CHAPTER III

REVIEW OF RELATED STUDIES.
CHAPTER -III

REVIEW OF RELATED STUDIES

For any research undertaking, it is quite necessary to review previous studies in the area of investigation and know the trends of the research practice and the directions of the findings therefrom. In this chapter, studies relevant to teaching and teacher behaviour in general and to the present research problem in particular, have been reviewed under the following sub-headings:

3.1 Research Trend on Teaching and Teacher Behaviour.

3.2 Studies Related to the Relationship Between Intelligence and Teacher Behaviour.

3.3 Studies Related to the Relationship Between Self-Concept and Teacher Behaviour.

3.4 Studies Related to the Relationship Between Attitude and Teacher Behaviour.

3.5 Sex Factor and Teacher Behaviour.

3.1 Research Trend on Teaching and Teacher Behaviour

From the time teaching started to gain recognition as a profession, educators, research scholars, educational administrators, as well as common men began to wonder about the effectiveness of the teacher. As Dave (1986) noted, whether mythological or historical, both the eastern and the western
Review of Related Studies

records strongly suggest that the famous teachers were known to attract a large number of pupils around them and their glory used to be reflected in terms of the achievements of their pupils. Teacher effectiveness has been viewed more in terms of what happens to a learner than what a teacher does. In other words, what is crucial is not the teacher's act or behaviour, but the pupil's act or behaviour. Therefore, the ultimate criterion for judging a teacher is the improvement in the education of the learners.

However, while the teaching outcomes in learners are essential ingredients of any education system, the causes that bring about these outcomes are also important for without any cause one can not think of any effect. Therefore, the study of process and process variables along with the product variables received strong attention from researchers. In the past few decades, a number of investigations was carried out to establish the relationship among factors like teacher characteristics, teacher behaviour, teaching strategies and learning outcomes (Buch, 1974, 1979, 1986). A careful study of the various studies conducted in the past on the area of teaching and teacher behaviour suggests that certain category of the studies can be made by considering the kinds of factors included. In his comprehensive trend analysis of the research studies conducted in India (1978-1983),
Dave (1986) suggested that the majority of the studies on teaching and teacher behaviour could be categorised under the following four cause-effect relationships:

3.1.1 Teacher Factor Affects Teacher Behaviour or Teaching Strategies (T Fac ---TB/TS).

3.1.2 Teacher Behaviour or Teaching Strategies Affects Learning Outcomes (TB/TS ---L Out).

3.1.3 Teacher Factor Affects Learning Outcomes (T Fac ---L Out).

3.1.4 Teacher Factor Affects Teacher Behaviour or Teaching Strategies, which in Turn, Affect Learning Outcomes (T Fac ---TB/TS ---L Out).

Often in literature, these factors are referred to as independent-dependent, antecedent-consequent and presage-process-product variables. The above major relationships are schematically represented below:-
Review of Related Studies

T Fac¹

Organismic Personality

Subject Competence

Professional Education

T3²

Teaching Skills

Teaching Competence

Teaching Styles

Teaching Techniques

Teaching Modes

Teaching Approached

Physical

Cognitive (Mental)

Psychomotor (Skill)

Affective

Socio-Emotional

L Out⁴

FIGURE 3.1

A Schema For Analysis and Classification of Research Studies on Teaching and Teacher Behaviour.


- ¹T Fac stands for Teacher Factor.
- ²TB stands for Teacher Behaviour.
- ³TS stands for Teaching Strategies, and
- ⁴L Out stands for Learning Outcomes.
Review of Related Studies

Under each category, studies relevant to the present study are briefly reviewed.

3.1.1 Trend Under Category T Fac-TB/TS (Presage-Process Studies)

A sizable number of studies, which can be classified under category "teacher factor affects teacher behaviour/teaching strategies" have been conducted by researchers and research scholars in the past three decades or so. Both in-service and pre-service teachers participated as being subjects.

In this line, the relationship between teacher traits like personality, perception measures and some process variables of teaching behaviour were studied. From among the good number of research studies completed under this category, the following may be considered as examples: - Davis (1961); Bowers and Soar (1961); Gage (1963); Flanders et al. (1963); Ringness et al. (1964); Amidon (1966); Simon (1966); Soar (1966); Allen et al. (1966); Evan (1969); Patric (1974); Smith (1974); Markham (1977); Kremmer (1978); Goel (1978); Suthar (1981); Sharma (1981); Reddy (1982); Choudhry (1982); Williams (1983); Kawan (1984); Ahuja (1984); Tewari (1989).

In order to see into the direction of the findings, few of these studies have been briefly presented below: -
Review of Related Studies

In the studies that have used the 16 PF personality inventory of Cattell, quite significant results have been obtained for the relationship between personality and various classroom behaviour. In a study conducted by Smith, (1974), the second stratum and factor III had a negative correlation with the I/D ratio indicating that the tender mindedness of teachers was related to indirect teacher talk.

Patrick (1974) found quite a high correlation between various traits of personality and classroom behaviour. On the other hand Markham (1977) found a weak correlation between progressive and traditional attitude and classroom behaviour.

Kremmer (1978) conducted a research study to investigate the relationship between progressiveness and classroom behaviour of teachers. The study revealed progressive teachers to be progressive in their behaviour while traditional teachers were found to be traditional in their classroom behaviour too.

Goel (1978) investigated the behaviour flow pattern of introvert and extrovert teachers. The study revealed that extrovert teachers seemed to have greater inter-change of classroom events than introvert teachers. Introvert teachers
seemed to provide more opportunities for pupil participation. Similarly, Suthar (1981) found that the difference in mean i/d ratios of extrovert and introvert teacher trainees was significant and it was in favour of extrovert teacher trainees.

Sharma (1981) conducted a study on B.Ed. students of Meerut University to ascertain if a relation existed between academic grades of student-teachers and their behaviour in classroom. It was found that teaching behaviour may be significantly predicted with the help of academic grades.

Reddy (1982) has studied the verbal classroom behaviour of high school science teachers who were social extrovert and social introvert. Guilford's STDR personality inventory was used to measure extroversion-introversion. He found a high significant difference between total interaction patterns for social extrovert and social introvert teachers. The transition from one category to another category is more in social introvert than that of social extrovert. The mean percentage of time by extroverts on accept feelings, praise or encouragement, using students ideas, ask questions, lecture and criticising or justifying authority is more than that of introvert teachers.
Review of Related Studies

The findings of William's (1983) study indicated a significant negative correlation between the teacher's competency and the chronological age of the teacher and the amount of time spent on lecturing. Moreover, a significant positive correlation existed between the teacher's competence and use of praise and encouragement. In another study by Kawan (1984), high conceptual-level teacher preferred the direct approach to teaching basic skills and believed that this approach to be the most effective for teaching basic skills.

Tewari (1989) studied emotional maturity as teacher factor in relation to patterns of classroom verbal behaviour of student-teachers in Chandigarh. The findings revealed that student-teachers with high level of emotional maturity exhibited a tendency to ask more questions while guiding the content oriented part of class discussion than the student teachers with lower level of emotional maturity.

3.1.2 Trend Under Category TB/TS---L Out (Process-Product Studies)

As in the previous category, attempts have been made by different scholars to establish a relationship between Teacher Behaviour and Pupil's learning outcomes, thereby, indicating the awareness and concern of a good number of researchers to validate
the assumptions of teacher behaviour with respect to pupil outcomes.

Studies conducted by Patel (1974); Lulla (1974); Roka (1976); Padma (1976); Pandey (1981); Jones (1981); Mullinix (1982); Lara (1983); Beaumont (1984); and Brophy (1987) have attempted to find out the effect of the process variable of teacher behaviour on the product variables of learning outcomes of students.

Patel (1974) investigated into the effectiveness of the influence of teachers' classroom behaviour on pupils' personal anxiety, motivation and classroom organisation, attitude towards reward and punishment, attitude towards teacher, attitude towards school and the classroom climate. The study revealed that indirect teacher influence had favourable effect on motivation and classroom organisation, and attitude towards teacher. Similarly, Lulla (1974) found out the effects of teachers' classroom influence upon the pupils' achievement.

Roka (1976) experimented with nine inservice science teachers to find out the effect of certain verbal teaching behaviour patterns on the pupils' achievement at knowledge, understanding and application levels. Likewise Padma (1976) also
attempted to find out the effect of different teaching patterns on cognitive attainment of pupils.

Pandey (1981) conducted a research study involving process-product variables of teaching. The objectives of the study were (i) to evolve teaching styles on the basis of verbal interaction taking place in the classroom, (ii) to determine the effect of teaching styles on science concept attainment at various levels, (iii) to identify the teaching behaviours commonly exhibited by science teachers, and (iv) to determine the effect of individual teaching behaviour on concept attainment at various levels. Findings of the study include: (i) accepting ideas and praising had significant positive effect on concept attainment at different levels, (ii) extended lecturing was negatively related with different levels of concept attainment and the segments of formal level, (iii) the teacher's questioning had significant positive effect on both the levels, classificatory and formal, of concept attainment, (iv) all teaching behaviours were not frequently observed in the science teachers, (v) all teachers in the sample were direct teachers (value of I/D ratio ranged between 0.00 and 0.57), and (vi) encouraging students' participation, and students' response and giving ample opportunity for students to think in the course of
teaching were behaviours conducive to better concept learning.

In a similar vein, Jones (1981) examined the relationship between (i) teacher clarity, (ii) teacher use of pupil ideas and information (process variable), and (i) Pupil cognitive achievement, (ii) pupil attitude towards their course, schooling and themselves (product variable). It was concluded that teacher clarity and teacher use of pupil ideas and information were not positively related to pupil cognitive achievement except in one instance.

Mullinix (1982) conducted a study to seek association between the behaviour of the teachers in regular classrooms and cognitive learning of their students. It was found that classes taught by teachers who ranked higher on direct to indirect scale of verbal behaviour showed a high mean content gain than classes of teachers who ranked lower on this scale.

Beaumont (1984) studied the relationship between classroom teaching behaviour and student achievement. Multiple regressions indicating the direction of relationship between predicted gain scores on Comprehensive Test of Basic Skills (CTBS) and grade grouping, student ability and 13 measures of teacher behaviour were presented for 1100 elementary students. It was concluded that when student initiated, verbal interactions
Review of Related Studies

were high, gain in simple mathematics and reading was more than when this behaviour was moderate.

Brophy (1987) reviewed quantitative and qualitative findings of process-outcome research linking teacher behaviour to student achievement. Five sets of quantitative findings suggest that achievement is maximized when teachers allocate most classroom time to activities of students.

In a similar trend, substantial attempts were made to test the effectiveness of interaction analysis technique as a technique for analysing teaching behaviour in the classroom or as a technique as a feedback device. The investigators who used, for example, the FIACS tested its effectiveness against proper behaviour modification of pupil-teachers. Studies conducted by Flanders (1965); Furst and Amidson (1967); Hough and Ober (1967); Amidon and Flanders (1967); Moskowitz (1968); Schalok (1968); Bondi and Ober (1969); Quraishi (1972); Singh (1974); Pandya and Seth (1976); Malhotra and Mangla (1977); Rajamony (1981); and Singh (1987) may be cited as examples. One of the major findings of these studies was that as the result of the feedback through FIACS, the behaviour patterns of student-teachers changed from direct to indirect and they encouraged students' participation in their classrooms.
A review of available research literature and an examination of the trends of research in the area of teaching and teacher behaviour indicates that the trend of research investigation under this category has been almost negligible. The trend analysis by Dave (1986) ascertained that, in India, not a single study could be categorised under Teacher Factor-Learning Outcomes relationships during 1978-82. However, few researchers abroad have attempted to establish a relationship between some characteristics of teachers and achievement of their students. Presage variable of teacher characteristics like personality, attitude, self-concept, etc. were considered as teacher factor that can affect learning outcomes of pupils.

Boardman (1975), for example, attempted to establish a relationship between teacher factor of self-concept and pupil achievement and found that the self-concept of teachers teaching English to sixth and eighth grades appeared to be a critical factor in academic achievement of their pupils.

Recently, Evans (1988) conducted a presage-product study of the relationship between teacher self-concept and student achievement and attendance. The research was based on
the premise that teachers, individually and collectively affect the learning of students more than any other single factor. Data analysis using multivariate analysis of variance indicated no significant relationship between students competency measures and teachers' self-concept, thereby, indicating the rejection of the hypothesis that students attend better or learn more when taught by high self-concept teacher. The study also recommended the need to much teacher research which focuses on the relationship between identifiable teacher characteristics and students' performance.


Studies that come under this category are those investigations that involve presaqe, process and product variables of teaching. The teacher factors are presaqe variables, teacher behaviour or teaching strategies are considered as process variables and learning outcomes are product variables. Though not many, there are studies that involved all these three variables together.

Jangira (1974), for example, made an attempt to investigate the relationship among classroom behaviour training, teacher behaviour and people adjustment, after having controlled
Review of Related Studies

the effect of fourteen teacher factors such as sex, initial teaching ability, halo effect, maturation, etc. Raijiwala (1976) conducted a study to investigate the effect of training in modifying the teacher behaviour and its subsequent effect on pupil's adjustment in general and specific to teacher, school, peer or father as well as achievement in science.

Singh (1981) established emotional stability as an important factor of teacher effectiveness in his study on the relationships between teachers personality, teaching success and behavioural change in students.

Naidu (1980) and Tareen (1980) also studied such a triangular relationship among teacher training, teacher behaviour or teacher competence and pupil academic achievement. Keeping teaching competence in instruction in focus, Passi and Sharma (1982) studied the variables of teacher personality characteristics and pupil academic achievement. One of the major findings was that there was significant positive relationship between the teacher's teaching competency, the liking of their pupils of their teaching behaviour and the academic achievement of the pupils of grade IX in Hindi.
This trend was made to continue as some research scholars have taken interest in carrying out research activities in the same line.

Sharma (1986) conducted a research on the effect of teacher behaviour on student achievement in relation to cognitive styles and achievement motivation and found that there was significant interaction among cognitive styles, teacher behaviour and achievement motivation. It was further noted that teacher behaviour significantly affected the achievement of students.

The above broad classification of the studies on teaching and teacher behaviour, whatsoever helpful may be in its simplicity is not comprehensive. Hence, it may be considered as a crude classification. For instance, there have been some studies which dealt with the presage variable alone. The studies by Adaval (1952); Kaul (1972); Shukla (1981); and Khajuria (1981) were some of the attempts ventured to describe teacher characteristics.

Yet, another category of research in the area of teaching and teacher behaviour can be made by considering efforts made to investigate the nature of the process variables of
Review of Related Studies
teaching. The studies of Roy (1970); Mehta (1972); Pangotra (1972); Singh (1974); Vasishitha (1976); Joglekar (1981); and Kumar (1982) can be classified as process studies, dealing mainly with the process variables of teaching.

Joglekar (1981), undertook a research study to identify the patterns of the classroom behaviour of some selected teachers on the basis of Flanders Interaction Analysis Category System. The analysis and interpretation of the data obtained through observation has revealed that mostly, the teacher's classroom behaviour was direct and that male teachers did not differ from female teachers as regards their classroom behaviour in general. Similarly, Kumar (1982) made an investigation into the questioning patterns of social science and science teachers and found that the teacher dominated the classroom interaction and about 71.37 per cent of the total time was used by the teacher. Of this teacher's talk, questioning formed only 6.09 per cent. According to his study, increase in the use of questioning increased students' response and initiation. The questioning behaviour of social studies and science teachers differed significantly. Science teachers used total questioning translation, interpretation, application and higher order questions to a lesser extent than social studies teachers.
Review of Related Studies

Generally, the review of the studies presented under the different categories is the indication that, in the past, efforts were made to study teaching and teacher behaviour in a variety of ways, involving different variables (presage, process, product) one at a time, in pairs or by considering all the variables together.

As per its two major objectives, the present study, is a process study in the sense that it explores the classroom teaching behaviour patterns of science teacher trainees and it is also a presage-process study for it involves the teacher factors of intelligence, self-concept and attitude towards teaching and investigates their impact on the classroom verbal behaviour of the subjects.

In the following few pages, therefore, studies related to the relationship between teacher behaviour and the variables of intelligence, self-concept, attitude and sex have been briefly reviewed.

3.2 Intelligence and Teacher Behaviour

A review of literature in the field of teaching indicates that a large number of attempts have been made to
establish the relationship between intelligence and teaching performance. The recent studies conducted by Patel (1980); Mishra (1983); Singh (1986); Bal (1986); Kawan (1987); Emomotimi (1987), Swami (1988); and Meher (1988) are few of the examples.

Swami (1988) conducted a research to ascertain the relationship between intelligence, emotional maturity, self-concept and teacher effectiveness and found that teachers who have high intelligence are more effective in teaching than those with low intelligence. There was no significant interaction effects among the variables of intelligence, emotional maturity and self-concept. The correlation coefficients among intelligence, self-concept and teacher effectiveness were positive and significant.

Intelligence, self-concept and attitude towards teaching were studied as predictors of teaching effectiveness of secondary school teachers by Meher (1988). The findings revealed self-concept and attitude towards teaching to be good predictors of teaching effectiveness whereas intelligence was proved to be ineffective variable as a predictor.

In so far as the relationship between intelligence and teacher classroom behaviour is concerned, the review of research studies in the area shows that the trend is a rare case. Very
few studies are available discussing the cause-effect relationship of intelligence and classroom behaviour of teachers.

William and Reynolds (1976) have found that a positive relationship existed between cognitive complexity and verbal interaction patterns in the classroom teaching.

Recently, Bisht (1985) conducted a study on verbal and non-verbal classroom behaviour as related to teacher's first and second order factors of personality. He concluded that intelligence, outgoingness, emotional stableness, assertion, happiness rule boundedness, venturesomeness, shrewdness, experimentalism, self-sufficiency, controlledness, anxiety, extraversion, poise and independence are positively related to the verbal behaviour of the teacher. Evan (1969); Schaffer (1970); and Good, Biddle & Brophy (1975) have also found similar results.

Roy (1981), with a view to enquiring into the relationship between a set of teacher traits and a set of behaviour patterns in the classroom as measured by Flanders Interaction Analysis Category System, and to exploring the possibilities of predicting teacher behaviour from teacher traits, have conducted a study on teacher traits associated with
classroom interaction patterns. The findings of the study were:

(i) Significant correlation existed between teacher response ratio (TRR) and intelligence and some other traits like self-confidence, leadership, emotional balance, attitude towards teaching as a career and sociability.

(ii) Significant correlation existed between teacher question ratio (TQR) and intelligence, leadership, emotional balance, sociability and interest in arts and literature.

(iii) Significant correlation existed between pupil initiation ratio (PIR) and intelligence, self-confidence, leadership, emotional balance, sociability and interest in arts and literature.

(iv) Significant correlation existed between teacher response ratio (TRR) and intelligence, self-confidence, emotional balance, sociability and attitude towards teaching.

(v) Significant correlation existed between content cross ratio (CCR) and intelligence, self-confidence, leadership, emotional balance, sociability, attitude towards teaching, interest in science, literature and sports.

(vi) Significant correlation existed between pupils steady state ratio (PSSR) and intelligence, self-confidence, leadership, emotional balance and interest in literature.

3.3 Self-Concept and Teacher Behaviour

As regards the self-concept of teachers as a factor affecting teaching and teacher behaviour, the findings of previous studies have not come to a consensus. Some investigations revealed a significant positive relationship
between these two variables while others found no or negative relationship.

Norris (1973), in his study of thirty biology secondary teachers and their 1400 students, found significant relationship between the teaching proficiency of the teacher and his self-concept. Hochel (1973); Denton (1974); and Patted (1974), have also found the self-concept of student-teachers to be the best predictor of student-teaching success.

Mathew (1976) conducted a research study on classroom behaviour of teachers and its relationship with their creativity and self-concept. The findings revealed that (i) there was no relationship between self-concept of teachers and their indirect-direct (I/D) behaviour, and (ii) there was negative relationship between self-concept of teachers and vicious circle.

The study conducted by Heinz (1977) showed a negative relationship between self-concept and teacher behaviour both verbal and non-verbal. Heinz recommended the need of future studies in this direction using a large sample to allow for variations in the degree of self-concept of teacher.

In another study conducted by Singh (1978), the self-concept of school teachers was studied in relation to creativity
attitude towards teaching and classroom verbal interaction. Findings showed that (i) there was no significant relationship between indirect/direct (i/d) behaviour of teachers and their self-concept, (ii) there was a positive and significant relationship between teachers' self-concept and encouragement of students' talk by them, and (iii) there was a positive and significant relationship between teachers' self-concept and their divergent questions using students' ideas and silence and confusion,

Kaur (1981) studied the adjustment pattern, self-concept and academic achievement of student teachers in relation to their teaching performance. Using a Pearson's Product Moment Correlation method, a positive relationship between self-concept and teaching performance was found to exist, but it was not significant.

Chopra (1983) in his attempt to comparing the personality traits of effective and less effective secondary school teachers, found that the effective teachers were warm hearted, independent, emotionally mature, stable, venturesome and have high self-concept.
Monsour (1987) made an analysis of personality and cognitive variables in relation to performance in Indiana University of Pennsylvania and found no significant correlation between student-teachers' self-concept and their teaching performance. But on the other hand the vital importance of self-concept in determining child and adult behaviour in many settings has been well documented in the study conducted by Nix (1988) on student self-concept and three critical dimensions of teacher behaviour.

3.4. Attitudes and Teacher Behaviour

Reviews of empirical studies on attitude reveal that attitude is one of the significant factor that influence teaching behaviour (Ajzen and Fishbein, 1972). Various studies have been conducted to find out the relationship between attitude and classroom behaviour. These studies vary with respect to both variables. As far as the attitude is concerned different attitudes have been correlated with different dimensions of classroom behaviour.

In a study conducted by Girvetz (1975) significant correlation between extended indirect influence and progressive education attitude was found. However, the relationships between

100
the overall use of direct or indirect verbal influence of elementary school teachers and their attitude were not significant. Similarly, Ouraishi (1975) studied teacher classroom behaviour with reference to teacher personality variables and reported the absence of relationship between behaviour ratios i/d, I/D and attitude scores.

Malhotra (1976) conducted a research study on teacher classroom behaviour in relation to presage variables of teacher attitude and adjustment and product variables of student liking and perceived behaviour by peers, principals and self. Using Minosota Teacher Attitude Inventory and FIACS on urban higher secondary school teachers, he found that teachers with positive attitudes were observed to be more indirect in their teaching than teachers with negative attitudes.

Gupta (1977) compared the attitude of successful and less successful teachers towards teaching and the variable of attitude towards teaching came out as a significant determinant of success in teaching. Vanich (1977) found no relationship between progressive-traditional attitude and classroom behaviour.

In another study conducted by Davis (1977), progressive teacher were found to be less dominating showing more individual
Review of Related Studies

behaviour and having a more open learning environment in the classroom as compared to pseudo-progressive teachers.

A study on some correlates of success in teaching of secondary school teachers conducted by Mann (1980) came out with the conclusion that the relationship between attitude of teachers towards the teaching profession, classroom teaching behaviour and success in teaching was significant. The successful teachers had more healthy attitude towards teaching.

Singh (1981) conducted a study on secondary school teachers' attitude towards teaching in relation to classroom behaviour and concluded that no significant relationship existed between attitude towards teaching scores and the scores of selected dimensions of classroom interaction. But in a study conducted by Sharma (1982), a significant relationship between attitude towards teaching of pre-service commerce teachers and their classroom verbal interaction was obtained.

Jain (1982) carried out a research study with a view to finding out the relationship between the teachers' attitude towards teaching profession and the classroom behaviour patterns of teachers and to predicting the classroom behaviour patterns of teachers through teachers' attitude towards their profession. The teacher variables of morale and value were also considered.
Review of Related Studies

The sample of the study consisted of 100 trained graduate teachers (50 male and 50 female) teaching mathematics in Class VIII of government higher secondary schools of Delhi. Major findings, among others, include: (i) Male teachers devoted more time in asking questions than female teachers, (ii) Teachers with a positive attitude towards child-centred practice, educational process, pupils and teachers, devoted more time to asking questions in the classroom while guiding the more content oriented part of the class discussion (iii) Teachers with a positive attitude towards teaching profession, classroom teaching, child-centred practice and educational process reacted to ideas and feelings of pupils and frequently created an emotional climate in the classroom, and (iv) Pupils interacted more in the classes of teachers having positive attitude towards teaching profession, pupils and teachers.

Hazlett (1983) reported a significant relationship between teacher's expressed attitude towards students and the quality of dyadic classroom interaction.

Recently, the relationship between teachers classroom verbal behaviour and their attitude towards teaching was studied by Khatoon (1986). The data was collected from 150 teachers of thirteen secondary schools in Uttar Pradesh (India). Findings
indicated that no significant correlation existed between teacher attitude towards teaching and their different behaviour segments and ratios. The only conclusion that could be drawn was that the two phenomenon were unrelated.

Sheela (1987) used the criteria of attitude towards teaching together with classroom verbal behaviour of teachers to study the teacher effectiveness owing to the inculcation of values.

The study of verbal behaviour of the teacher in relation to democratic attitude and personality was one of the very recent presage process studies conducted by Vasudev (1990) in the area of teaching and teacher behaviour. As far as the effect of democratic attitude on various behavioural ratios is concerned, the study revealed that out of twentyone behavioural ratios considered in the investigation, attitude was found to have a significant effect on only five behavioural ratios, namely; indirect teacher talk, direct teacher talk, pupil talk, indirect/direct teacher talk and instantaneous teacher question ratio.

Other studies conducted by Primalaux (1979); Mendez (1983); Shake (1984); and Hauray (1984) indicated that attitudes do have impact on teacher behaviour.
On the other hand, results indicating the absence of the effect of attitudes on verbal behaviour of teacher were, however, borne out by the findings of Poll (1972); Rambely (1977); Ilyas (1983); and Butter (1984), according to whom attitude does not have a significant bearing on different classroom behaviour. Poll (1972), for example, obtained no relationship between the teaching attitude of teachers and 29 items of verbal behaviour. Based on the findings of this study, one of the recommendations was that there should be continued research into the relationship between teacher's attitude and the classroom behaviour.

3.5 Sex Factor and Teacher Behaviour

Among the studies conducted on personal factors and verbal interaction of teachers, some are related to sex factor. In an attempt to investigate the extent of the effect of sex difference on classroom teacher behaviour, different individuals had ventured to undertake research studies.

Ryan's (1969) have pointed out that male teachers were less responsible and business like in classroom practices and more inclined toward permissive child. Men teachers have significantly higher emotional stability than women teachers.
Review of Related Studies

Bane (1969) conducted a study and found that there is significant relationship between teaching behaviour and sex. Male teachers used greater amount of warning, accepting and more direct behaviour and that was also true for female teachers.

Felsenthal (1969) also found that sex factor to be significantly related to teacher behaviour. Boys receive a large share of pupil-teacher interaction, both positive and negative.

In the study of the patterns of teacher influence in some selected schools, Santhanam (1972) sought to study the impact of some presage variables like sex, age, recency of training, experience, marital status and subject matter being taught. The classroom observations were done with the help of Flanders Interaction analysis Category System.

Mehta (1976) has also considered the variable of sex in his enquiry into the relationship between teachers' classroom communication pattern and certain perceptual factors. The results of the investigation indicated that generally, there was no relationship between the sex of the teachers and their communication pattern in classroom. However, significant negative relationship was found between the sex of the teachers and TRR (Teacher response Reatio). The male teachers were not found to differ from female teachers significantly regarding l/d,
I/D and TQR. But the male teachers differed significantly from female teachers regarding TQR.

In the study conducted by Sharma (1979), certain aspects of classroom behaviour of science teachers in Macro and Micro teaching situations were studied using Flanders Interaction Analysis Category System. Sex-wise analysis of data was also made in the investigation. Employing the techniques of tabulated tallies in the form of matrix, computed behaviour ratios, correlations, mean, standard deviation and t-test, the analysis of data gave rise to the following findings: (i) Sex did not play an important part in shaping the teachers' influence. (ii) The communication was relatively faster in the classes conducted by female science teachers than in classes conducted by male science teachers, whereas, in the case of female science teachers, it had significant values with respect to friendliness and masculinity only. (iii) In the case of male teachers, the structuring of classroom control had no relationship with any trait of personality.

As regards to the patterns of classroom behaviour of the teachers, Sharma's study revealed that (a) Teachers' talk was six times more than students' talk. (b) Very little time was spent on praising and developing students' ideas. (c) The
highest frequencies were covered by the cell (5-5) in which teacher's lecture was 42.31 per cent. The second highest frequencies were occupied by the cell (10-10), i.e., silence or/and confusion which was 19.39 per cent of the total tallies.

The study revealed that (i) the male teachers, on an average, were more indirect than the female teachers on the criterion of i/d but not on the criterion of I/D, (ii) Age, recency of training and experience of the teacher did not seem to affect teacher influence in terms of i/d and I/D, and (iii) the unmarried teachers, on an average, were more indirect than the married teachers on the criterion of i/d, but not on the criterion of I/D.

Kushwaha (1979) made an investigation into the attitude and role perceptions of secondary teachers in Rajasthan and found that the male teachers were better than female teachers on adviser and disciplinarian roles. The female teachers were better than the male teachers on motivator and counsellor roles.

Thakur (1980) observed the teaching behaviour of 200 teachers in their respective classrooms for twenty minutes on three different occasions with the help of Flanders Interaction Analysis Category System. The personality characteristics of teachers were measured in the 16 PF Test. The constellation of
traits of teachers (direct and indirect) was found out by using factor analysis. The differences in groups were measured and tested for the significance on the variables of age, sex and experience. The study yielded the following findings: (i) The two groups of teachers (indirect/direct) differed significantly on nine of the interaction variables except the variable of MFR. (ii) There was no significant difference in the teaching behaviour of the direct/indirect teachers due to the variables of age, sex and experience. (iii) Four personality factors, namely, C, O, O₃ and O₄ significantly differentiated the direct and indirect teachers.

In general from the studies cited in this chapter, some directions of findings can be identified. In the majority of the studies reviewed, it was found that teachers spent a higher proportion of time in lecturing than in any other categories of accepting, praise, questioning, directing or criticizing. Rarely did teachers express in words acceptance of students' feelings. When students talked they were much more likely to be responding to teachers' initiations than initiating themselves. In so far as the studies related to the impact of presage variables upon classroom verbal behaviour were concerned, the findings did not point out a clear direction and some results were, in fact, quite contradictory. Therefore, it becomes necessary to tackle the problems afresh.