared teachers' disciplinary activities in traditional and open classrooms. They argued that the teacher personality, values, and behavioural style are major components of the classroom setting and are, therefore, substantial determinants of classroom norms and standards.

Group is to be studied to understand the impact of the group on individuals, teachers. In recent years the importance of the

psychological atmosphere or "climate" in which a group works
has been strongly emphasized in educational literature. The
following studies emphasize the influence of group on various
aspects of individuals development.

Study by Connor (1960) examined the influence of the school
and the interaction of the class group to determine the effect of
each on climate. It was found that it was the class as a unit
or the conditions within the class that were largely responsible
for the classroom climate. Classes with good climates had more
social contents. Teacher-pupil rapport was better in the well
adjusted than the poorly adjusted classes. Children were relaxed
rather than tense. They were confiding and friendly rather than
strained and fearful.

It was concluded that more desirable behaviour is shown
in the classes where the climate is good. Where the climate is
poor children are more distant from the teacher, are more dis-
connected as a social group and have a poor attitude towards school
as a whole. In general, the school surroundings and the home
back-grounds of the pupils as well as individual personal attri-
butes of pupils and teachers have their influence however it is
the interaction of these factors in a classroom situation that
has more immediate relevance for the classroom climate and the
learning process.

Evidences from several studies of good and poor teachers was
compared and summarized by Peronto (1961) in an attempt to discover
the patterns or clusters of characteristics that appear to be
associated with effective teaching and the variations in the
amounts of these characteristics that appear to be associated
with teaching success or failure. He concluded that in certain
qualities there was evidence of measurable difference between good
and poor teachers and in other qualities there was little difference.
From the studies he examined, Peronto found varying degrees of
measurable difference in these seven qualities academic and

professional knowledge, interest and proficiency in teacher-pupil relationships, emotional stability, motivation. Problems arising from the use of inadequate criteria and of measuring devices of questionable reliability make the evidence inconclusive.

Class groups vary with respect to the degree of unity and the amount of friendliness exhibited by the children who comprise the membership. Although teachers are aware of these differences in 'groupness'. Why they occur is difficult to explain. Why some grade children work together, seem happier and exhibit more enthusiasm in involving themselves in classroom activities, than the other group which lacks harmony. Such situation gets generated in a classroom but it is difficult to understand the reason of variations of cohesiveness.

Cohesiveness has been defined by Bonner as a system of inter-locking roles initiated and sustained by standards either already existing or evolved by members of a group in the course of striving for a common goal. It has also been referred to as integration which in turn is defined as the ability to maintain structure and function. Ralph (1959). Cohesiveness and mutual promotes communication and result in increased motivation and greater productivity.

A study by Perkins (1951) concluded that the quality of teacher-pupil relationship was a determiner of group climate. A number of implications for teacher-pupil relations were given. The initial sets of feelings and relations that were established in the classroom appeared to determine the kinds and amounts of learning that followed. When the climate was group centred, the members reactions were more objective and problem-centred. The group climate appeared to determine the amount of learning that took place and was the key determiner whether the emotional needs of the group were satisfied.

Study conducted by Marie De Sales (1978) where social relation-ship was studied as one aspect of pupil growth concludes that the

classrooms with higher climate scores had better social relation-
ship in their classes.

2 : 3 SOCIAL RELATIONSHIPS

Upmanya (1970) has made a study of the relationship between
socio-metric status of the pupils and his scholastic achievements,
using a sample of 85 subjects studying in standard VIII from two
schools. Three categories of students - populars, neglects and
rejectees were identified and the achievement scores analysed.
The obtained co-efficient of correlation, 0.33 was regarded low
and not statistically significant. The difference between the
populars and the rejectees was significant at 0.05 level.

Gautam (1971) studied the relationship between personal and
social variables and socio-metric status in classroom situation.
He asked the pupils to choose their three classmates in a preferen-
tial order with whom they would like to go for a movie, study, go
on a picnic. He found out of a class of 238, 20 over chosen and
12 under chosen. The results showed that age and socio-metric
status are not so closely related to socio-metric status in class,
intelligence, achievement and other personality patterns. The
rejectors (under chosen) have lower achievement sensitive, and
suffer from mental conflicts, anxiety and frustration. Lakshmi
(1976) studied the relationship between classroom cohesiveness
and academic achievement in high school children, found that
classroom cohesiveness is found to be significantly related to
pupils achievement. Classroom with only boy or only girls had
more cohesiveness rather than classrooms with mixed pupils.
Socio-economic status had no bearing on their cohesiveness as
classroom members.

Study by Bhanot (1967) states that as the members of a
cohesive group have closer interpersonal communications they feel
more confident and set higher goals and aspirations for themselves
and hold up group goals higher than personal goals. Soundararaja
Rao (1974) has made a study of the cohesiveness of classroom groups

using socio-metric measurements, data were collected from 11
classroom groups having 381 pupils. These pupils were asked to
mention three friends from their own whom they would choose
(a) for group study, (b) to play with (c) for help in academic
study and (d) for company during leisure time. Cohesiveness
Index was calculated by using the formula

$$\frac{100 \times M}{n \times N}$$

where, N is the size of the group.

      n is the number of sub-group.

      M is the size of the largest sub-group.

The results indicated that the index as evolved in the study not
only served to study inter-class differences on a theme but also
high-lighted the difference across the four themes. Kendall's
co-efficient of concordance was calculated and F-value was
insignificant indicating that the classes differed widely in
their cohesiveness across the four themes.

Schmuck (1966) held cohesiveness and norms as properties of
social climate of classroom groups and studied them in classrooms.
It was revealed that peer groups characterised by a wide dispersion
of friendship relations had more cohesiveness than groups with
concentrations of liked and disliked members. Classroom cohesive-
ness was measured by each pupil designating on a nine point scale
how much be valued every other pupil in the class. It was
indicated that the distribution of pupil preferences or the socio-
metric structure was associated with cohesiveness of the group.

2 : 4 STUDIES ON INNOVATION

Studies on 'innovation and change' were conducted by Buch
(1972), Rai (1972) Bhagia (1973) Pillai (1973), Singh (1975),
Darji (1975), Panchal (1977) and Purushotam (1979); they have been
conducted taking into consideration various types of variables.

Study by Purushotam (1979) states about the characteristics
of 'innovative schools' as perceived by the principals.

Rai (1972) studied the factors which influence a teacher's perception and proneness to change. She found that teachers'- exposition through inter-visitation, participation in professional ,conference and their perception of the principal's change orientation play an important role in their acceptance and adoption of innovations.

Pillai (1973) tried to find out the relationship between organizational climate, staff morale and innovativeness of the school and pupil performance. She found that openess of climate and higher staff morale are significantly related to school innovativeness.

Bhagia (1973) took up the study of 46 innovations of 120 schools in 7 districts in the initial stage. She found 11 characteristics like communicability, simplicity, divisibility, practicability highly related to the diffusion process. Generally, innovations which are more time consuming and expensive and those which cannot be adjusted easily are not likely to be taken up by the school system.

Various studies on innovations indicate that planned change can be brought through innovations. The review of literature on innovations include the review of the studies on resistance to change. Because very often when innovations are tried out they have been resisted by the adopters.

Rogers (1962) concludes that extreme difference in social status between the communicator and a receiver may impede communication, slow up or trickle down of new ideas.

Rogers (1962) reached to the conclusion that an individuals innovativeness varies directly with norms of his social system.

De Sales (1979) modified Thelen's concept of classroom climate to measure the classroom climate in Indian conditions. She developed a scale covering a range of Eight Behaviours under each

component (ALP). This scale is a pupil response form and has
fifty items through which individual scores are obtained and
classroom index is obtained on the basis of the individual scores.
De Sales arrived at the triangular model of ALP concept. She
took for her investigation the factors which affect classroom
climate taking variables like, teacher behaviour, adjustment
dependency and independency, trust, social relationships, socio-
economic status, academic performance. She concluded that
lesser the direct behaviour of teachers greater was the classroom
climate and that classroom with a lower climate had fewer stars
and isolates and consequently a lower classroom integration index.

Another study conducted by Aram (1980) on pupils' self
concept, academic motivation, classroom climate, academic perfor-
mance revealed that classroom climate is positively related to
pupils' motivation and pupils' academic achievement. Its relation-
ship with self-concept though positive was not significant.

A different view is taken by Sundarlakshmi (1981) who studied
the components of classroom climate as group characteristics like
trust, anxiety, initiative, group structure, cohesiveness etc.
She states that these characteristics represent the classroom
climate. The results of the study reveal that these characteristics
of group in similarities and differences is the effect of the two
strategies. Classroom trust was positively affected by strategy
2, at 0.01 level of significance. The same variable showed an
increase of 3.23 from T_1 (45.08) to T_2 (48.31) in the mean score.

Pupil initiative was positively and significantly affected
by both the strategies. Strategy 2 had an effect on this variable
found significant at 0.05 level of significance in both groups
as seen by the increase in mean score in group 1 from T_1 (8.42)
to T_2 (8.97) and in group, from T_2 (12.52) to T_3 (13.45), in respect
of 2.

Strategy 1 had a greater effect on the variable as seen by the
increase in mean score in group 1 from T_2 to T_3 (8.97) - (11.94)

and in group 2 from T_1 (10.3) to T_2 (12.52) both of which were found at 0.01 level of significance.

The patterns of interaction generated by the two strategies as inputs showed similarities. Teacher behaviour were mainly 'informative' pupils were mainly 'responsive'.

Thelen's ALP - Ethos instrument was applicable to the American population. Hence, Desai (1976) constructed for the Indian school pupils, two scales to measure classroom climate, viz., (1) A classroom climate descriptive questionnaire for teachers; (2) A scale of classroom climate for pupils. With these two scales she studied different types of classrooms. The findings of her research show that according to pupils, there are three criteria and twenty four components of classroom climate and according to teachers there are four criteria and twenty two components for classroom climate. The classroom climate profiles of each of the five classrooms that were studied differed from each other.

2 : 5 CONCLUSION

Evidences from the above mentioned studies indicate the importance of teacher in classroom activities. It also stresses how various aspects of the classroom gets influenced by the type of personality the teacher has, it also indicates that how the behaviour of the teacher generates either positive or negative climate in the classroom. The studies on teacher behaviour laid emphasis on verbal interaction of teacher mainly using the FIACS as a tool to measure the behaviour. A study by Roka (1975) has deviated slightly in using the FIACS modified observation schedule to measure teachers verbal behaviour. All these studies indicate that 'indirect' teachers influence pupils to have positive behaviour. Pupils also prefer indirect type of teachers because they exhibited warmth, better achievement, freedom with which they were involved in classroom activities.

Another array of studies on classroom climate by Marie De Sales (1978), Thangam (1980), Desai (1979) have used varied types of

variables like teacher behaviour, pupils growth. These studies
have concentrated the attention on the three important components
of Herbert Thelen (1964) - Authenticity, Legitimacy and Productivity.
But it can be a challenging effort to know classroom climate
beyond these three components. Because it is not just these three
things that constitute the climate of the classroom. Very few
studies have been conducted to know the pupils psyche as an
independent or dependent variable. The studies quoted above on
pupils' psyche are studied as dependent variable, as how it gets
generated in an open climate or scattered in a closed climate of
a class.

Very few studies have been conducted in innovations. It is
mainly on innovation and change, innovation and problems to start
it, or problems to continue or institutionalize innovations. But
no studies have so far tried to see the relationship of teacher
behaviour, classroom climate and pupils' psyche in innovative class.

The aim of this study to throw more light on what happens
to the climate, teacher behaviour and students' psychic world in
a so called innovative classroom. So that further researches can
be conducted to improve the levels of all the above mentioned
variables.

As there are innumerable studies in Teacher behaviour,
classroom climate, which are both empirical and theoretical are
reported here in this chapter concentrating only on sample,
variables and the major findings of the study. Major findings of
the study cited here have been reused wherever necessary in the
other chapters of the thesis.