

**A Study of Teacher Effectiveness, Job Satisfaction,
Organizational Climate and its Relationship with
the Academic Performance of Primary School
Learners-A Comparative Study of Public, Missionary,
Government and Muncipal School**

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ARUN KUMAR SAMAL

**ZAKIR HUSAIN CENTRE FOR EDUCATIONAL STUDIES
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067
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ZAKIR HUSSAIN CENTRE FOR EDUCATIONAL STUDIES

SCHOOL OF SOCIAL SCIENCES

New Delhi-110 067

DECLARATION

Certified that the dissertation entitled "A STUDY OF TEACHER EFFECTIVENESS, JOB SATISFACTION, ORGANIZATIONAL CLIMATE AND ITS RELATIONSHIP WITH THE ACADEMIC PERFORMANCE OF PRIMARY SCHOOL LEARNERS - A COMPARATIVE STUDY OF PUBLIC, MISSIONARY, GOVERNMENT AND MUNICIPAL SCHOOL", submitted by Arun Kumar Samal is for the award of the Degree of Master of Philosophy of this University. This dissertation has not been previously submitted for any other degree of this or any other University, and is his own work.

We recommend that this dissertation may be placed before the examiners for evaluation.

Karuna Ahmad
DR (Mrs) KARUNA AHMAD

(CHAIRMAN)

V. Veeraraghavan
DR (Mrs) V. VEERARAGHAVAN

(SUPERVISOR)

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(ARUN KUMAR SAMAL)

CHAPTER I

INTRODUCTION

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It is universally accepted that the development and progress of a nation depends upon the quality of its citizens, and the latter on the quality of their education, which is dependent on several factors including inherited traits and potentialities of the learner, the educational environment, the home background and the type of schooling. Amongst the school factors the most significant one is the quality of teachers, which not only depends upon the natural inclinations of the teacher, his devotion and personal qualities such as intelligence, aptitude, interest towards teaching, etc. but also on their job satisfaction and the school climate.

The most important function of a teacher is teaching, which is a highly complex process demanding from a teacher a variety of skills, knowledge and abilities. Teaching is complex because it involves exploitation of the potentialities of the learner, help him acquire knowledge and facts and develop an insight into his own self. For this as stated by Howard and Nicholas (1975), a teacher requires considerable knowledge of the subject, a wide variety of skills to teach and positive attitudes towards teaching and pupils. The teacher should also have a wide knowledge of the basic discipline in education in order to analyse his situation, select appropriate aims and objectives, devise related learning opportunities and assess his pupils' progress.

In addition, the teacher needs knowledge and expertise to decide about the use of aids, forms of organizations and ways to implement the required curriculum. Satisfaction, zeal, and interest in teaching should be the factors a teacher should possess along with their devotion to work and efficiency in teaching. Even a qualified teacher will be a failure in the process of education if he lacks interest and satisfaction in his teaching. A teaching-learning situation can be more effective if the teacher, by dint of his efficiency, interest, knowledge, satisfaction and inclination towards teaching, performs his activities in the teaching-learning situation in a very skilled manner. A teacher may be duly qualified and possess all the teacher-like traits and characteristics but yet may not be an effective teacher.

The Concept of Effectiveness of Teaching:

The concept of effectiveness in teaching would be very clear if attempts would be made first to define what teaching is and then whether effectiveness in teaching has been attained or not.

A generic definition of teaching has been offered by Smith(1961) who says that "teaching is a system of action intended to include learning". This definition clearly says that it is possible to examine the teachers' actions without the reference to learner since the intention is only to induce

learning. Amidon and Hunter (1966) defined teaching as "an intensive process primarily involving the class-room talk which takes place between teacher and pupils and occurs in certain definable activities". Flanders (1970) defined teaching as a behaviour which exists in a context of social interaction. The acts of teaching lead to reciprocal contacts between the teacher and the pupils, and the interchange that takes place is called teaching.

A Committee of American Educational Research (AERA, 1978) calls teaching as a form of interpersonal influence aimed at changing the behaviour potential of another person.

Teaching is an important aspect of classroom behaviour and teacher effectiveness depends on the way the teacher performs all the activities relevant to the promotion of learning. Effective teaching system leads to success in teaching profession, which primarily helps learners in achieving success in the academic sphere. Effectiveness in teaching involves also the skills of a teacher in terms of adjusting to the unique patterns of student behaviours, to the unique physical setting, and to the unique behavioural patterns of those with whom the teacher interacts in the school situation. According to Barr (1935) the ultimate criteria of teaching success will have to be found in the changes produced in the pupils measured in terms of the

objectives of education. These changes or products of instruction will have to be considered in a broader perspective.

Thus teacher effectiveness would necessarily include such as job satisfaction, etc. a number of variables on which the teaching-learning process needs to be evaluated in the light of goals and objectives of an educational setting. Merely assessing the teacher effectiveness in terms of methodologies of teaching or the knowledge and skills possessed by the teacher would not provide an adequate picture of effectiveness in teaching.

The Concept of Job Satisfaction:

The term Job Satisfaction has been widely used and variously interpreted. According to Maslow (1943), the work environment satisfies a number of needs of an individual worker. He enumerated eight such needs which he arranged in a hierarchical order and said that the extent to which the job environment or the various segments of it contributed to the satisfaction of these needs, determined the job satisfaction of the workers.

Pestonjee (1973), while discussing the concept of satisfaction, said, that "job satisfaction can be taken as a summation of employees' feelings in four important areas. Two of these (job and management) encompass factors directly concerned with the job, (intrinsic factors) and the remaining two (social relations and personal adjustment) include factors

not directly connected with the job, but which are presumed to have a bearing on job satisfaction.

Siegel (1962) analysed job satisfaction in the context of two main factors - intrinsic factors and extrinsic factors. Factors intrinsic to the job include pay, job security, participation and personal recognition, hours, working conditions and occupational status. Among factors extrinsic to the job are supervision, age, level of intelligence, job experience and personal adjustment. Most studies on Job Satisfaction have been in the industrial setting, in the recent years the educational researchers have focussed their attention on Job Satisfaction of teachers also. Marr and Mathur (1975) studied the extent of satisfaction of teacher educators with different aspects of their job, and found that the same was contingent on factors such as respect, prestige, way of life, immediate supervisor's behaviour, intellectual stimulation, responsibility, management policy, variety in work, independent achievement and security in the job.

Reddy et al. (1978) found that the teachers working in private schools and those in zila parishad schools were significantly more satisfied than the teachers in government schools.

Oades (1983) found a significant positive correlation between job satisfaction and work, promotion, supervision and co-workers.

Dodge (1983) found that organizational climate factors accounted for 33 per cent of the variance in job satisfaction while personal variance accounted for 2 per cent of the variance in general. These findings suggested that perceived organisational climate factors are more important to the public school teachers for job satisfaction than the personal factors.

The Organizational Climate of the School:

Organization as a concept has been discussed by different authorities in different ways.

According to Lonsdale (1964), organizational climate might be defined as a global assessment of the interaction between the task achievement dimension and need satisfaction dimension within the organization, or in other words of the extent of the task need integration. In general usage the term has a psychosocial flavour which reflects more concern with the need satisfaction dimension than with the task achievement dimension, but the term that gives relatively equal attention to both is preferred.

Sharma (1971) defined organizational climate in terms of the interaction that takes place between the organizational members as they fulfil their prescribed roles while satisfying their individual needs. Furthermore he specifies that it is the resulting condition within the school interaction among the teachers and between the teachers and principal.

While delineating the dimensions of school climate (Bayti, (1970) ^{and} Sharma. (1972) identified eight dimensions and concluded that teachers of rural schools were superior in esprit, intimacy, aloofness, thrust and hindrances whereas teachers of urban schools were higher on dimensions of disagreement, production emphasis and consideration.

✓ Sterling (1977) in a study of the relationship between teacher perception of elementary school organizational climate and student achievement found that there was no significant relationship between the two variables.

✓ Chopra (1983) found that among six types of climate the open climate schools show the higher overall teacher job satisfaction which are followed by autonomous, familiar, controlled, closed and parental climate schools, respectively.

✓ Ricciotti (1982) found that the teachers in the schools with innovative organizational designs i.e. the non-graded and open-space made greater gain in reading achievement than those students in the traditional setting.

✓ Sharma (1971) reported that more open the climate the higher academic achievement on the part of the students, which finding was not validated by Whitaker (1982) in his study of organizational climate in elementary school and the students' self-concept.

However, many studies have shown that classroom organization and management (Desai, 1982), teachers' personality

(Singh, 1981), teachers' attitude towards teaching (Goyal, 1981) were individually responsible for students' success. No study so far has been conducted which has related all these factors and studied them in combination and ascertain their individual effect on a student's performance. The present study has attempted to fill the gap in this area in a small way. Thus the main aims and objectives of the present research are:

- (1.) to ascertain whether there exists a difference in the academic performance of students in terms of four different types of school;
2. to ascertain if academic performance varies in terms of types of organizational climate, types of Teacher Effectiveness and types of Job Satisfaction;
3. to find out whether the interaction effects of two or all of the following factors in any way affect the academic performance of the students:
 - 3.1 organizational climate,
 - 3.2 teacher effectiveness, and
 - 3.3 job satisfaction of teachers.
4. to find out if academic performance of students, Teacher Effectiveness and Job Satisfaction vary in terms of different climate that exists in the different types of school; and
5. to ascertain whether there exists a correlation between Teacher Effectiveness and their Job Satisfaction.

CHAPTER II

REVIEW OF LITERATURE

REVIEW OF LITERATURE

A research study on any topic cannot be undertaken without knowing what had been covered already in earlier studies in the particular field concerned and which areas need further exploration and investigation. Such an approach helps to eliminate duplication and shortcomings of the earlier researches and assists in formulating suitable hypotheses and research designs.

It is well known that the field of education has been of great interest to researchers and educators because of its contribution to the intellectual, emotional and social development of children. The performance of an individual in the primary and secondary schools is indicative of the knowledge gained by him/her through the effects of schooling. Hence researchers have attempted to investigate the latter's effect on the performance of children in terms of effectiveness of teacher, the typical school climate, etc.

The following section presents the available relevant literature in the areas of Teacher Effectiveness, Job Satisfaction and Organizational Climate as related to Academic Performance of children studying in schools.

Teacher Effectiveness

Effectiveness in teaching has been given considerable importance from the mid-twentieth century. Educationists have focussed their attention on the concept of Teacher Effectiveness and how to bring about effective teaching in schools. Ryans (1950) stated that teaching can be considered

effective to the extent that the teacher acts in ways that are favourable to the development of basic skills, understanding, work habits, desirable attitudes, value judgement and adequate personal adjustment of the pupils.

According to Barr (1952), "teacher effectiveness is a relationship between teachers, pupils and other persons concerned with the educational undertaking, all affected by limiting and facilitating aspects of immediate situation. According to Remmers (1952) teacher effectiveness is the degree to which an agent of teaching produces effects on the learner. Jones (1956) delineated effective teachers by the distinguishing characteristics between the least liked and best liked teachers. According to Stern, Stein and Bloom (1950), discussing effectiveness in general pointed out that effectiveness is a standard of performance that individuals are expected to manifest in certain specific work they perform. Coombs (1961) pointed out that a good teacher is one who has learnt to use himself as an effective instrument in the teaching-learning situation. He defined the effective teacher as one who had learned to use 'self' effectively and efficiently for achieving his own and that of the society's goals.

Attempts have been made to define teaching behaviour by Filson (1957), Medley (1959), Flanders (1960), Bowers (1961), Smith (1961), Ober, Mentley and Miller (1979) and others.

Their attempts to examine the more global aspect of teaching have, to an extent, helped in a clearcut distinction between good or effective and poor or ineffective teaching strategies. Cortis (1977) pointed out that effective teaching is a matter of the teacher finding the right niche i.e. the appropriate situation in which to operate. Thus, if there is a mismatch between the personal factors of the teacher and the situation chosen, then it is unlikely to obtain effective and happy teaching relations. According to Dickson (1980) teaching effectiveness consists of the repertoire of competencies involved with (a) teaching plan, (b) teaching materials, (c) classroom procedures, (d) inter-personal skills, (e) learners' reinforcement, and (f) involvement reflected teaching behaviour. According to Medley (1982) teacher effectiveness refers to the effect that the teachers' performance has on pupils; in addition it also depends on the responses the pupils make to the teaching. Just as equally competent teachers perform differently in different situations so also identical performances would not be expected to have identical effects in different situations. Teacher effectiveness can be understood only by way of its effects on students' performance.

Effectiveness in teaching involves also the skills of a teacher in terms of adjusting to the unique patterns of student behaviours, to the unique physical setting, and to the unique behavioural patterns of those with whom the teacher

interacts in the school situation. According to Barr (1935) the ultimate criteria of teaching success will have to be found in the changes produced in the pupils measured in terms of the objectives of education. These changes or products of instructions will have to be considered in a broader perspective.

Considering various factors of teacher effectiveness, Gage (1963) listed out factors related to teaching success which included, pupils' happiness and achievement in life; pupils' achievement in subsequent schooling; pupils' achievement in terms of current educational objectives; pupils' satisfaction with the teacher; teachers' emotional and social adjustments; his knowledge of the subject matter; and interests in the same, etc.

The above appear to be in line with the criteria put forward by the American Educational Research Association (AERA, 1952). However, Briddle (1964) offered a seven-variable model for the investigation of success in teaching which included: formative experience, teacher properties, teacher behaviours, immediate effects, long term consequences, classroom situations, school and community serving as contextual variables.

For instance Chaya (1974) found that effective teachers had significantly better personality adjustment and more favourable attitudes towards teaching than ineffective teachers. Effective teachers, though did not differ from ineffective

teachers in their interest in teaching, they were significantly more emotionally stable than the ineffective teachers. Effective teachers were also not more extrovert than ineffective teachers though age and sex of a teacher had a significant relationship with the effectiveness of teaching.

Dasgupta (1977) found that the efficiency of a teacher was directed by the presence of certain factors, such as, human relationship, socio-economic condition of the teachers, organization of teaching-learning process, out of school activities assigned to the teacher and the socio-cultural setting of the community.

Teacher Effectiveness, Intelligence and Other Factors:

Sherry (1964) found intelligence to be the most important factor for the success in teaching, with the next important factor being the emotional quality of the teacher.

Deva (1966) in his study attempted to predict the teaching success. He used five predictor variables such as intelligence, social adjustment, personality, socio-economic status, and academic achievement. The coefficient of correlation between the criterion variable and the intelligence as the predictor variable was found to be statistically significant showing 'intelligence' to be an important factor for teacher effectiveness.

Kaul (1973) undertook to identify the personality traits of effective teachers. The study was conducted on a sample of 200 teachers of Haryana and showed that effective teachers were more intelligent, emotionally stable, tough minded, placid, controlled and relaxed.

Gupta (1976) in a study of 300 male graduate teachers investigated the relationship between the criterion of teacher effectiveness with a number of predictors and found out that effective teachers were more intelligent.

Rao (1976) in a study of 139 male and 271 female teachers of Madras found significant relationship between the n-achievement and intelligence. The n-achievement referred to the performance of teachers in classroom situations of teaching and learning.

Teacher Effectiveness, Attitude Towards Teaching and Other Factors

Barr (1934) contended that the attitude towards teaching is significantly associated with the teaching competencies in a review of related literature in the area of teacher behaviour in classroom reveals attitude of a teacher towards teaching appears to be significant for the classroom verbal interaction.

Ringness, Barr and Rippan (1935) while attempting to find out the relationship teacher effectiveness, attitude towards teaching and supervision concluded that attitude of a teacher was related with the teaching success.

Ryans (1960) in his extensive research on teacher characteristics developed a number of opinionaries which centred upon the attitude of teachers towards their pupils, democratic classroom activities and other personnel in the school. The study revealed high correlation between attitudes towards teaching and the characteristics of effective teachers.

Joshi and Srivastava (1964) reported a study of the relationship between intelligence, teacher attitude, and the teaching performance as a process of education. A high positive correlation was obtained between intelligence, teaching attitude and teaching effectiveness throughout the study.

Kaul (1972) made a factorial study of certain personality variables of popular teachers in the secondary school, and observed that, attitude towards teaching and appraisal of the work were indicators of effectiveness of popular teachers in teaching.

Arora (1978) differentiated the motives of effective and ineffective teachers for joining the teaching profession. He found that effective teachers took to teaching because they held it in a high esteem and had a great liking for teaching per se. On the other hand, the ineffective teachers were found to like mainly the financial aspect of teaching and not teaching per se.

Gupta and Kapoor (1976) derived the term teacher effectiveness in teaching as repertorie of efficacy exhibited by

teachers in instructional management; classroom management; personal disposition, temperament and tendencies; evaluation and feedback; interpersonal relations; job involvement; initiative and enthusiasm; professional values; and innovation in every day teaching-learning situation.

There have been a number of studies regarding the concept, measurement and evaluation of teacher effectiveness. The research conducted by Marsh and Wilder (1954), Barr et al. (1961), Bellack and Huebner (1960), Getzel and Jackson (1963), Biddle and Ellena (1964) and Traverse (1973) reveal a long history abroad, but they have not made any effort to relate the teacher effectiveness with the academic achievement/performance of the learners. In India, Adaval (1975), Balram (1965), Buch (1975) and Grewal (1975) have all attempted to study effectiveness and success in teaching. These studies, however, do not seem to throw light on teachers' effectiveness and its impact on the academic achievement of the learners.

Job Satisfaction:

According to Roberts (1966), job satisfaction comprises those outward or inner manifestations which give an individual a sense of enjoyment or accomplishment in the performance of his work. Job satisfaction may thus come from the product or the item produced, from the speed with which it is accomplished or from features relating to the job and its performance. Kahn (1973) defines job satisfaction as it occurs when there is a fit between job characteristics and wants of employees.

Blum and Naylor (1968) defined job satisfaction "as the result of various attitudes possessed by the employee which relate to job and are concerned with specific job aspects".

Job satisfaction, being a complex phenomenon with several interrelated factors such as personal, social, cultural and economic, has been explained by various theories of which the most significant is the two-factor theory postulated by Herzberg et al. (1968), which suggests two different sets of factors - motivators and hygiene factors, which influence job satisfaction/dissatisfaction. While the motivators include advancement, development, responsibility, recognition, achievement and the work itself, the hygiene factors include salary, working conditions, company policy, supervision and the work group.

Schaffer's (1953), somewhat older theory states that overall job satisfaction will vary directly with the extent to which the needs of an individual can be actually satisfied on a job; the stronger the needs, the more closely will the job satisfaction depend on their fulfilment.

Chandra (1978) found that teachers with favourable attitudes towards teaching adjudged the teaching job as more favourable than those who had unfavourable attitude towards teaching.

Siegel (1962), analysed job satisfaction in the context of intrinsic and extrinsic factors. Factors intrinsic to the job include pay, job security, participation, personal recognition, hours of work, working conditions and occupational status. Amongst the extrinsic factors were supervision, age, level of intelligence, job experience and personal adjustment of the individual to his job.

Hoppock (1967) in his composite theory concluded that job satisfaction depends upon the extent to which the job a person holds meets the needs which the individual feels should be met. The degree of satisfaction is determined by the relationship between what is experienced and what is wanted by the individual.

Thus job satisfaction appears to involve a large number of physical, psychological and personal factors. When job satisfaction of teachers in schools is considered specifically, it has been observed that women teachers are more satisfied with their jobs than their male counterparts (Chase, 1951; Selesco and Alluto, 1972; Bernard and Kulandivel, 1976; Anand, 1977 and 1980; and Reddy et al., 1980). However, Goyal (1981) found that sex does not affect the job satisfaction. The latter finding was based on a sample of teacher educators therefore probably contradicts the earlier findings on the sample of teachers. /

As for job satisfaction in terms of urban/rural background of teachers Anand (1977), and Reddy et al. (1980), found that job satisfaction is not related to either rural or urban background or the states to which the teachers belonged.

Studying the relationship between educational level of teachers and their job satisfaction, Roahm (1966), Hegland (1968) and Hogan (1969), in their research on American school teachers, found that there was no significant correlation between job satisfaction, educational level and the degree the teachers held. This was somewhat substantiated by Goyal (1981), who found that qualifications did not affect the job satisfaction of teacher educators.

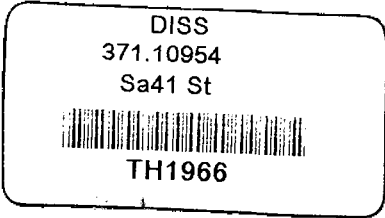
Volmer and Kenney (1955) found that workers with higher educational degrees or accomplishments tended to be more dissatisfied with their jobs. However, in direct contrast to this, Rao (1970) in his study on the socio-personal correlates of job satisfaction, found that higher the educational level of teachers, greater their job satisfaction. This finding was corroborated by Anand (1979), who, in his study on job satisfaction versus work-role variables of school teachers (both in arts and science groups) found that the post-graduate teachers were more satisfied with their jobs, than the only graduate teachers.

Harrell (1967) found that a highly skilled person may be dissatisfied with his job, if he is placed in a job unsuited to his talents and where he cannot use his skills. Amongst the Indian teachers, evaluating skill as a correlate of job satisfaction, Tripathy et al. (1981) found that the trained teachers had greater job satisfaction than untrained teachers and were more effective as teachers.

Studies which link personality with job satisfaction are very few in number. For instance, Rohilla (1966) found that job satisfaction was contingent on the innate needs of the concerned individual, and stronger the need, greater the job satisfaction.

It has been found by many researchers in the industrial setting (Harrel, 1967), (Davis, 1974) and the educational setting (Lortia, 1975; Katz and Kahn, 1978) that extrinsic and intrinsic rewards in combination, lead to greater satisfaction with the job. For example, Sayles (1974) pointed out that an incentive that is operating successfully can bring psychological as well as economic rewards. There is a satisfaction from a job well done and the individual's self image improves because of feelings of competence.

In the context of educational setting, Grey (1963) in a study on job satisfaction of secondary school teachers, reported that social rewards on the job contributed towards the job satisfaction of the school teachers.



Serigionni (1967) in a study on the factors which affect job satisfaction and dissatisfaction found that satisfaction factors for the teachers tended to be linked to the work itself. He also showed difference between work, and conditions of work and pointed out that whereas satisfaction was related to work itself, job context factors i.e. conditions of work were responsible for dissatisfaction. This was substantiated by Dayal and Saiyadain (1971).

Menon (1974) in a relational study of work motivation and organizational climate, found that work motivation among employees is a direct function of the organizational climate relating job satisfaction with the leadership style. Singh and Pestonjee (1974) found that greater job satisfaction results from a democratic form of leadership.

In a study linking organizational incentives and teaching amongst secondary school teachers, Lortie (1975), found that satisfaction with teaching and internalized motivations were of primary importance to teachers. He argued that extrinsic rewards such as salary and perks and ancillary rewards such as working hours and conditions while important were not more significant than the intrinsic rewards.

Pestonjee and Akhtar (1969) found that for teacher educators, social service, fame, independence and self-expression on the job were most preferred work values. They reported that both men and women preferred social service and

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self-expression as compared to other non-social factors, and within the same, women valued job security, while men fame.

Organizational Climate :

Sullivan (1947) noted that the organizational climate refers to the Cathectic patterns giving identity to such groups and interpersonal relations in a living organization. Andrews (1965) defined organizational climate "merely as a somewhat blurred esprit state".

Face and Stern (1958) theorized that the concept of climate helps in understanding individual attitudes and behaviour in an organization, and it would operationalize the 'E' in Lewins' formula $V_1^2, B = P \times E$. Organizational climate has been defined as an underlying concept which reflects the content and strength of prevalent values, norms, attitudes and behaviour of a member of a social system (Payne, 1971).

(Organisational Climate Description Questionnaire)

✓ By using OCDQ of Halpin and Croft (1963), Bayti (1973) and Sharma (1972), to delineate 8 dimensions of school climate, viz., disengagement, production, emphasis, consideration, esprit, intimacy, aloofness, thrust and hindrances. They demonstrated that teachers of rural schools were superior in esprit, intimacy, aloofness, thrust and hindrance whereas urban teachers were higher on the dimensions of disengagement, production-emphasis and consideration.

✓ Sharma (1972) studied 56 schools and identified the following climate types with number of schools given on the parenthesis: open (15), closed (21), controlled (11), autonomous (6), Parental (2) and familiar (1).

✓ The school represents a social system within which teachers and Principals interact by virtue of their being members of the organization (school). There are thus many forces which emanate from the different categories of members and from the very interaction between the members as well as the organizational demands, etc. All these results are typical climate characteristics of that organization. / For example, Pillai (1976, 1979) found a very high relationship between the school climate and morale of teachers. He demonstrated climate is conducive to high morale and the existent morale in turn affects the climate of the schools.

Sinclair (1971) used educational environment as synonymous to 'organizational climate'. He stated that the term educational environment refers to the conditions, forces and external stimuli that foster the development of individual characteristics.

Cornell and Argysis (1955) explained the organizational climate as an interaction amongst persons in an organization and they isolated and discussed briefly the variables which they believed as having an effect on this interaction. The phenomenon of interaction can be thought of as occurring in a system of independent forces, which can be analyzed in the light of other operating forces in an organization. The

notion of 'system' facilitates the analysis of a complex organizational phenomenon.

Goyal (1973) found that within a school the open system of education led to a higher level of responsible and stimulating environment, which led to greater creativity amongst students, as compared to a closed system of education.

Mehdi and Gupta (1981) examining the role of the teacher, enumerated four important areas where the teacher was expected to assist pupils to facilitate their allround development as learners, as persons, as citizens and as workers.


Studies have shown that skills of class organization and management (Desai, 1982), teacher behaviour and communication (Singh, 1981), teachers' personality (Singh, 1981) and teacher attitudes towards his/her profession, level of satisfaction and adjustment in the job (Goyal, 1981), etc. are responsible for teacher effectiveness and success.

Indiresan (1979) reported that individuals in the same organization perceived the organizational climate/atmosphere differentially; thus a favourable perception of the organizational atmosphere contributes to greater expressed job satisfaction, than an unfavourable perception./

Ricciotti's (1982) study reveals that the students in the schools with innovative organizational designs (i.e. the non-graded and open space) made greater gain in reading achievement than those students in the traditional setting.

Comparison of the reading achievement test results as measured by the standardised tests favoured the non-graded and open space schools.

Whitaker (1982) in his study concluded that while there were differences between elementary schools in terms of the organizational climates and the students' self-concept, these differences were not significant. The findings do not support the notion that the self-concept of children attending the open climate schools differ significantly from those attending the closed climate schools.

Pack (1981) studying the organizational climate, comparing the elementary and secondary schools concluded that (1) organizational profile for the elementary and secondary schools indicate that the behaviours of teachers and Principals were similar to those of Halpin and Croft norm group; (2) the generally closed climate  system appeared ^{to} be wide and affected by school size or the elementary or secondary level of education. 137 within the same town, there appears a higher proportion of closed secondary schools than elementary schools. In a differential context, comparing the perception of elementary and special education teachers, York (1983) reported that the latter perceived significantly larger number of closed climate factors than the elementary school teachers./

Donottne (1983) reported that the relationship between faculty perceptions of the organizational climate and the

faculty's job satisfaction is highly related. Increased esprit and the work environment appear correlated with the satisfaction on the subscales of job satisfaction index. On the other hand, increased production emphasis, thrust and consideration appear positively correlated to satisfaction as the subscales of Job Description Index (JDI), except pay. It was also demonstrated that, as the aloofness and disengagement dimension increased, the satisfaction on the subscales of JDI decreased; as the same thing increased hindrance factor appears to be correlated negatively to satisfaction on the subscales of JDI except the people factor.

Muchinsky (1978) in his study of organizational communication (OCO), organizational climate (OCL) and the job satisfaction found that 47 per cent of the communication climate correlations were significant and suggested that certain aspect of OCO are highly related to the perceived climate while other communication dimensions appeared unrelated to the perceived climate. Fortyseven per cent of the correlations between the communication and the JS were also significant. All of the correlations between the dimensions of job satisfaction and perceived climate were positive except those involving the climate factor standards.

Sterling (1977) in his study of relationship between teacher perception of elementary school organizational climate and student achievement, found that there was no significant correlation between the student achievement

variables (mathematics and reading scores) and the nine subscales of elementary school organizational climate.

Haggard (1982) found that the school climate and the academic achievement have only a weak to moderate relationship, particularly in regard to language and arithmetic. The statistical data in this study also indicate a reduction in the negative correlation between the school size and the academic achievement. This appears to support the contention that several of the organizational changes and additional resources directed into the larger schools have the desired result.

The findings regarding the variance of job satisfaction have been explained by seven variables by Dodge (1982). The four variables of emotional support, participation in decision making, teaching anxiety and age appear to yield significant contribution to job satisfaction. Results indicate that organizational climate factors account for 33 per cent of the variance in the satisfaction. While personal variables account for 2 per cent of the variation in general. The above findings suggest that perceived organizational climate factors are much more important than the personal factors to the public school teachers.

In this context, Reddy and Reddy (1978) found that the teachers working in private and Zilla Parishad schools were more satisfied than those in the government schools and

schools run under other managements. They further demonstrated that the different types of management lead to different levels of job satisfaction for the school teachers. Chopra (1983) found that, of the six types of climate in schools, the open climate led to a significantly higher job satisfaction for the teachers as compared to the climates such as autonomous, familiar, controlled, closed and parental climates in schools.

✓ Analysis of the grade levels obtained in different schools in terms of the organizational climates show significant differences between the more open and closed schools at different grade levels (Martin, 1983).

Earlier Goyal (1973) had obtained contradictory findings in the Indian context, wherein he showed that the open system of education and more responsive and stimulating environment led to greater creativity among the students.

✓ On a similar theme in the Indian context, Pillai (1973) found that pupil's performance is significantly better in open and autonomous climates than that obtained in other types of climate. A further correlational analysis showed that the organizational climate in schools is positively related to pupil's performance; and that the innovative index and teacher morale are highly significantly correlated with pupils' performance. ✓ On the other hand, in his study Rier-Franklin (1983) found that the climate was not the most influential factor in determining students' performance in

reading and mathematics. He demonstrated that the typical educational process in the open climate high schools, contribute to the development of favourable self-concept in students. He further pointed out that the openness of high school climate as being associated with school based administrative cooperation, assistance, guidance and social needs satisfaction of teachers; thus behaviour pattern displayed by people in the open and closed climate high schools differed as a result of the administrative style exercised by the administrator.

Burks (1984) in his study found that the schools which maintain a climate that stresses achievement standards, personal dignity, orderliness and task effectiveness are significantly more likely to have higher reading achievement scores than those schools that do not stress these factors.

Pareek et al. (1970), Qureshi (1973) and Buch (1977) and others found that teachers' attitude towards democratic classroom procedures was significantly correlated with their own direct influence (i.e. teachers more often accepted students' feelings and ideas, praised and encouraged them, and asked questions than gave directions and lectures and justified his authority.

Thus the above review of literature has shown that a large amount of research work has gone in relating various factors concerning the educational field.

Most studies reviewed above have studied one or two of the above factors either in isolation or in combination, but none has attempted to ascertain the effect of all the above factors contributing to academic performance of students. Thus the present analysis has mainly focussed attention on teacher effectiveness, teacher job satisfaction and organizational climate as contributing to the academic performance of school students. The following chapter presents the methodology used in the present research which aims to investigate the effects of organizational climate, teacher effectiveness and job satisfaction of teacher on the academic performance of students of classes IV and V respectively.

CHAPTER III

METHODOLOGY

CHAPTER III

METHODOLOGY

Having reviewed the available literature on the topic it is now in order to present the methodology used in the study.

As mentioned earlier, the main objective of this research is to ascertain teacher effectiveness, job satisfaction and the organizational climate of the school and their effect on the academic performance of students belonging to four different types of school namely public, missionary, government and municipal. This has been based on the observation that the performance of the children and the effectiveness of teachers as well as the input and output in different types of school vary a great deal (Heim and Watts 1972; Rao 1978; Pillai 1979; Sinha 1980; Reddy and Reddy 1978; Chopra 1983; Rogers 1976). Thus the present study aims to investigate the following objectives:

1. To ascertain whether there exists a difference in the academic performance of students in terms of the four different types of school.
2. To ascertain if academic performance varies in terms of differential teacher effectiveness, job satisfaction and organizational climate in schools.
3. To find out whether the interaction effect of the following factors in any way affects the academic performance of the students:-
 - 3.1 organizational climate
 - 3.2 teacher effectiveness
 - 3.3 job satisfaction of teachers.

4. To find out whether there exists a correlation between teacher effectiveness and their job satisfaction.

The following hypotheses were laid down for achieving the above objectives:

Hypotheses:

1. The academic performance of students of classes IV and V will vary in terms of the different types of school. Specifically, the performance of students from public school will be higher than those from the missionary, government and municipal schools.
2. Differential level of organizational climate, teacher effectiveness and teacher job satisfaction, individually and in varying combinations, will differentially affect the academic performance of the students.
3. Teacher effectiveness will vary in terms of differential organizational climate in the schools.
4. Job satisfaction will vary in terms of differential climate in the schools.
5. There will be a linear correlation between teacher effectiveness and job satisfaction.

OPERATIONAL DEFINITIONS

1. Organizational Climate:

Operationally defined, organizational climate is the resulting condition within the school of the social interaction between the teachers and the Principal. As Halpin and Croft (1963) defined, "personality is to individual, what organizational climate is to the organization". This

refers to the typical work atmosphere that exists in the school as perceived by the teacher and the Head Masters/ Principals.

✓ The organizational climate score has been obtained by the Organizational Climate Description Questionnaire (OCDQ) scale devised by Sharma (1973) where the Principal/Head Master of the school made their ratings. In the present study, the organizational climate score which has been obtained has further been divided into two dimensions, i.e. the open climate and the closed climate.

2. Teacher Effectiveness:

The term teacher effectiveness is used to refer the results a teacher gets or the amount of progress the pupils make towards some specific goals of the education. In the present study teacher effectiveness is defined in terms of the scores obtained by a teacher characteristic description form (TLDF) devised by Arora (1978). This comprises of the following factors:

- 2.1 have accurate knowledge of the subject;
- 2.2 have ability to bring the subject matter to the level of students' understanding;
- 2.3 explain the topics clearly;
- 2.4 make clear presentation of the subject matter;
- 2.5 organize subject matter systematically;
- 2.6 have self-confidence;
- 2.7 have ability of expression;

- 2.8 have skill in stimulation of interest and motivation of the students;
- 2.9 have sense of duty and responsibility;
- 2.10 pleasant and distinct voice;
- 2.11 plan and prepare his lessons; and
- 2.12 have good health.

3. Job Satisfaction:

It is the quality, state or the level of satisfaction which is a result of various interests and attitudes of a person towards his/her job. In other words, the attitude a worker has towards his job, sometimes expressed as a hedonic response of liking and disliking the work itself, the rewards (pay, promotions, recognition) or the context (working conditions, benefits). Job satisfaction is defined as a "favourable feeling or psychological condition of a person towards his/her job situation. Job satisfaction is brought about by many factors including the attitudes". The latter half of the definition is similar to the one given by Blum and Naylor (1968). The present study has used the definition of Blum and Naylor.

4. Academic Performance:

Academic performance is the knowledge attained or skills developed in the school subjects, usually designated by the marks assigned by teachers or on evaluating the pupil's papers written during a final examination. For the present

study, the marks obtained by the student in the annual examination conducted by the school in all the subjects have been taken to indicate the academic performance.

5. Primary School Students: consist of the students of class IV and V.

6. Type of School:

There are schools maintained by (a) the central government, (b) the state governments, (c) direct beneficiaries (students paying fees), (d) religious and charitable institutions, and (e) private agencies. Each of these different types of schools has its own unique organizational problem and its own particular structural arrangements which influence the management of the system, the effectiveness of teachers, students' growth, competence, etc. For the purpose of the present study only four different types of schools will be taken. These are public school, missionary school, government school and the municipal school.

Variables:

The following variables will be studied:

Independent Variable:

1. Organizational climate (as scored on Sharma's OCDQ).
2. Teacher Effectiveness (as scored on Arora's TCDF).
3. Job Satisfaction (as scored on Indiresan's JSI).

Dependent Variable:

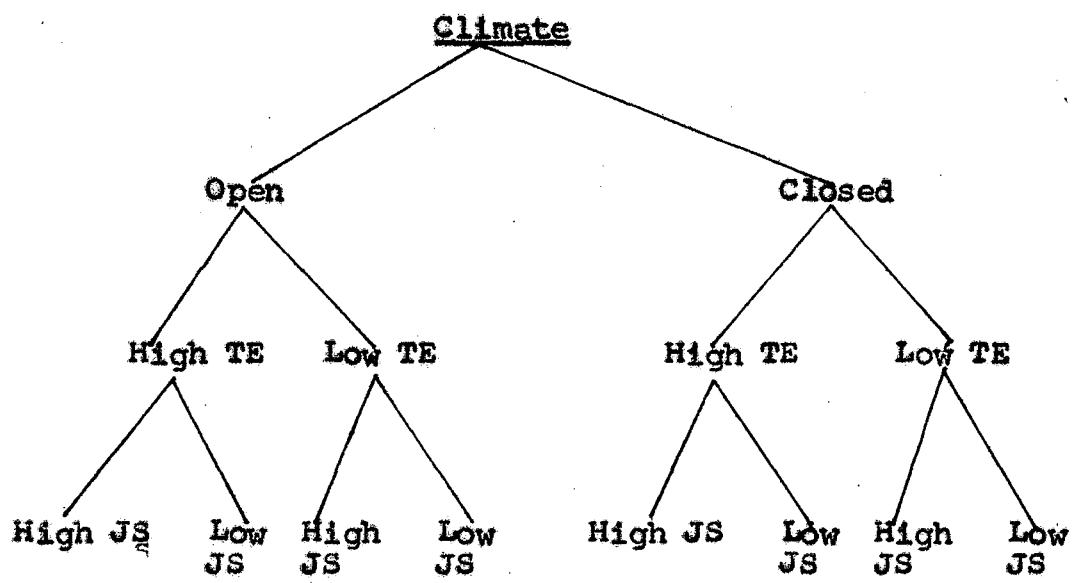
The dependent variable is the academic performance of the students securing the marks in their annual examination as obtained from the school record. The performance of the student will thus be studied in terms of the above three independent variables.

Research Design:

The following Research Designs were used to test the hypotheses 1 to 5.

To test hypothesis-1, the mean and standard deviation of the academic performance of students of classes IV and V, respectively were calculated for each school. The obtained differences were subjected to t-test to ascertain if the academic performance of students differed in terms of the types of school. For this purpose, both overall scores and subject marks were considered separately.

To test hypothesis-2, a 2x2x2 analysis of variance design was used with organizational climate at 2 levels (open and closed), Teacher Effectiveness at 2 levels (high TE and low TE) and job satisfaction of teachers at two levels (high JS and low JS). The research design was as follows for class IV and V separately.



← ACADEMIC PERFORMANCE OF STUDENTS →

3. The correlations between Teacher Effectiveness and Job Satisfaction were calculated by using Product Moment Co-efficient of Correlation.

Sampling: A total of four schools was selected for the study. Six hundred eighteen (618) students of classes IV and V (309 from class IV and 309 from class V) have been selected randomly, i.e. 124 students each from class IV and V from the missionary school, 107 students each from classes IV and V from the government school and 38 students each from class IV and V from the municipal school. Only class IV and V students were chosen for the study because the final examination (promotion examination) was held only for these two classes at the primary level and not for classes I, II and III.

Teacher Sample: As in both class IV and V, the students study five subjects in all; accordingly there are five teachers who are directly involved in teaching-learning process of the concerned subjects such as mathematics, science, English, social studies and Oriya. Thus the sample of teachers constitutes of forty (40) teachers, of which ten (10) were from each type of school.

Regarding the academic performance of the students the marks obtained are the final examination marks, from the

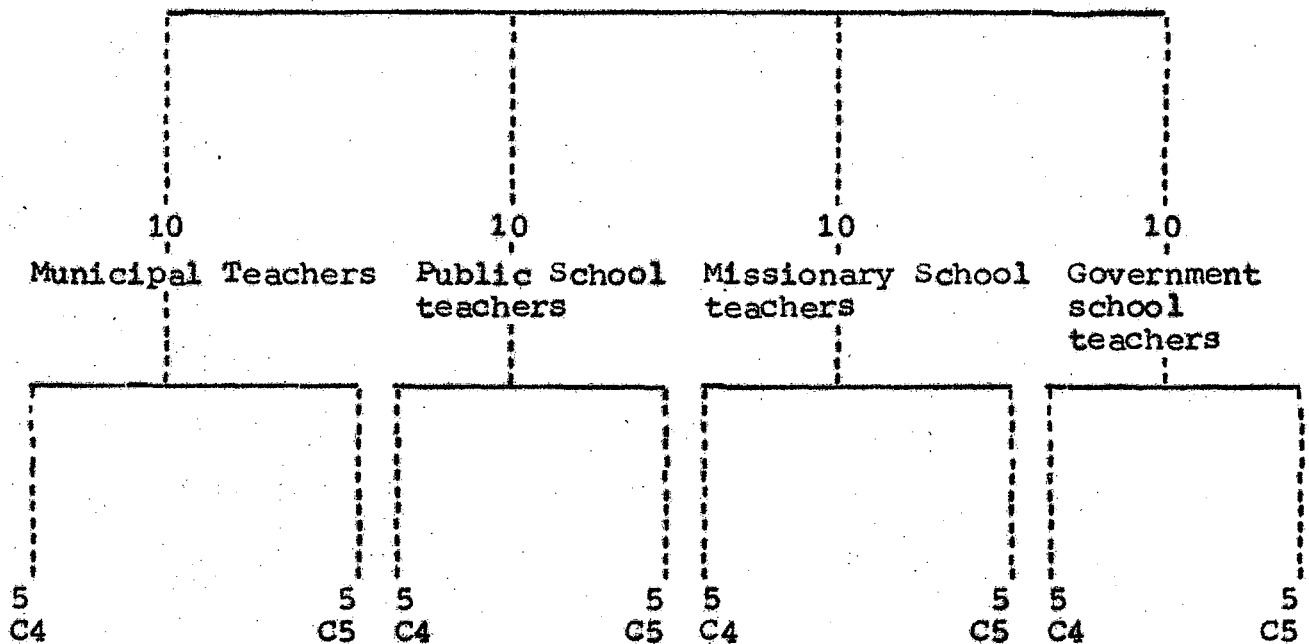
school record. The samples are diagrammatically presented in the figures 1 and 2 below:

Figure 1

A DIAGRAMMATICAL PRESENTATION OF THE TEACHERS SAMPLE:

N : 40 School Teachers

TEACHERS' SAMPLE



C₄ = Class IV

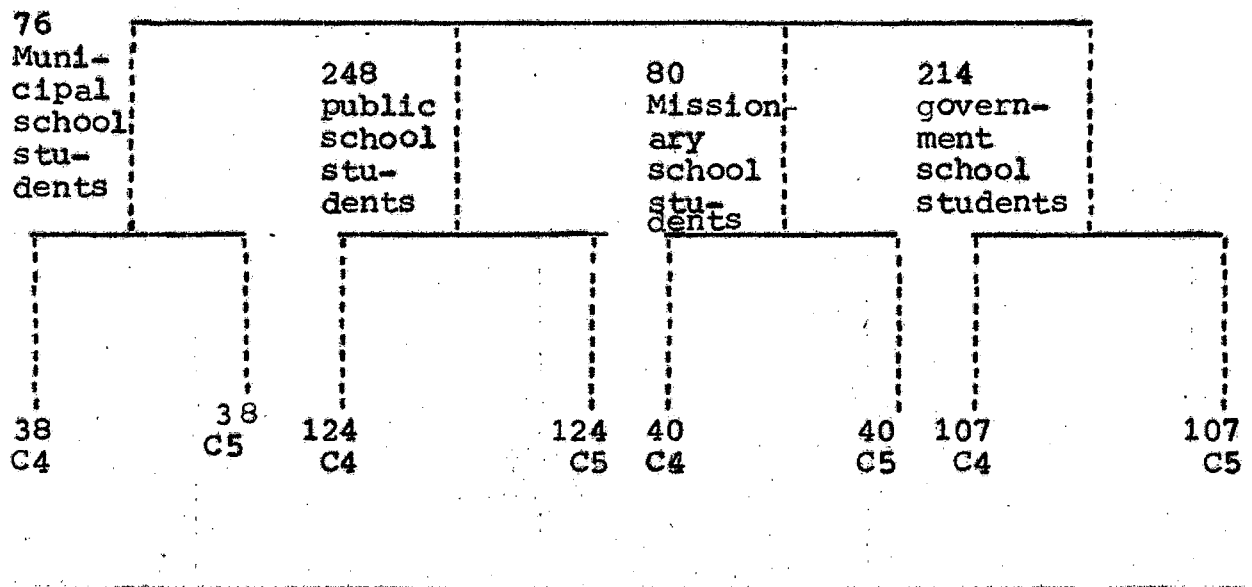
C₅ = Class V

Figure 2

A DIAGRAMATIC PRESENTATION OF THE STUDENTS' SAMPLE

N = 618 Primary School Students

STUDENTS' SAMPLE

C₄ = Class IVC₅ = Class VTool Used:1. Organizational Climate:

For assessing the organizational climate of the school, organizational climate description questionnaire (OCDQ) devised by Sharma (1973) were given to the schools, to be filled up by the Headmaster/Principal of the concerned school. (Appendix-III)

The analysis of OCDQ at item level (64 modified items) resulted in eight (8) dimensions of organizational climate as was the case in the study of Halpin and Crofts (1963). The 4 common dimensions identified by Halpin and Crofts, and the present author like - (1) Disengagement, (2) Espirit, (3) Intimacy, and (4) producti^{on} emphasis.

In all there are 64 likert type items distributed over 8 dimensions (sub-tests). The respondents are asked to indicate the extent to which each statement characterizes per school. The scale against which the respondents indicate the extent to which each statement characterized their schools are defined by 4 categories - (1) rarely occurs, (2) sometimes occurs, (3) often occurs, and (4) very often occurs. For scoring these 4 categories of responses are assigned 4 successive integers viz. 1, 2, 3 and 4, respectively.

2. Teacher Effectiveness Scale

For measuring the effectiveness of the teachers characteristic description form (TLDF) devised by Arora (1973) were given to the teachers. (Appendix - I)

A teacher characteristic description form (TLDF) consists of the characteristics associated with effective teachers, were described. It had three columns under the headings, (i) indispensable, (ii) desirable, and (iii) not important against each characteristics. In this TLDF, a teacher must have all the characteristics considered to be indispensable and as many as possible of those three considered desirable for being regarded

as an effective teacher. On the other hand, the ineffective teacher would be the one who had least number of indispensable and desirable characteristics.

The analysis of TLDF (Teacher Characteristic Description Form) at item level (51 items) resulted in 6 dimensions of Teacher Effectiveness/characteristics as was the case in the study of Arora (1973). The 6 dimensions identified by Arora, like (1) personal characteristics, (2) professional characteristics, (3) academic background and scholarship, (4) pupil-teacher relationship, (5) class-room management and discipline, and (6) miscellaneous.

In all there are ~~50~~ 51 items, distributed over six dimensions (sub-tests) described earlier. The respondents are asked to indicate the extent to which each statement, characterises for the individual himself. The scale against which the respondents indicate the extent to which each statement characterized the individual himself are defined by 3 categories - (1) I do so most of the times/indispensable, (2) I do so part of the time/desirable, and (3) I don't care much for this/not important. For scoring these 3 categories of responses are assigned 3 successive integers viz. 3, 2, 1, respectively.

3. Job Satisfaction:

The tool for measuring the teachers' job satisfaction was done by the job satisfaction inventory (JSI) devised by Indiresan (1973). (Appendix-I)

+ The job satisfaction inventory (JSI) consists of 29 items. It had five columns under the headings, (i) very much less than what it should be, (ii) less than what it should be, (iii) just what it should be, (iv) more than what it should be, (v) very much more than what it should be against each characteristic.

The analysis of job satisfaction inventory (JSI) at item level (29 levels) as was done in the study of Indiresan (1973). The JSI mainly consists of these factors: pay, opportunity for advancement, supervision, co-workers, organization policy and management, working conditions, recognition, achievement and independence. It is a 5-point likert type of scale. For scoring these 5 categories of responses, as mentioned earlier, are assigned 5 successive integers viz. 1,2,3,4 and 5.

Procedure:

Out of the three questionnaires as mentioned above, two questionnaires, one on the effectiveness of teachers and another on the job satisfaction of teachers were given to teachers to be filled in by them personally. For ascertaining the organizational climate OGDQ was given to the Headmaster/Principal of the concerned school for their rating. The instructions given were as exactly as given in the concerned instruments.

It is important to mention that the TE scale which was given to the teachers to fill up, to be sure of the correctness,

of teacher's self-evaluation, the same scale was given to the headmasters of the schools, requesting them to fill up the TE scale for each teacher as he would rate them. A correlational analysis was carried out between the teachers' evaluation of themselves and the headmaster's evaluation of the teachers. Since there was a high positive correlation ($r = .90$) between their evaluations, the teachers' rating of themselves alone was taken up for further analysis.

Statistical Technique:

1. $2 \times 2 \times 2$ factorial design analysis was carried out with organizational climate at 2 levels (open/closed climate), teacher effectiveness at 2 levels (high-low effectiveness) and job satisfaction at 2 levels (high/low job satisfaction) to ascertain if the academic performance varied in terms of (i) organizational climate, (ii) level of teacher effectiveness, and (iii) level of job satisfaction and the interaction between the three. This was done for each of the four schools separately.
2. One way Analysis of Variance (ANOVA) was applied to find out whether there exists any difference in terms of academic performance of different type of schools in both the classes i.e. IV and V.
3. The t-test was used to ascertain whether there exists any difference in the mean academic performance of the students in terms of levels of teacher effectiveness and

their job satisfaction as well as in different subjects.

4. Pearson Product Moment Coefficient of Correlation was used to ascertain the relationship between teacher effectiveness and their job satisfaction.

5. To find out the averages in teacher effectiveness and academic performance, mean, SD, and Mcomb have been computed.

CHAPTER IV

ANALYSIS

ANALYSIS

Having discussed the methodology in the previous chapter, results of the analysis of data are presented in the following sections. To recapitulate, the present study set out to ascertain the teacher effectiveness, job satisfaction and the organizational climate of the schools and their effect on the academic performance of class IV and V students belonging to four different types of school, namely, the Municipal, Public, Missionary and the Government schools. As mentioned elsewhere the academic performance of the students was the marks obtained by each one of them in their examination held in the month of December 1985.

The teacher effectiveness inventory, namely, Teacher Characteristics Description Form (TCDF) by Arora (1978) was administered to find out the level of teacher effectiveness (TE). Job satisfaction scores of the teachers were obtained by administering the job satisfaction inventory (Indiresan, 1973), and the organizational climate scores of the schools were determined by applying the Organizational Climate Description Questionnaire (OCDQ) by Sharma (1973), a modified version of the OCDQ of Halpin and Crofts (1963).

To test the hypothesis-1, namely, the academic performance, will vary with the type of school in which a pupil studies the half yearly examination marks secured by the students of class IV and V in all subjects were obtained individually and the means were calculated. Table 1 presents the results of class IV and V students.

TABLE 1

MEAN OF THE ACADEMIC PERFORMANCE OF STUDENTS IN
BOTH THE CLASSES

Subjects	Public		Missionary		Government		Municipal	
	IV	V	IV	V	IV	V	IV	V
Maths	74.0	76.63	65.0	71.85	64.98	65.43	44.14	50.47
English	52.87	57.20	46.56	44.85	44.63	43.25	33.51	34.64
Science	60.19	61.33	46.93	44.3	50.53	47.43	37.89	40.8
Oriya	51.44	54.81	46.9	47.55	41.16	40.95	32.79	35.8
Social Studies	55.51	59.34	49.38	47.58	51.18	45.93	38.52	40.56
Total	294.01	309.31	254.77	256.13	252.48	242.99	186.85	202.21
Mean of Aca.per- formance	58.8	61.86	50.95	51.23	50.5	48.6	37.37	40.44

Since the academic performance appeared to differ from school to school among both the class IV and V students, the same was subjected to a one-way Analysis of Variance (ANOVA) separately for class IV and V students in order to ascertain if there is any difference in the performance of the students of class IV and V in terms of the schools in which they were studying.

The total marks, mean, SD and range of class IV marks obtained by the students of 4 different types of schools are given in Table 2 and the summary of ANOVA in Table 3/and Fig.1. respectively

Fig-1

ACADEMIC PERFORMANCE OF STUDENTS IN VARIOUS SUBJECTS

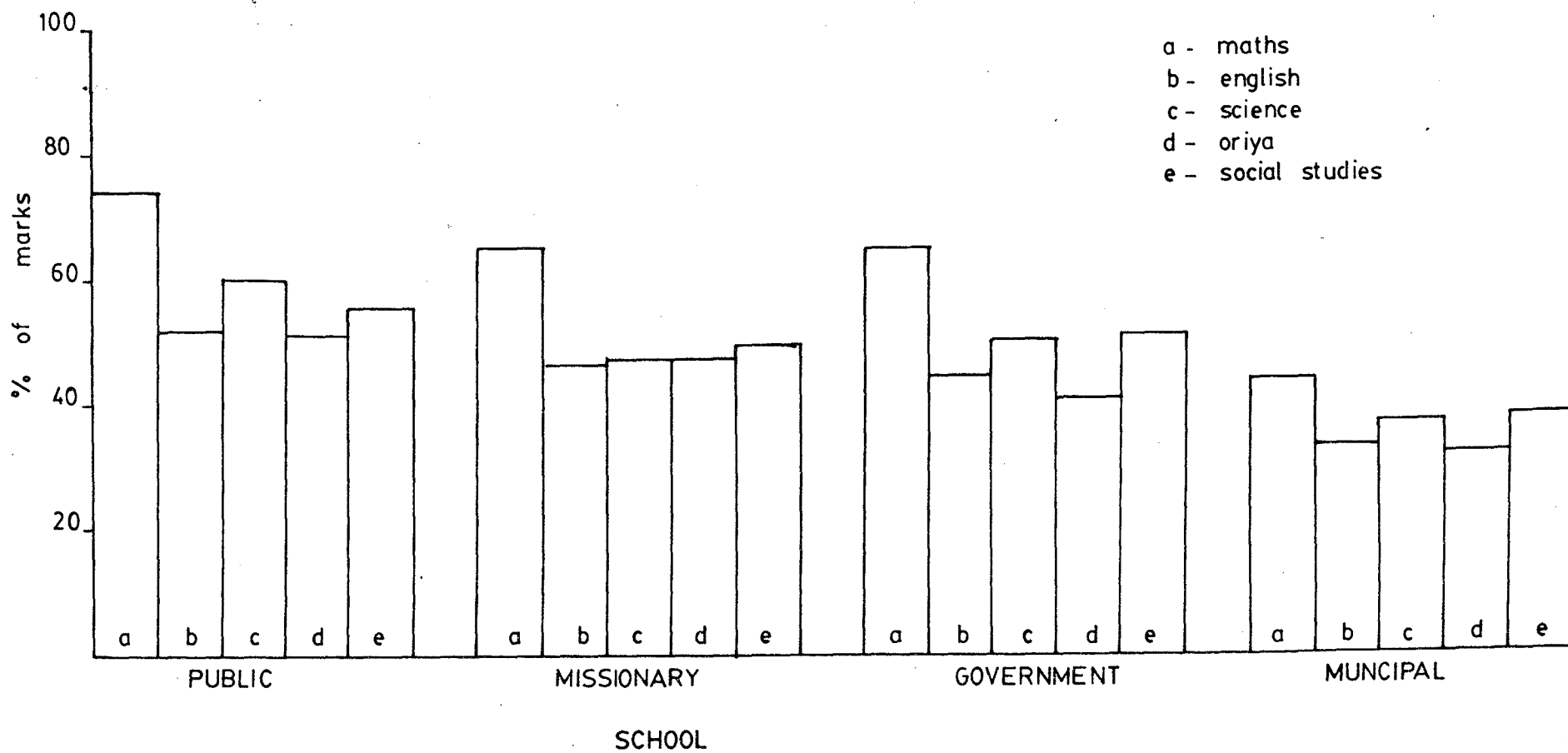


TABLE 2

MEAN, SD AND RANGE OF ACADEMIC PERFORMANCE OF
STUDENTS OF CLASS IV IN THE FOUR TYPES OF SCHOOL

School	Total marks mean	Total marks SD	Range
Public	293.45	28.08	252-335
Missionary	251.87	25.7	230-305
Government	248.67	27.29	220-285
Municipal	184.55	25.46	150-225

TABLE 3

SUMMARY OF ANOVA FOR CLASS IV STUDENTS ACADEMIC
PERFORMANCE

Sources of Variance	df.	Sum of squares	Mean sum of squares	F	P
Between the means of the school	3	445414.27	148471.72		
Within the School	305	2428335.01	7961.75		18.65 (P < .01)
Total	308	2873749.28	156433.47		

Similarly, the academic performance of class V students for all the four different types of schools was subjected to ANOVA, to find out if there was a difference in the performance of students of class V in terms of the schools in which they were studying. The total mean, SD and range of marks obtained by the students of class V is presented in Table 4 and the results of ANOVA are presented in Table 5.

TABLE 4

TOTAL MEAN, SD AND RANGE OF ACADEMIC PERFORMANCE OF STUDENTS OF CLASS V IN THE FOUR TYPES OF SCHOOL

Schools	Total marks Mean	Total marks SD	Range
Public	308.67	21.44	271-350
Missionary	259.31	25.7	232-315
Government	246.99	20.87	218-305
Municipal	200.58	29.37	175-250

TABLE 5

SUMMARY OF ANOVA FOR CLASS V STUDENTS ACADEMIC PERFORMANCE

Sources of Variance	Df.	Sum of squares	Mean sum of square	F
Between the means of the school	3	35112.41	117050.8	52.44
Within the school	305	1680814.21	2232.18	(P < .01)
Total:	308	1715926.62		

From the above analyses in Tables 2,3,4 and 5 following conclusions emerged:

1. There is a significant difference in the performance of students of both class IV and V in terms of the schools in which they study, viz: municipal, public, missionary and government schools. Figure 2 substantiates the above finding.
2. Those who were from the public school have obtained significantly higher marks in their academic subjects than those from missionary, government and municipal schools.

Since the F value of the academic performance scores between the schools in the two classes, i.e. class IV and V was found to be highly significant, an attempt was made to find out, by applying the 't' test to ascertain which of the

schools specifically differed in ^{student's} performance. Table 6 presents the total mean, SD, N and t values of academic performance of the students in class IV and V of the 4 different types of schools.

TABLE 6

MARKS
TOTAL MEAN / SD, N AND t VALUES OF ACADEMIC PERFORMANCE
SCORES OF CLASS IV AND V STUDENTS IN FOUR TYPES OF SCHOOL

Schools	Public		Missionary		Government		Municipal	
	IV	V	IV	V	IV	V	IV	V
M	293.45	308.67	251.87	259.31	248.67	246.99	184.55	200.58
SD	28.08	21.44	25.7	25.7	27.29	20.87	25.46	29.37
N	124	124	40	40	107	107	38	38
t value								
Public			8.70	10.65	12.30	19.33	22.55	21.08
			(P<.01)	(P<.01)	(P<.01)	(P<.01)	(P<.01)	(P<.01)
Missionary			6611	2.67	11.62	9.23		
			(N.S.)	(P<.01)	(P<.01)	(P<.01)		
Government					13.08	8.93		
					(P<.01)	(P<.01)		
Municipal								

From the above table one may infer the following:

- (1) Public school students' academic performance in both classes IV and V was significantly higher than that of students from all other schools, namely, missionary, government and municipal schools.
- (2) The academic performance scores of the missionary and government school students in class IV did not differ significantly even though the latter showed relatively poorer performance than those of the missionary school. However, in class V there was a significantly better academic performance of missionary school than government school students.
- (3) The trend of highest performance being that of the public school students and lowest performance being that of the municipal school students appears to be maintained irrespective of classes IV and V in which a child studied.

Performance in Individual Subjects and Types of School:

Since the overall performance of students differed in terms of the different types of school, it was considered worthwhile to ascertain if these differences were obtained in terms of academic performances in each of the subject courses for the four different types of school. Tables, 7, 8, 9, 10 and 11 represent the Mean, SD, N and t matrix for five different subjects, i.e. Mathematics, English, Science, Oriya and Social Studies in four different types of school.

Mean, SD, N and t Values of Marks Obtained in
different subjects of Class IV and V students

TABLE 7 (MATHEMATICS)

Schools	Public		Missionary		Government		Missionary	
	IV	V	IV	V	IV	V	IV	V
M	74.0	76.63	65.0	71.85	64.98	65.43	44.14	50.41
SD	16.93	16.12	20.1	14.5	20.24	14.79	20.21	20.21
N	124	124	40	40	107	107	38	38
Public			2.55 (P<.05)	1.75 (N.S.)	3.64 (P<.01)	5.44 (P<.01)	8.27 (P<.01)	7.20 (P<.01)
Missionary					0.19 (NS)	2.39 (P<.01)	4.91 (P<.01)	5.32 (P<.01)
Government							5.45 (P<.01)	4.15 (P<.01)

TABLE 8 (ENGLISH)

Schools	Public		Missionary		Government		Missionary	
	IV	V	IV	V	IV	V	IV	V
M	52.87	57.20	46.56	44.85	44.63	43.25	33.51	34.64
SD	13.50	14.13	18.06	11.6	16.09	10.72	12.16	15.14
N	124	124	40	40	107	107	38	38
Public			2.56 (P<.01)	5.56 (P<.01)	4.16 (P<.01)	8.55 (P<.01)	8.32 (P<.01)	8.17 (P<.01)
Missionary					2.42 (P<.05)	0.76 (N.S.)	3.08 (P<.01)	3.34 (P<.01)
Government							4.43 (P<.01)	3.24 (P<.01)

TABLE 11 : (SOCIAL STUDIES)

Schools	Public		Missionary		Government		Municipal	
	IV	V	IV	V	IV	V	IV	V
M	55.51	59.34	49.38	47.58	51.18	45.93	38.52	40.56
SD	14.42	14.51	18.69	12.01	14.27	9.23	12.53	15.29
N	124	124	40	40	107	107	38	38
Public			1.91 (N.S.)	5.11 (P<.01)	2.29 (P<.05)	8.54 (P<.01)	7.05 (P<.01)	6.70 (P<.01)
Missionary					0.55 (N.S.)	0.56 (N.S.)	3.04 (N.S.)	2.24 (P<.05)
Government							5.15 (P<.01)	2.03 (P<.05)
Municipal								

From the above tables, the following conclusions emerge:

Mathematics

1. In Mathematics, the trend of highest to lowest marks is obtained by the public, missionary, government and municipal school in that order respectively as was observed in the case of overall marks percentage.
2. However, in class IV, the difference in the marks obtained between missionary and the government school is not significant. In other words, the performance of the students in the mathematics subject is more or less the same for missionary and government school students of class IV. This appears to be in line with the overall percentage discussed in the previous section.

3. In the case of class V students there is no statistically significant difference in the marks obtained in mathematics by the students of public and missionary schools. In other words, the performance of students in mathematics is more or less the same for public and missionary school students of class V. Excepting the above two (almost similar performances in mathematics between missionary and government schools (class IV) and missionary and public school (class V)); in all other cases the trend of public school students scoring the highest marks in mathematics, followed by missionary, government and municipal schools had been maintained.

English

4. In the English subject also the trend of highest to lowest marks being obtained by the public, missionary, government and municipal school is maintained as obtained in the case of overall percentage of marks.
5. However, in class V, the differences in English marks obtained between missionary and government schools is not statistically significant. In other words, the performances of the students in English is more or less the same for government and missionary school for class V. Between students of class IV and V, within the same school, it is interesting to note that only in public school, class V students have scored higher than class IV students, whereas in the other three schools the latter's performance appears superior to that of class V

students. Furthermore, only the students of public school have scored above 50 per cent in English, whereas the students of the other three schools have scored only less than 50 per cent.

Science (Fig.1)

6. In science subject the trend of highest to lowest performance of the school changes slightly with public school students having the highest score, but followed by the government school, then by the missionary school with the tail-end being brought up by the municipal school.
7. However, the performance of class IV students in science subject is more or less similar for the missionary school and the government school.
8. Similarly, the performance of class V students in science is more or less similar between the municipal and missionary school students.
9. Thus in the science subject, there appears relatively more similar performance amongst the students of the different types of school as compared to the mathematics subject.

Oriya

10. In Oriya literature subject, the trend of highest and lowest being maintained by the public, missionary, government and municipal schools is similar to the one obtained in the case of overall percentage of marks.

11. However, the performance of class IV students in Oriya subject is more or less similar, for the public and missionary school.

Social studies

12. In the subject of social studies, the academic performance of schools in terms of highest to lowest again changes slightly with government school taking the second position and the missionary school taking the third position. with the public school maintaining the first/^{position.}
13. However, the order of schools in terms of highest and lowest is maintained in class V with highest marks being obtained by the public school followed by the missionary, government and municipal school in that order.

To summarize the above analysis on academic performance of students it may be stated that there is by and large a consistency maintained amongst the performance of the students, belonging to different types of school, that is, the public school being at the top of the performance ladder followed by the missionary, government and municipal school irrespective of class IV and V. Only in case of missionary and government schools the position fluctuates sometimes with missionary school getting the second position in some subjects and the government school the second position on certain other subjects. In most subjects, there is also no statistically significant difference between the performance of these two schools, though

one may have shown slightly higher performance than the other. This result validated the hypothesis number 1, which states that the academic performance of the students will differ significantly amongst the students belonging to different types of schools. Specifically, the performance of students (of class IV and V) from public school will be significantly higher than those from the missionary, government and municipal schools.

✓ Since the performance of the students was found to be significantly different both in overall scores and subject-wise scores in terms of the type of school, it was suggestive of the fact that academic performance may not only ^{be} influenced by type of school but also by various other factors existing differentially in different schools, such as the organizational climate that exists in schools, the Teacher Effectiveness (TE) and Job Satisfaction (JS) of teachers.

Academic Performance and other factors:

To ascertain if academic performance varies in terms of the three factors mentioned above, such as climate in schools, teacher effectiveness and satisfaction on the job, a 2x2x2 factorial design with OC at 2 levels (open and close), TE at 2 levels (high and low TE) and JS (high and low JS) at 2 levels, was used to test the hypothesis-2, which reads as follows:

Differential level of organizational climate, teacher effectiveness and job satisfaction individually and in varying combinations, will differentially affect the academic performance of the students.

Table 12 presents the summary of 2x2x2 factorial design pertaining to class IV students' academic performance in terms of organizational climate, teacher effectiveness and job satisfaction of teachers of four different types of school.

TABLE 12
SUMMARY OF ANOVA FOR CLASS IV

Sources of variation	Sum of squares	df	Mean sum of square	F Value	P value
A: Organizational Climate (OC)	110601.19	1	110601.19	453.14	<.001
B: Teacher Effectiveness (TE)	23212.0	1	23212.0	95.12	<.001
C: Job Satisfaction (JS)	3275.84	1	3275.84	13.42	<.001
A&B: OCxTE	15037.5	1	15037.5	61.61	<.001
A&C: OCxJS	122370.55	1	122370.55	501.37	<.001
B&C: TExJS	5235.17	1	5235.17	21.45	<.001
AxBxC:OCxTExJS	107494.91	1	107494.91	440.43	<.001
Error: Within the treatments	375135.9	1537	244.07		
Total	762364.06	1544			

A similar analysis as above was carried out also for class V students' academic performance. Table 13 presents the summary of 2x2x2 factorial design of class V students' performance pertaining to their school climate, teacher effectiveness and job satisfaction.

TABLE 13
SUMMARY OF ANOVA FOR CLASS V

Sources of variation	Sum of squares	df	Mean sum of squares	F Value	P Value
A: Organizational Climate (OC)	60165.4	1	60165.4	577.24	<.001
B: Teacher Effectiveness (TE)	59673.4	1	59673.4	572.52	<.001
C: Job Satisfaction (JS)	14572.9	1	14572.9	139.81	<.001
AxB: OCxTE	35879.06	1	35879.06	344.23	<.001
AxC: OCxJS	14542.14	1	14542.14	139.52	<.001
BxC: TExJS	12476.7	1	12476.7	119.7	<.001
AxBxC: OCxTExJS	67559.4	1	67559.4	648.23	<.001
Error: Within the Treatments	160204.6	1537	104.23		
Total:	475073.6	1544			

The following conclusions emerge from the analysis presented in Tables 12 and 13:

1. ✓ The academic performance of the students varies significantly in terms of the school climate.
2. The academic performance of students varies significantly in terms of teacher effectiveness.
3. ✓ The academic performance of the students varies in terms of different levels of job satisfaction.
4. The interaction effect of the school climate with the teacher effectiveness (TE) is found to be significant at .01 level of confidence. This means a particular school climate in combination with a particular level of teacher effectiveness may influence the academic performance of the students.
5. The interaction of school climate with the job satisfaction (JS) of teachers is found to be significant at .01 level of confidence. In other words a particular school climate when combined with a certain level of job satisfaction (JS) significantly influences the academic performance of the students.
6. The interaction effect of teacher effectiveness and job satisfaction is also found to be significant at .01 level of confidence. That is a particular level of teacher effectiveness and a certain type of job satisfaction may influence the academic performance of the students.
7. There is a significant interaction effect amongst the three factors, viz. organizational climate, teacher effectiveness and the job satisfaction. This indicates

that if a child studies in a school with a certain organizational climate, where the teacher has a certain level of effectiveness in teaching and a certain level of satisfaction with his job, the academic performance of the child will be significantly influenced.

In summary one could conclude that the performance of students had varied significantly in terms of (a) organizational climate, (b) teacher effectiveness, (c) job satisfaction, (d) organizational climate and teacher effectiveness, (e) organizational climate and teacher job satisfaction, (f) teacher effectiveness and job satisfaction, (g) organizational climate, teacher effectiveness and job satisfaction.

The above findings have clearly validated the second hypothesis which stated that, differential levels of organizational climate: teacher effectiveness and teachers' job satisfaction will individually and in varying combinations (interaction effect) will affect the academic performance of students differentially.

The following section presents the specific trends in the above results:

Academic Performance and Organizational Climate:

When the academic performance of students was seen in terms of the two types of climate (open and closed) in the 4 types of schools, the following picture emerged: The table

below presents the organizational climate scores and the mean academic performances of the students in 4 types of schools.

TABLE 14

ORGANIZATIONAL CLIMATE SCORES AND MEAN ACADEMIC PERFORMANCE OF STUDENTS OF FOUR TYPES OF SCHOOLS

Schools	Organizational climate scores	Climate description	Mean of students academic performance	
			IV	V
Public	358.63	Open	294.01	309.13
Missionary	437.63	Closed	254.77	256.13
Government	349.96	Open	252.85	242.99
Municipal	469.06	Closed	186.85	202.21

As is observed in Table 14 and Figure 2), it is clearly evident that public schools and government schools have open climate and the missionary and municipal schools have closed climate.

As for the academic performance of students of class IV and V, the same appears to vary in terms of the different school climates. To ascertain if these differences are statistically significant the t values were computed for the academic performance

of students of class IV and V separately in terms of open and closed climate. The mean, SD and t values of students' academic performances in the 2 types of school climates, respectively, for class IV and V are presented in Tables 15 and 16 below:

TABLE 15

MEAN, SD, N AND t VALUES OF THE ACADEMIC PERFORMANCE OF CLASS IV STUDENTS IN TERMS OF ORGANIZATIONAL CLIMATE

Climate	Mean	SD	N	t	Inferences
Open	268.46	57.68	231	7.97	P < .01
Closed	216.48	46.82	78		

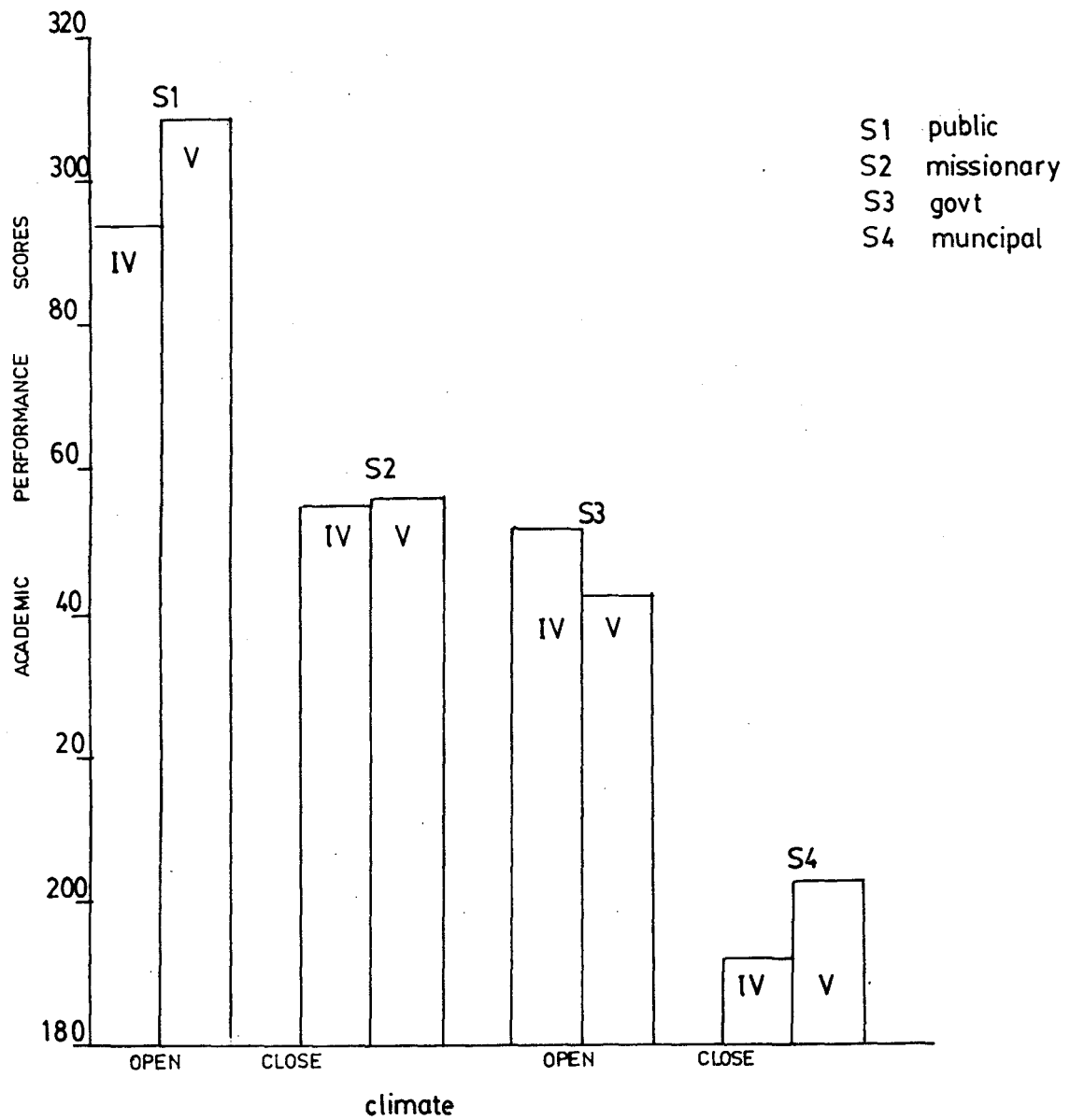
TABLE 16

MEAN, SD, N AND t VALUES OF THE ACADEMIC PERFORMANCE OF CLASS V STUDENTS IN TERMS OF ORGANIZATIONAL CLIMATE

Climate	Mean	SD	N	t	Inferences
Open	272.15	58.27	231	6.96	P < .01
Closed	224.68	49.82	78		

Fig-2

AP IN DIFFERENT TYPES OF SCHOOL CLIMATE



From the above tables, one may conclude that the students of both classes IV and V coming from schools with open climate have shown significantly higher academic performance as compared to students coming from a closed climate school. ✓

Teacher Effectiveness and Students'
Academic Performance

∩ To recaptulate (as mentioned in the Methodology chapter) the Teacher Effectiveness (TE) was ascertained by administering Teacher Characteristic Description Form (TCDF) by Arora (1973). The obtained teacher effectiveness scores for each school were then classified into high teacher effectiveness (HTE) and low teacher effectiveness (LTE) scores based on the combined mean (details presented in the Methodology chapter).

Table 17 below presents the mean Teacher Effectiveness scores for the teachers of four schools (detailed individual scores of teacher effectiveness scores are given in the appendix). ↵

TABLE 17

TYPE OF SCHOOL AND THE MEAN TEACHER EFFECTIVENESS
SCORES

Schools	Mean of TE Scores
Public	130.9
Missionary	127.5
Government	124.15
Municipal	110.65

As is observed from the above Table, the mean Teacher Effectiveness scores of the public school teachers were found to be relatively higher than those of missionary school, government school and municipal school teachers in that order. These Teacher Effectiveness scores were then categorized into high TE and low TE scores on the basis of the combined mean of TE for all teachers of four schools.

Tables 18 and 19 present the Mean academic performance and its SD, N and t value of classes IV and V students respectively in terms of high effective (HE) and low effective (LE) teachers.

Fig-3

MEAN OF T.E. SCORES IN DIFFERENT TYPES OF SCHOOL

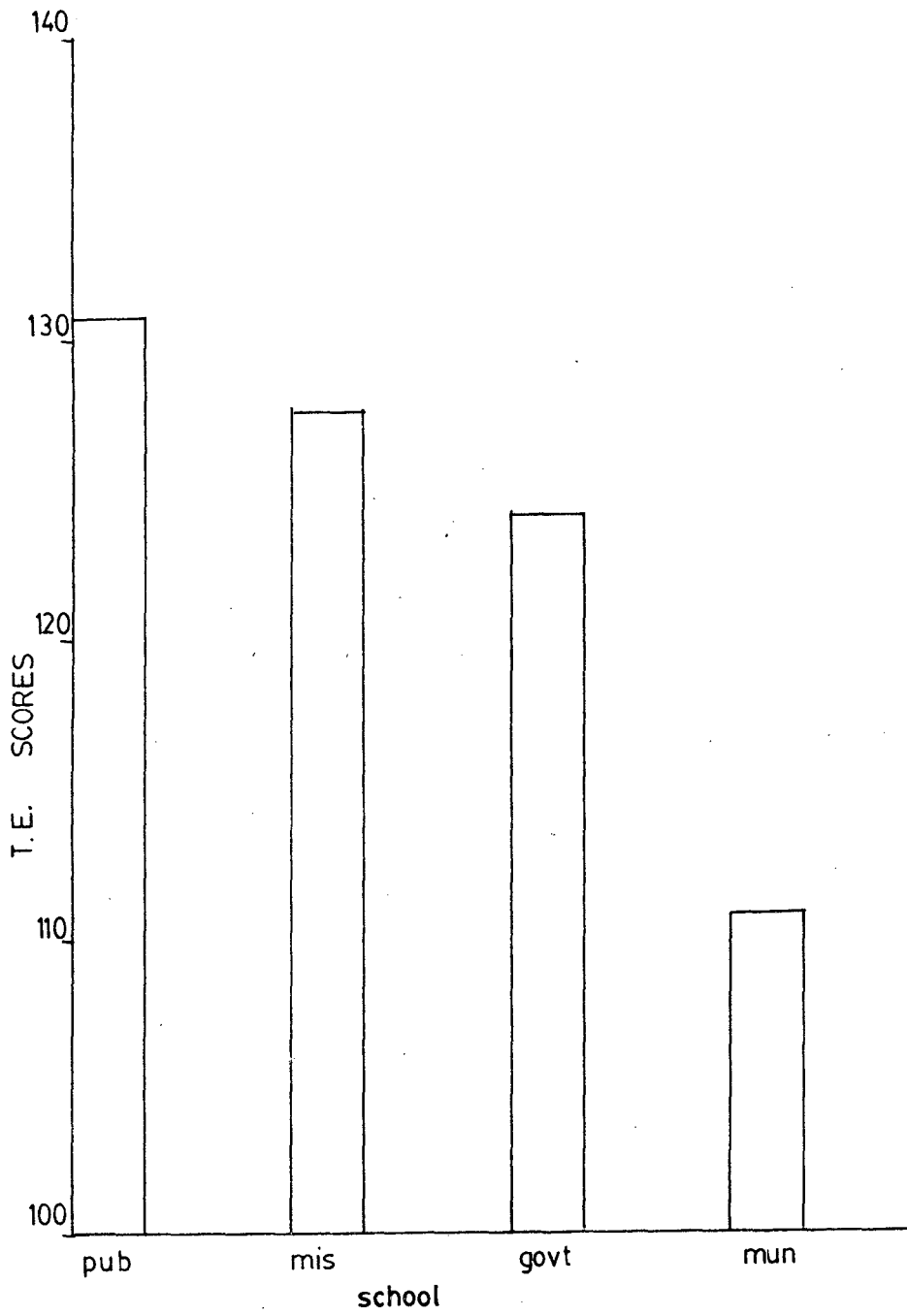


TABLE 19

COMBINED MEAN, SD, N AND t VALUES OF THE CLASS IV STUDENTS' ACADEMIC PERFORMANCE IN TERMS OF H.E. AND L.E. TEACHERS

Teachers	M	SD	N	t	Inferences
H.E.	54.81	18.66	923		
$M_{\text{comb}} = 121.55$				13.19	$P < .01$
L.E.	42.79	16.75	622		

TABLE 20

COMBINED MEAN, SD, N AND t VALUES OF THE CLASS V STUDENTS' ACADEMIC PERFORMANCE IN TERMS OF THE H.E. AND L.E. TEACHERS

Teachers	M	SD	N	t	Inferences
H.E.	55.62	17.75	856		
$M_{\text{comb}} = 120.05$				13.84	$P < .01$
L.E.	44.13	14.78	689		

From the above tables the following conclusions emerge:

There exists a significant difference in the academic performance of the students taught by the H.E. and L.E. teachers, irrespective of the type of school. This finding holds good for both classes IV and V students. In other words when all schools were considered together, students under the high effective teachers have secured in the subjects concerned

significantly higher marks than those studying under the low effective teachers.

An attempt has also been made to find out if similar results would be obtained in the academic performance of students, if the high and low effective teachers' effect on AP is considered separately for each school.

& Fig.4 & 5

Tables 20 and 21 present the Mean, SD, N and t values of academic performance of class IV and V students in terms of H.E. and L.E. teachers in the four schools.

TABLE 20

MEAN OF ACADEMIC PERFORMANCE, SD, N AND t OF CLASS IV STUDENTS IN TERMS OF TYPE OF SCHOOL AND TEACHERS EFFECTIVENESS

School	M	SD	N	t	Inferences
Public:					
HE	62.03	17.66	124	4.44	P < .01
LE	53.48	13.65	124		
Missionary:					
HE	53.76	16.14	40	1.97	P < .05
LE	46.75	15.82	40		
Government:					
HE	57.76	20.31	107	5.02	P < .01
LE	45.66	14.52	107		
Municipal:					
HE	41.33	17.05	38	1.98	P < .05
LE	34.71	14.09	38		

Fig-4

TEACHER EFFECTIVENESS & ACADEMIC PERFORMANCE (IN CLASS IV)

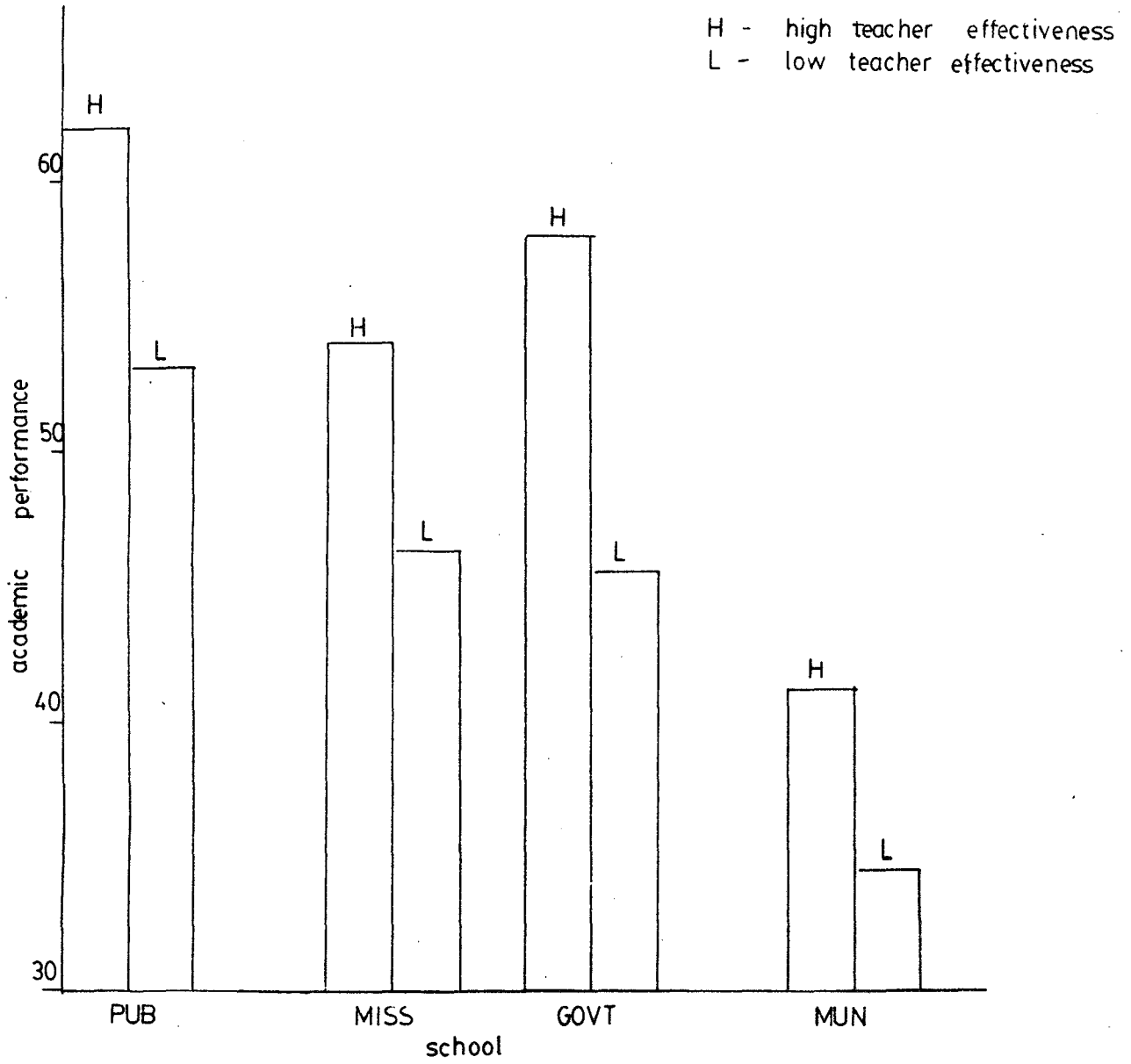


TABLE 22

MEAN OF ACADEMIC PERFORMANCE, SD, N AND t OF CLASS V STUDENTS IN TERMS OF TYPE OF SCHOOLS AND TEACHER EFFECTIVENESS

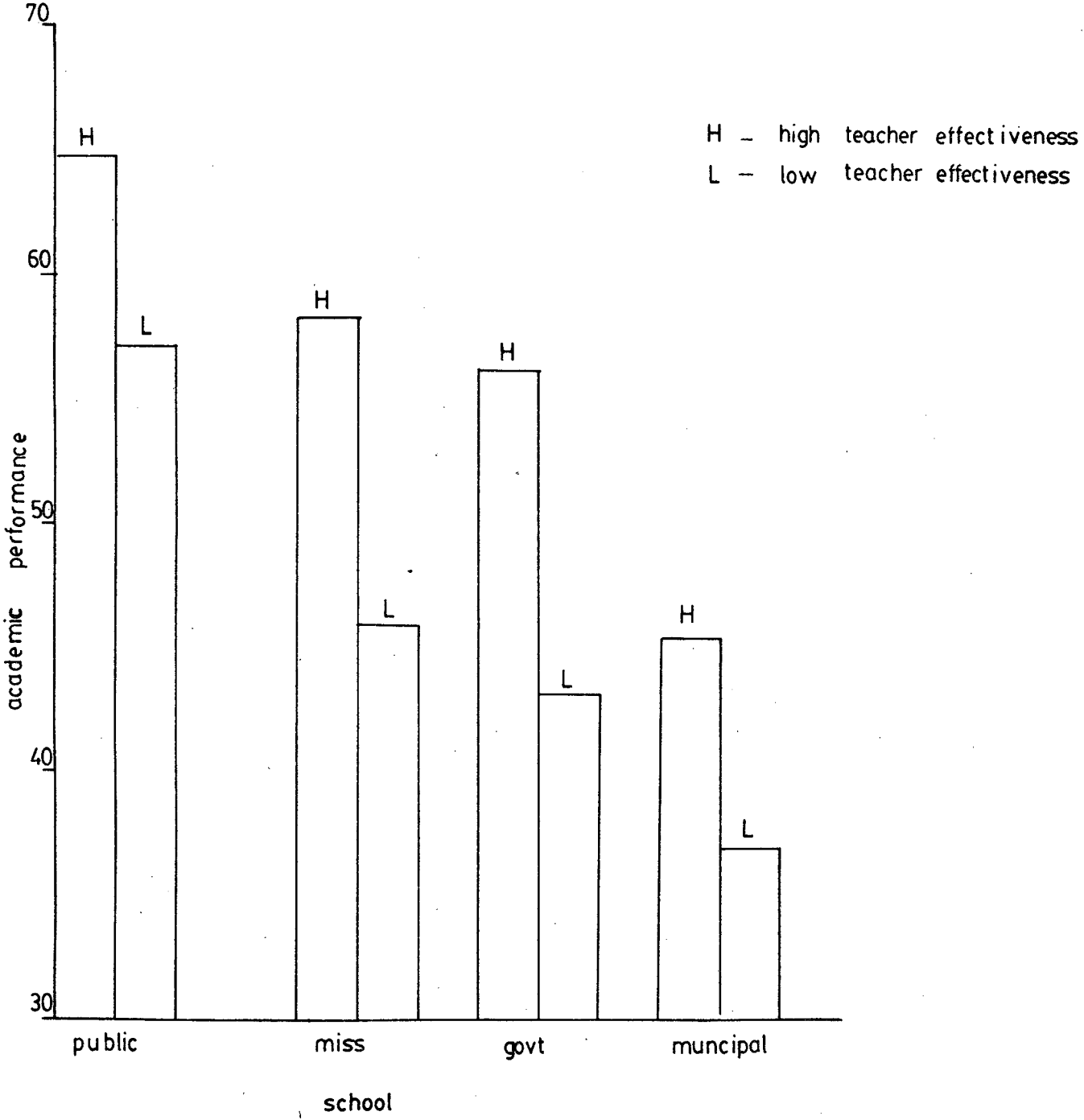
School	M	SD	N	t	Inferences
Public:					
HE	65.05	17.29	124	4.11	P < .01
LE	57.08	12.96	124		
Missionary:					
HE	58.08	19.88	40	3.18	P < .01
LE	46.66	10.94	40		
Government:					
HE	56.43	16.01	107	7.29	P < .01
LE	43.08	9.31	107		
Municipal:					
HE	45.61	19.68	38	2.17	P < .05
LE	37.0	14.52	38		

From the above tables and Fig. 4&5) following conclusions emerge:

In all 4 types of school, viz., public, missionary, government and municipal schools, there is a significant difference in the academic performance of the students in terms of teacher effectiveness. In other words, in each school those students who are learning under the high effective teacher have shown significantly superior academic performance than those who are

Fig-5

TEACHERS EFFECTIVENESS & ACADEMIC PERFORMANCE (IN CLASS - V)



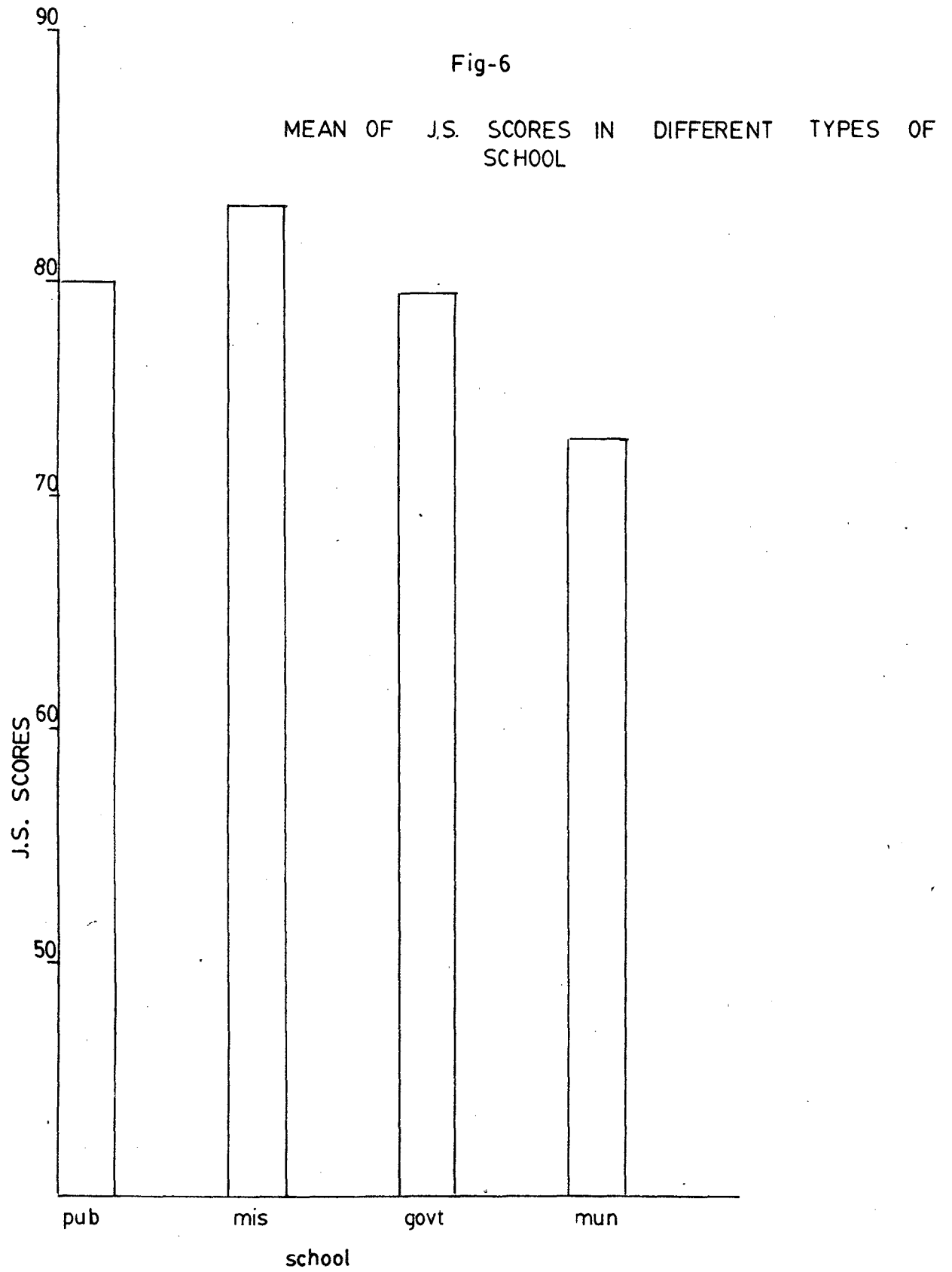
learning under low effective teachers. The result validated the hypothesis 3, namely, different level of teacher effectiveness will lead to differential level of academic performance among the students, irrespective of the school in which they study. Specifically, students under the High Effective (HE) teachers have shown significantly higher level performance than students under the Low Effective (LE) teachers.*

Teachers' Job Satisfaction and Students' Academic Performance

Though academic performance of students varied in terms of teacher effectiveness, one may argue that it may be influenced by the job satisfaction a teacher has. Thus an attempt has been made to ascertain the level of job satisfaction of the teachers with their job. As mentioned in detail in the Methodology Chapter, job satisfaction was ascertained with the help of the job satisfaction inventory by Indiresan(1978). Table 23 below presents the mean Job Satisfaction (JS) scores for the teachers in different types of school (the detailed individual job satisfaction scores are given in the Appendix).

TABLE 23
TYPE OF SCHOOL AND MEAN OF JOB SATISFACTION SCORES OF TEACHERS

Public School	Mean JS Score
Public	79.4
Missionary	84.1
Government	78.3
Municipal	73.5



From the above table it is seen that missionary school teachers are more satisfied with their jobs, followed by the public, government and municipal schools.

Since the Job Satisfaction (JS) of the teachers differed in the 4 types of school it was thought worthwhile to consider the academic performance of students in terms of teachers' job satisfaction and ascertain if the latter has in any way affected the academic performance of students in class IV and V differentially in different types of school. For this purpose, the JS scores of teachers were categorized into high job satisfaction (HJS) and low job satisfaction (LJS) based on the combined mean job satisfaction scores computed from the JS scores of all the teachers of all the four schools.

Tables 24 and 25 present the mean, SD, N and t values of the academic performance of students under the two groups of teachers (High and Low JS), respectively for class IV and V students.

TABLE 24

MEAN, SD, N AND t VALUES OF THE ACADEMIC PERFORMANCE IN TERMS OF HJS AND LJS TEACHERS OF CLASS IV STUDENTS

Teachers	M	SD	N	t	Inferences
HJS	51.97	19.45	805		
M.Coms = 80.2				6.71	P < .01
LJS	45.73	16.97	740		

TABLE 2(5)

MEAN, SD, N AND t VALUES OF THE ACADEMIC PERFORMANCE IN TERMS OF HJS AND LJS TEACHERS OF CLASS V STUDENTS

Teachers	M	SD	N	t	Inferences
HJS	54.31	17.97	966		
M.Com=76.5				10.80	P < .01
LJS	44.85	15.59	549		

From the above tables (24 & 25) one may conclude that there is a significant difference in the academic performance of students taught by the highly job satisfied (HJS) teachers and the low job satisfied (LJS) teachers. In other words, students taught by HJS teachers have scored significantly more marks than those taught by poorly (low) satisfied teachers irrespective of the schools. At this point, it was felt necessary to find out the differences in academic performance of students studying under high and low JS teachers for each school separately.

& Fig. 2 and 3

Tables 26 and 27 present the Mean, SD, N and t values of the students' academic performances taught by the HJS and LJS teachers respectively for class IV and V in four different types of schools.

TABLE 26

MEAN OF ACADEMIC PERFORMANCE, SD, N AND t VALUE IN TERMS OF TYPES OF SCHOOL AND JOB SATISFACTION OF TEACHERS OF CLASS IV STUDENTS

Schools	M	SD	N	t	Inferences
Public					
HJS	61.88	17.69	124	3.79	P < .01
LJS	54.19	14.02	124		
Missionary:					
HJS	55.78	19.22	40	1.97	P < .05
LJS	47.74	17.3	40		
Government					
HJS	53.07	20.15	107	1.71	N.S..
LJS	48.78	16.33	107		
Municipal					
HJS	36.02	12.59	38	.72	N.S.
LJS	38.27	14.49	38		

TABLE 27

MEAN OF ACADEMIC PERFORMANCE, SD, N AND t VALUE IN TERMS OF THE TYPES OF SCHOOL AND JOB SATISFACTION OF THE TEACHERS OF CLASS V STUDENTS

Schools	M	SD	N	t	Inferences
Public					
HJS	65.05	17.29	124	4.11	N.S.
LJS	57.08	12.96	124		
Missionary					
HJS	58.08	19.88	40	3.18	N.S.
LJS	46.66	10.94	40		
Government					
HJS	49.88	15.78	107	1.74	N.S.
LJS	46.68	10.44	107		
Municipal					
HJS	45.49	18.73	38	1.91	N.S.
LJS	37.98	15.37	38		

Fig-7

TEACHERS' J.S. & STUDENTS ACADEMIC PERFORMANCE (IN CLASS-IV)

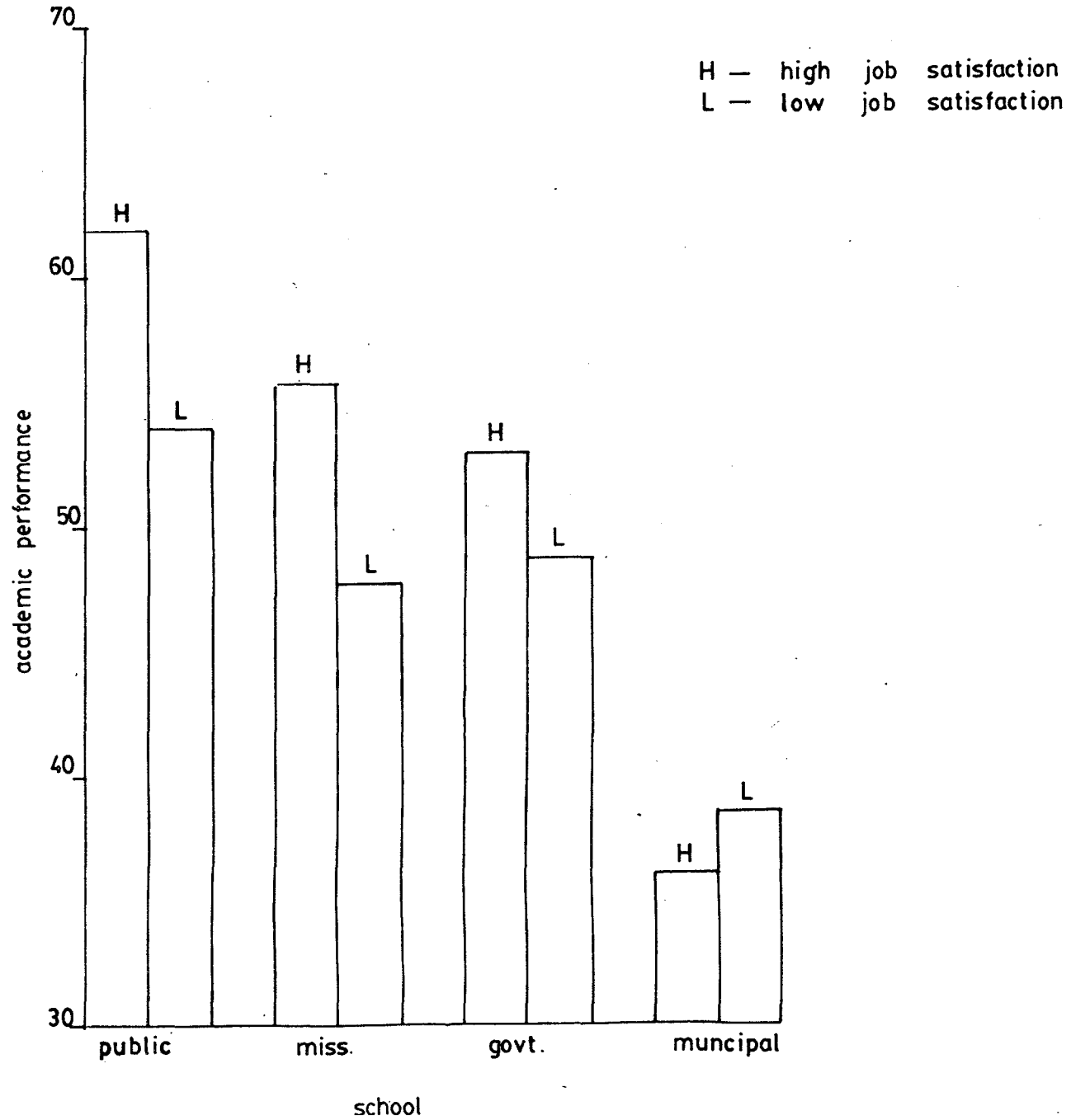
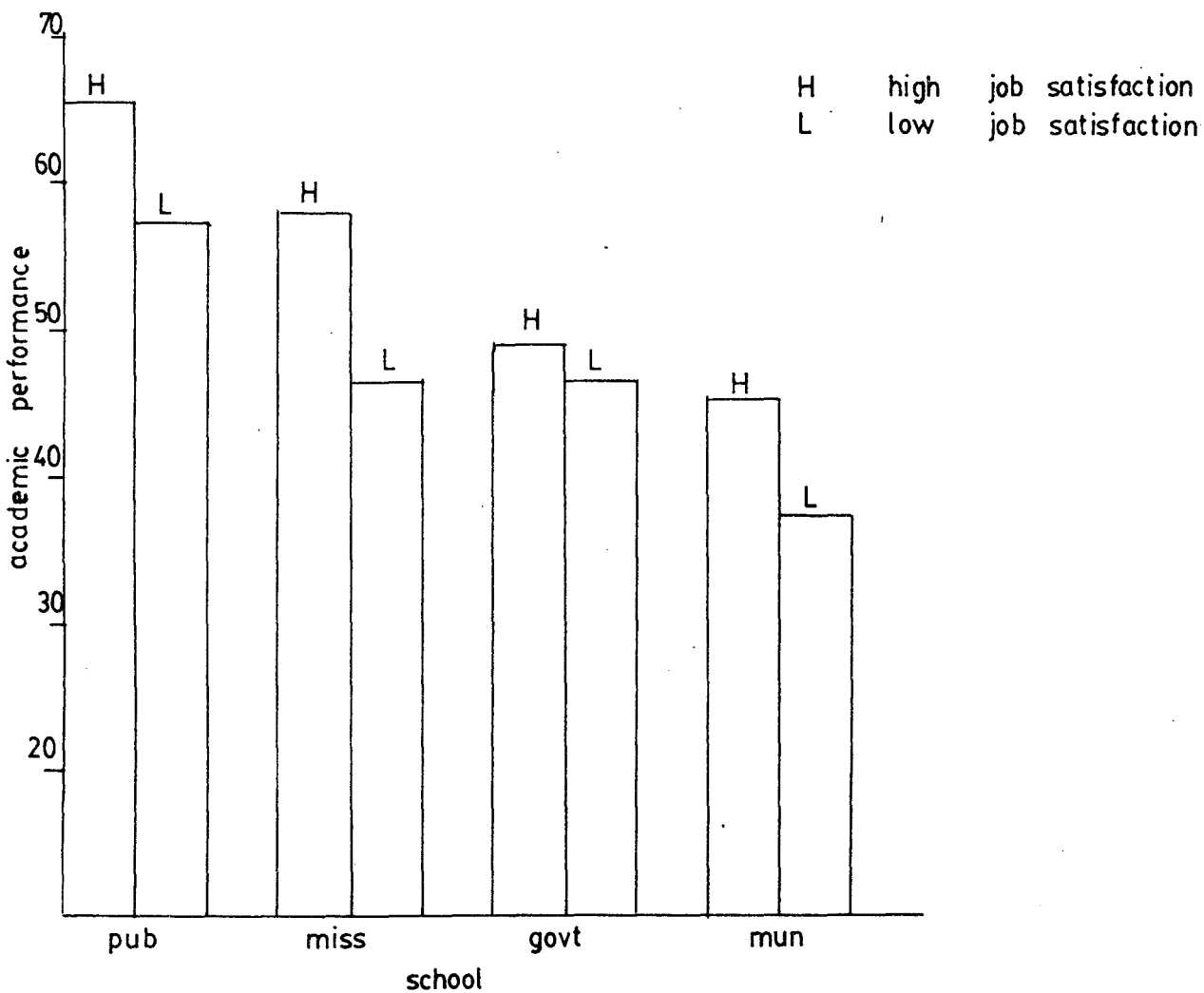


Fig-8

TEACHERS JS & STUDENTS ACADEMIC PERFORMANCE
(IN CLASS V)



From the above analysis of Job Satisfaction (JS) with the academic performance of students, following conclusions emerge:

1. There is a significant difference in the academic performance of students taught by the high job satisfied (HJS) and low job satisfied (LJS) teachers, only in the public and missionary schools.
2. In the case of the government and municipal schools the obtained difference was not significant. Hence one may conclude that the performance of students in terms of the teachers' job satisfaction is more or less the same in both the municipal and government schools.

From the above analysis, one may state that students taught by highly satisfied teachers scored significantly more than poorly (low) satisfied teachers. This finding was particularly relevant to the teachers of public and missionary schools in both the IVth and the Vth classes. But in the case of government and municipal schools this difference was not found to be statistically significant. In other words, irrespective of the teachers being satisfied or dissatisfied with their job, the students' academic performance was more or less the same in these two schools.

Organizational Climate and Teacher Effectiveness

After ascertaining the differences in the academic performance of students in both classes IV and V respectively (in the two different types of climates) to be statistically significant, it was thought worthwhile to ascertain whether the teacher effectiveness scores also vary in terms of the closed and open climates in the schools, by applying the Mann-Whitney U test. Table 28 presents R_I , R_{II} , n_1 , n_2 and U of the teacher effectiveness scores under the two climates in classes IV and V. (The reason for using M-W-'U' test was applied because the 'N' was too small for applying t-test).

TABLE 28

**
 R_I , R_{II} , n_1 AND n_2 AND THE U OF THE TEACHER EFFECTIVENESS (TE) SCORES IN CLASSES IV AND V

Class	R_I	R_{II}	n_1	n_2	U	Inferences
IV	118	92	10	10	37	N.S.
V	125	85	10	10	30	N.S.

** R_I presents the rank of the TE scores in open climate school.

* R_{II} presents the rank of the TE scores in closed climate school.

From the above analysis the following conclusions emerge:

There does not exist any significant difference in the teacher effectiveness scores in terms of the two climates. Irrespective of the school having an open or closed climate, the Teacher Effectiveness appears to be the same in both types of climates. Thus hypothesis number-3 which states that the Teacher Effectiveness will vary in terms of the differential organizational climates in the schools, has not been validated.

Organizational Climate and Job Satisfaction:

An attempt was made to find out if the teachers differed in their job satisfaction in terms of the two different school climates. Mann-Whitney U test was applied to the job satisfaction scores of two different types of school climates. Table 18 presents the R_I , R_{II} , n_1 , and n_2 and the U values of the teachers' job satisfaction scores in classes IV and V respectively.

TABLE 29

** **
 R_I , R_{II} , n_1 , n_2 AND THE U OF THE JOB SATISFACTION SCORE
 OF TEACHERS IN CLASSES IV AND V IN OPEN (CLOSED) CLIMATES

Class	R_I	R_{II}	n_1	n_2	U	Inferences
IV	99	111	10	10	44	N.S.
V	112	98	10	10	43	N.S.

From the above Table one may conclude that in both classes IV and V there does not exist any significant difference in the job satisfaction of teachers in terms of the open or closed climate. This rejects the Hypothesis-4, which states that job satisfaction will vary in terms of differential climate in the school.

Concluding Note on the Organizational Climate

✓ To summarize the above findings it may be stated that in terms of the two types of organizational climates, there exists significant difference in the academic performance of classes IV and V students. However, the TE does not differ significantly in terms of the two types of climate. Similarly also in case of teachers' job satisfaction there does not exist any significant difference in terms of two types of climate (the open and closed climates).

Job Satisfaction and Teacher Effectiveness

The Product Moment Co-efficient of Correlation was computed between the scores on job satisfaction and teacher effectiveness of teachers of all the four schools separately. Table 30 presents the Mean, SD, N and r of teacher effectiveness and job satisfaction scores of the four different types of school.

TABLE 30

MEAN, SD, N AND r OF TEACHERS EFFECTIVENESS AND JOB SATISFACTION SCORES OF FOUR DIFFERENT TYPES OF SCHOOL

Schools		Teacher Effectiveness scores	Job Satisfaction scores	r	Inferences
Public	M	130.9	79.4	.41	N.S.
	SD	6.02	8.15		
	N	10	10		
Missionary	M	127.5	84.1	.45	N.S.
	SD	8.11	13.41		
	N	10	10		
Government	M	124.15	78.3	-.38	N.S.
	SD	15.25	6.57		
	N	10	10		
Municipal	M	110.65	73.5	-.39	N.S.
	SD	8.59	7.76		
	N	10			

From the above Table, it is seen that even though not statistically significant, there exists a positive correlation between the Job Satisfaction (JS) and Teacher Effectiveness (TE) in the missionary and public schools, whereas there is a negative correlation between the two factors in government and municipal schools. These results validate the hypothesis-5 which states there will be a positive correlation between JS and TE.

Correlation Between JS and TE

No specific conclusion could be arrived at, as the sample is rather too small. However, a very interesting trend is delineated with both the better standard schools (public and missionary) having both the teaching and job satisfaction being positively related, whereas in the slightly less standard schools (government and municipal) those two factors being negatively related. This needs further exploration with larger samples.

Thus the present chapter which set out to analyse the data has been able to demonstrate that academic performance of the students differs in terms of types of school and within the schools in terms of the school's organizational climate, teacher effectiveness and job satisfaction of the teachers.

Having discussed the academic performance of students in terms of different organizational climates in schools, different levels of teacher effectiveness, job satisfaction and in terms of the interactional effect of organizational climate and teacher effectiveness, organizational climate and job satisfaction of teachers, teacher effectiveness and their job satisfaction, the following section presents the academic performance of students in terms of the interactional effect of three factors, viz., organizational climate, teacher effectiveness and job satisfaction. Table 12, in page 61 has indicated the interaction, effect of these three factors to be highly significant, demonstrating thereby that a typical type of organizational climate when combined with a certain level of teacher effectiveness and certain type of job satisfaction influences differentially the academic performances of students irrespective of the type of schools. To specifically find out in the above interactions, which type of combinations of these three factors has led to the highest/lowest academic performance, t values were computed of the academic performance of students in the eight different combinations of organizational climate, teacher effectiveness and job satisfaction. Table 31 presents the Mean, SD, N and t values in terms of 2 types of climates, 2 levels of teacher effectiveness and job satisfaction respectively.

TABLE 31

Mean, Academic Performances SD, N and t values of all students in different subjects in terms of organizational climate, Teacher Effectiveness and Job Satisfaction (Class IV)

	Open Climate				Closed Climate			
	High T.E.		Low T.E.		High T.E.		Low T.E.	
	High J.S.	Low JS	High J.S.	Low J.S.	High J.S.	Low JS	High J.S.	Low JS
	1	2	3	4	5	6	7	8
Mean =	66.24	68.77	63.47	51.89	43.39	50.64	42.81	37.94
SD =	68.54	60.76	66.38	56.84	52.34	58.09	50.76	37.83
N =	355	231	338	231	118	78	118	76
(t values)								
1	-	.47	.84	2.74**	3.78**	2.07*	3.96**	5.0
2	-	-	.98	3.09**	4.05**	2.35*	4.22**	5.23**
3	-	-	-	2.23*	3.34**	1.71	3.50**	4.52**
4	-	-	-	-	1.40	0.17	1.52	2.43*
6	-	-	-	-	-	0.89	0.09	0.84
6	-	-	-	-	-	-	0.97	1.61
7	-	-	-	-	-	-	-	0.72
8	-	*=P<.05	** = P<.01	-	-	-	-	-

TABLE 32

Mean Academic Performance SD, N and t-values of all students in different subjects in terms of organizational climate, teacher effectiveness and Job Satisfaction (Class V)

	Open Climate				Closed Climate			
	High TE		Low TE		High TE		Low TE	
	High JS	Low JS	High JS	Low JS	High JS	Low JS	High JS	Low JS
	1	2	3	4	5	6	7	8
Mean =	71.88	74.49	66.27	54.16	52.97	59.94	52.87	44.18
SD =	72.16	74.87	66.93	55.44	54.65	60.05	53.17	44.86
N =	355	231	231	338	118	78	78	116
t-values								
1	-	0.42	0.96	3.64**	3.93**	1.53	2.62**	4.89**
2	-	-	1.24	3.52**	3.76**	1.78	2.78**	4.70**
3	-	-	-	2.72**	2.52*	0.78	1.79	3.65**
4	-	-	-	-	0.28	0.78	0.19	1.94
5	-	-	-	-	-	0.94	0.15	1.73*
6	-	-	-	-	-	-	0.78	1.98*
7	-	-	-	-	-	-	-	1.18
8	-	-	-	-	*P < .01	-	** P < .05	-

✓ It is seen from the t values for classes IV and V given in the Tables (31 & 32) that:

- (1) the combination of open climate in schools with any two levels of teacher effectiveness (TE) and job satisfaction (JS) respectively, has led to relatively higher academic performance amongst students as compared to the combination of closed climate in schools with any level of teacher effectiveness and job satisfaction.
- (2) within the open climate, it is significant to observe that a combination of open climate, high teacher effectiveness and low job satisfaction together have led to the highest academic performance, followed by the combination of open climate, high teacher effectiveness and high job satisfaction of teachers. A similar trend is observed in the case of closed school climate, etc. (Tables 31 and 32 above).
- (3) the academic performance of students is significantly lower in the case of the combination of open climate, low teacher effectiveness and low job satisfaction compared to the other three combinations in the open climate context (viz; open climate, high teacher effectiveness, high job satisfaction; open climate, high teacher effectiveness, low job satisfaction; open climate, low teacher effectiveness and high job satisfaction). There is no significant difference in the academic performance of students in the latter three types of combinations.

- (4) the academic performance of students in the closed climate schools with any combinations of teacher effectiveness and job satisfaction is significantly poorer as compared to academic performance of the students in the open climate with any combination of organizational climate, teacher effectiveness and job satisfaction except the combination of open climate low teacher effectiveness and low job satisfaction category.
- (5) ⁱⁿ with the closed climate there is no significant difference in the academic performance of students in any type of combination of climate, teacher effectiveness and job satisfaction.
- (6) it is important to note that the interaction of job satisfaction factor gives an ambiguous result in the academic performance of students, namely at times low job satisfaction leading to higher academic performance and at other times high job satisfaction leading to lower academic performance, etc.
- (7) by and large the analysis of the three-level interaction of organizational climate, teacher effectiveness and job satisfaction has clearly indicated that an open climate in schools, with high teacher effectiveness and high/low job satisfaction will lead to a higher level of academic performance amongst students irrespective of the type of school in which they study.

The next chapter presents the discussion of these results in the light of available studies in this area.

CHAPTER V

DISCUSSION

DISCUSSION

The present study set out with the objectives of (1) ascertaining if academic performance of primary school children (class IV and V) varied in terms of types of school, organizational climate of the school, teacher effectiveness and job satisfaction of teachers, and (2) to ascertain if academic performance of primary school learners varied in terms of the interactional effect of the organizational climate, teacher effectiveness and teacher job satisfaction.

The results of the study categorically showed that the academic performance of primary school learners differed significantly in terms of the school, with public school students showing the highest performance subject wise and aggregate wise, followed by academic performance of students from missionary school, government school and municipal school.

The following section discusses in detail the above results in the light of work done in the field, in the following order:

1. Academic performance and type of school
2. Academic performance and Teacher Effectiveness
3. Academic performance and job satisfaction of teachers
4. Academic performance and Organizational Climate
5. Organizational climate and Teacher Effectiveness
6. Organizational Climate and Job Satisfaction of teachers
7. Teacher Effectiveness and their Job Satisfaction.

1. Academic Performance and the Type of School

It may be recalled that 4 types of school (i.e. public school, missionary school, government school and municipal school) were taken as samples for this study, with a sample of 618 students and 40 teachers from both classes IV and V.

As mentioned in the earlier chapter it has been found that the academic performance of students had differed significantly in terms of the type of schools pupils/students attend. Specifically, the public school students in both classes IV and V had performed significantly better than the students of the missionary school, government school and municipal school ($F = 18.65$, $P < .01$ in class IV and $F = 52.44$, $P < .01$ in class V). These findings validate the hypothesis that the academic performance of students of class IV and V will vary in terms of the different types of school; with public school students showing significantly better performance than those from the other schools. These findings support those of Rao (1978), Opal and Sen (1979) and Veeraraghavan (1983). For instance Rao (1978) had compared the privately managed school with public and government schools and found the students from the privately managed schools had performed significantly better than students from all other schools. Veeraraghavan (1984) compared the students from public school, government school and corporation-run school and found that the public school students not only performed better but also had higher ambitions and more ambitious future plans as compared to students from other schools. /

/ In an unpublished work, Singh (1981) had found certain distinguishing features between the public and government schools which included differences in, (a) reliance on textbooks, (b) political awareness amongst the teachers, (c) extra-curricular activities, (d) the socio-economic status of teachers, (e) Parent-Teacher Association (PTA), (f) leadership training, and (g) socio-economic status (SES) of students. She had also argued that these differences influenced to a great extent the performance of students, and as such she concluded that the type of school a student attends has a very significant influence over the performance in the class.

In India the educational system which was introduced by the British is still being followed. Despite the India government's efforts to have a uniform pattern of education in all schools, the efforts have not been successful partly due to the financial constraints and partly due to the lack of will. Kothari Commission Report (1966) categorically recommended neighbourhood schools so that certain degree of uniformity in all schools could be achieved and if the elites in the same locality also send their children to the neighbourhood school, the latter's standard of education may improve, etc. Underlying all these recommendations has been the strong feeling and conviction that one can minimise the existing dichotomy amongst different types of school in regard to the academic performance of students./

2. Academic Performance and Teacher Effectiveness:

Analysis of the academic performance of classes IV and V students of 4 different types of school shows that the performance was a function of the level of teacher efficiency, a teacher possesses. To be more specific, the findings of the present study showed that students, who were taught by the highly effective (HE) teachers, performed significantly better than students taught by the teachers who were found to be low effective (LE) teachers in both the classes (in class IV $t=13.19$, $P < .01$ and in class V, $t=13.84$, $P < .01$). This finding validated the hypothesis which states that differential levels of teacher effectiveness will differentially affect the academic performance of the students.

These results supported those of Flanders (1965), who discovered a significant relationship between teacher influence and pupil achievement and attitudes. On the basis of several correlational, field and experimental studies he concluded that indirect teacher influence was related to higher pupil achievement and more positive attitudes amongst students as compared to the direct teacher influence. This finding has been corroborated by several other investigators (Anderson, 1939; Lewin, Lipitt and White, 1930; Withall 1949; Perkins 1950; Flanders 1951; Flanders 1965). Flanders and Simon (1969) found that teacher behaviour was related to pupil achievement. Pillai (1973), Dekhtawala (1977) and Franklin (1976)

reported that teacher morale and school achievement were significantly related and demonstrated that the performance of school pupils in schools with high morale was also high.

Standard and Trump (1952) on the basis of numerous studies concluded that the correlation between pupil and achievement and teaching ability presented a mixed picture: in certain conditions the correlations were reported to be low (Betts, 1933; Barr et al. 1975), whereas in some others the correlations were found to be highly significant (Lins, 1946; Roskker 1945; Travers (1971) reported that a bibliography of research studies through 1967 revealed that out of 1,000 studies, there were only 20 in which the criteria of teacher effectiveness was relevant to pupil growth.

Rolfe (1945) found that teachers' educational aptitude and teachers' knowledge about the subject matter correlated with achievement at about .08 and -.10 respectively. He also found that many other characteristics such as teacher personality, attitudes and types of leadership were found to have no significant relationship with academic achievement.

Lin (1946) using pupils' residual gain achievement as the criterion measure, found that many of the teacher characteristics such as motivation, work habit, value, reading competence, competence in English and interest in teaching had correlations with academic achievement of less than .25.

Mc Gowan (1982) found that the effect of the classroom teacher on student achievement test scores was significant. The data supported the conclusion that most effective teachers in the first measured year were consistently superior to the least effective teachers over a period of time as well as regardless of the subject area. The finding of the present study also lends considerable support to the above study. Not only academic achievement appears to be influenced by Teacher Effectiveness, but also the teachers' effectiveness influences the performance in individual subject.

For instance discussing the factors of teaching influence, Flanders (1965) stated that teacher influence had a positive relationship with adjustment that pupil made in the school and their attitudes towards school. A year later Morrison (1966) reported, demonstrating the relationship between teacher influence and adjustment of pupil and latter's academic achievement scores in language usage, social study skills, arithmetic computation and problem solving. In this context it is important to note that the present study has categorically shown that if the subject teacher was effective, the average class performance on that subject also was very high. This finding also lends support to the study of Nelson (1964) who found that effectiveness in teaching was positively correlated with linguistic skill learning ability. Other studies by Lashier (1968), though somewhat in a different context, showed a positive relationship between academic

achievement of pupils and the type of relationship that existed between teacher and students in terms of Verbal Interactional Behaviour. Discussing the differences in reading ability, Davidson (1968) showed that higher the teachers' influence and effectiveness, better was the reading performance of students, which finding is amply supported by the findings of the present study in terms of Teacher Effectiveness and Academic Performance of students.

3. Academic Performance and Job Satisfaction of Teachers

The finding of the present study which related to Job Satisfaction of Teachers and Academic Performance of Students in four different type of schools, found that the public and missionary schools, had shown a higher Job Satisfaction amongst teachers as compared to those of government and municipal schools. In other words, not only the Job Satisfaction varied amongst the 4 types of schools but also it varied amongst teachers within a particular school. This corroborates to an extent the findings of Lee (1974), Chan (1977) and Reddy and Reddy (1980), who had also found in their respective studies, that teachers' satisfaction varied though they were all in general satisfied with their jobs of teaching. When the Job Satisfaction was related to the academic performance of learners of classes IV and V in 4 different types of school, the present study showed that the performance was a function

✓ of the level of job satisfaction of the teachers. To be more specific in this regard, students who were under the highly job satisfied (HJS) teachers performed significantly better than those who were under teachers having low job satisfaction (LJS), ($t=6.71$, $P < .01$ and $t =10.80$, $P < .01$, respectively for classes IV and V). However, the study of Warnous (1973) showed some correlations between Job Satisfaction and Academic Performance, but these were small and not statistically significant. There is also another controversy, stated by Lewler and Porter (1967), whether Job Satisfaction leads to performance or performance leads to Job Satisfaction. According to them, performance leads to rewards and if the latter are perceived to be equitable as explained by Equity Theory, the employees satisfaction will be the result. In whichever manner one could explain the above relationship, in the present context one could argue that there would be a significant relationship between Job Satisfaction of teachers and the performance of students, for it is well known that tasks which are goal/result-oriented, when achieved yield tremendous satisfaction to all involved, especially those who put in efforts to reach the stipulated goal. This contention was put to test in the study by finding out the magnitude of relationship of Job Satisfaction of teachers and results obtained by the class IV and V students in their annual examination. The results showed a high correlation between the two factors. More studies are needed to substantiate

the findings of the present study, though the trend of positive correlation between Job Satisfaction and Academic Performance appears indisputable.

4. Academic Performance and the Organizational climate

Organizational climate has received considerable attention in the last decade or so, particularly the dimensions of school climate (Sharma 1971; Pareek and Rao 1970 and Rao and Mehta 1973). In India a number of studies, namely, Joshi (1968), Sharma (1969), Mathur and Bedi (1970), Dorji (1971), Buch and Rai (1971), Pillai (1973), Sharma (1974), Desai (1975), Goyal (1975), Kumar (1975), Sharma and Gupta (1974), Patel (1978), Tripathi (1978), Gupta and Sharma (1981), and Gupta (1981) have reported that school differs in terms of its organizational climate and that organizational climate does affect the pupil and teacher working styles, and performances (outcomes).

In the present study the Organizational Climate has been found to be one of the major factors, attributing to better performance amongst students. In the present investigation, out of 4 different types of schools, two schools, i.e. public school and government school, appear to have an open climate and the other schools, i.e. missionary school and municipal school, have found to have closed climate. It has also been observed in the present investigation that there

exists a significant difference in the academic performance of students in terms of the organizational climate irrespective of the class in which they studies, ($t=7.97$, $P < .01$ and $t=6.96$, $P < .01$, respectively in classes IV and V). This finding supports the hypothesis number-3 which states that differential level of Organizational Climate, Teacher Effectiveness and teachers' Job Satisfaction individually and in varying combinations will differentially affect the Academic Performance of students, making it more specific with students' from Open Climate showing better performance than those from the Closed Climate schools.

The above findings corroborated the findings in the earlier studies made by Sinha (1980), Pillai (1973), Sharma (1973), Riciotti (1982) and Martin (1983). In a study Sinha (1990) studied the organizational structure of the schools and found that public schools had more competent organizational structure than the other schools, which he felt could be a factor contributing better performance amongst the students from the public school. Pillai (1973) found that students' performance was significantly better in open and autonomous schools than in any other type of school climates. There was also a positive correlation between openness and academic performance. Sharma (1973), on the basis of his study, showed that the school climate and the School Achievement Index (AAI) did not reveal any definite relationships amongst

✓themselves as the r-value obtained was not found to be significant. It is however interesting to note that the relationship between the two factors was positive, indicating that Open Climate appears to lead to better academic achievement in the school. Riciotti (1982) in his study indicated that the students in the schools with innovative organizational designs, i.e. the non-grade and open space made greater gain in reading achievement than those students in traditional setting. Furthermore, he also concluded that longer the pupils attended non-graded open space schools, the greater the improvement in their achievement scores in relation to their ability. Martin (1983) in his study of organizational and student achievement in Mathematics found that the differential organizational climate leads to differential achievement in Mathematics. Further the t-test revealed significant differences in the academic performance of the students between more open and closed schools at some grade levels. (y) Thomas (1980) discussed the conditions under which the most favourable balance possible could be achieved between the advantages of direct instructions and the advantages of open classrooms, in order, simultaneously to achieve favourable learning results and positive effects upon the personality. He concluded that the school and/or class climate significantly brought about the balance between direct and indirect instructions. He also showed teaching staffs' "expectation structure" was also found

✓ to be a factor in bringing about the balance. This seems to be supported by Brookover, et al. (1979) who found that appreciable achievement from the pupils came about when the teachers continued to expect better performance from them. When they had "given up" working with them seriously, the students' performance went down. *B*

✓ Of all the attitudes, the teaching staff should possess, the supporting attitude of a mutual nature helps to create a kind of "Climate" which is extremely important in the context of school-setting. *f* Another important aspect in this context is the school ethos. Fuers' study (1974) drew attention in particular to the importance of school ethos, summarizing various studies in this context as well as considering a large number of heterogenous indicators, he pointed out the importance of a teacher: (1) taking his/her task seriously, (2) expecting similarly serious efforts on learning on the part of the pupils, (3) controlling and rewarding the latter, (4) preventing pupils from "day-dreaming", and (5) holding them responsible and thereby building up a consistent "incentive structure". All the above in turn lead to better academic performance. *P*

↓ From the above analysis it may be argued that children, irrespective of organizational climate of the school, may show better performance in class because of the efficiency level in teaching and teachers' satisfaction with their job.

As such an analysis in this study was carried out to ascertain the extent to which the teachers' Job Satisfaction and Teacher Effectiveness affected the academic performance of students in different types of Organizational Climate.

5. Organizational Climate and Teacher Effectiveness:

In the present study no significant difference was found in the Teacher Effectiveness between schools with Closed and Open Climate ($U=37$, N.S. and $U=30$, N.S., respectively in classes IV and V). This finding corroborates with the previous studies by Franklin (1975), where he found that Openness of climate in contrast to Closedness of the climate did not lead to 'high' or 'low' effectiveness of the teachers.

A study by Tripathi (1980), on Organizational Climate and teacher attitudes, showed that government and private junior college teachers do not differ significantly in terms of their attitudes towards various aspects of teaching and education, despite differing Organizational Climate.

Other findings in this context have shown that the schools manifesting open climate had higher teacher morale (Shelat, 1974; Sharma 1973; Samsong 1976; Pillai 1973; Dekhtawala 1977; Mehta 1977, and Mehra 1976). Whereas Sharma and Qureshi (1972) found that the teachers from schools possessing different Organizational Climate did not differ significantly in their morale. Even though the above study had been carried out on college climate it appears valid in

showing the lack of relationship between the two factors mentioned above. Thus the findings in the present study ^{ling} show that there was no significant difference in the Teacher Effectiveness in terms of Organizational Climate, appear to support the above investigations.

6. Organizational Climate and Job Satisfaction of Teachers

School Climate has been demonstrated to contribute towards positive attitudes in teachers' satisfaction with job (Pandey 1980; Tripathi 1980; Parker 1974; Miller 1974; Chan 1977; Raju 1974 and Singh 1978).

In the present study it has been found that there was no significant difference in the job satisfaction of teachers in schools with Open Climate (public and government schools) and Closed Climate (missionary and municipal schools). Here the obtained difference between the two types was found to be insignificant (in class IV, $U=44$, N.S. and in class V, $U=43$, N.S.). This finding rejects the hypothesis-1 which reads, Job Satisfaction will vary in terms of differential climates in the school.

This finding supports the study by Franklin (1975) which indicated that the Openness of the Climate in contrast to the Closedness of the Climate did not lead to 'high' or 'low' Job Satisfaction among the teachers.

A study by Chen (1977) on Job Satisfaction of school teachers in the Republic of China, as related to the personal

and organizational characteristics revealed that, public and private school teachers expressed similar levels of job satisfaction. Although the study by Chen (1977) is similar to the present study, it was done in China and hence whether the findings can be generalised to the Indian setting is yet to be ascertained.

Other studies in this area/aspect have shown that type of institution was not related to Job Satisfaction nor was the place of posting of a teacher related to his attitude toward students (Raju 1974 and Singh 1978).

7. Teacher Effectiveness and Job Satisfaction

If a teacher is found to be effective in teaching, one may perhaps expect the teacher to be relatively more satisfied with his/her job as compared to a teacher who is not effective. This contention was put to test in this study and the findings showed a positive correlation (r) between the Teacher Effectiveness and Job Satisfaction of Public Schools and Missionary School (respectively, $r = .41$ and $r = .45$), whereas a negative correlation was found between the two variables amongst the government and municipal schools (respectively, $r = -.38$ and $- .39$). This finding partially validates the hypothesis number 5 which states that there will be a linear correlation between the teachers' effectiveness and their job satisfaction.

The above findings appear to corroborate the findings of study by Chandra (1978), that teachers with a favourable

attitude were found to enjoy their jobs to a greater degree than teachers with an unfavourable attitude. It is also in agreement with the findings of Goyal's (1981) study on teacher educators which showed a positive correlation between Job Satisfaction and attitudes towards teaching.

A group of very old but significant studies by Weber (1953), Cantor (1953) and Arnotora (1955) established that effective teachers had a genuine love and liking for the young people, enjoyed being with him, had deep interest in, and obtained great satisfaction from the job of teaching. Lycula (1968) in this context found that Job Satisfaction enabled teachers to function at their highest level of efficiency.

✓ Thus, from the above discussions one may possibly conclude that the efficiency level of teachers, teachers' job satisfaction and the type of school in which a pupil studies, as well as the differential school climate significantly influenced the academic performance of the student. The fact that the school had a significant influence over the students' performance could be explained in various ways. As Mayuri and Reddy (1983) mentioned it could be due to the physical facilities, teachers and classroom organizations, in the concerned school or it could be due to the typical organizational climate as pointed out by Rao (1978). As

✓ Raymond (1968) pointed out, the academic performance could be due to student-teacher ratio, teachers' experience, the library and other facilities, salary of the teacher. / It could also be attributable to the typical pressure put on students for higher academic achievement (Mc Clelland, 1953) or as pointed out by Opal and Sen (1979) it could be due to the typical attitude of the teacher. / Thus it is clearly evident that each school differs significantly from each other in regard to Organizational Climate, disciplinary measures, value placed on academic achievement, teachers' attitudes, efficiency level of teachers, physical facilities, and classroom organization, interest in teaching, their satisfaction in the job, all of which, in turn, appear to contribute to the differential performance amongst students from different schools. One may perhaps conclude as did Mayuri and Reddy (1983) that the less progressive school should have better physical facilities, classroom organizations, better curriculum, teacher-student interaction, efficient teachers, etc. so that they could also have students performing at an optimal level. At the same time one should also remember that, although an educational system may have excellent resources in the form of attractive school plant, well equipped laboratories and libraries, efficient administrative staff, correct policies and progressive curricula suited to the requirements of the community, if the teachers are incompetent or indifferent to their responsibilities, the

✓ Whole programme is likely to be ineffective and largely wasteful. Hence, an overall better academic performance cannot be achieved in isolation without the presence of optimal school climate, effective as well as satisfied teachers.

✓ To conclude the discussions, the findings of the present study are:

- (1) ✓ Academic performance of students had differed significantly in terms of the type of school the pupils/students attend.
- (2) ✓ The academic performance was a function of the level of efficiency a teacher possesses. To be more specific in this regard, the students who were taught by highly effective (HE) teachers, performed significantly better than the students those who were taught by the low effective (LE) teachers.
- (3) ✓ The academic performance was also found to be a function of the level of Job Satisfaction of the teachers. To be more specific, students who were taught under the Highly Job Satisfied (HJS) teachers performed significantly better than the students who were taught by the No Job Satisfied (LJS) teachers.
- (4) ✓ Organizational Climate has been found to be one of the major factors attributing to better performance amongst the students.

5. ✓ There was no significant difference in the Teacher Effectiveness between schools with open and closed climate
6. ✓ No significant difference in the Job Satisfaction (JS) of the teachers in schools with open and closed climates.
7. It was also found that there exists a positive correlation between the Teacher Effectiveness and their Job Satisfaction of public and missionary schools, whereas a negative correlation was found between the same two variables amongst the government and municipal schools.

We have found considerable support in the earlier individual studies which have treated at a time only one or two of the four factors considered in the present study. The unique aspect of the study is that it has considered all the four factors relating them to Academic Performance and to each other. The trend of the present study has categorically shown that the academic performance of students is highly dependent on the types of school, Teacher Effectiveness, Job Satisfaction of the teachers, but not so much on the Organizational Climates that exist in the schools. Though the findings showed different Organizational Climate in different types of school, the Teacher Effectiveness (TE) and Job Satisfaction (JS) of teachers were not affected by the differing organizational climates.

CHAPTER VI

SUMMARY AND CONCLUSION

SUMMARY AND CONCLUSION

✓ The strength of an educational system largely depends upon the qualities of its teachers despite a school's enlightened objectives, its adoption of the latest technology and equipment, and an efficient administration, the all-round growth and development of children to a large extent is influenced by the teachers. Hence for an educational system to be successful, it is important for it to secure a sufficient supply of the right kind of people to the profession of teaching, provide them with the best possible training and ensure them a status and esteem commensurate with the importance and responsibility of their work. With the rapid expansion of schools both in number and extent and with the introduction of new educational policy in India the importance of highly efficient teacher has acquired an all time importance and urgency.

As stated by Mathur (1974) the progress of a society depends on the quality of its teachers and it is imperative for those in education to analyse the present situation, pinpoint the weaknesses and find the solutions for some of the outstanding problems. Schools in India are extremely complex in their composition, structure and organization. While some schools are run by the central and state governments, some are managed by the local municipalities/municipal corporations and few others are run by direct beneficiaries (Sinha, 1980) like public schools, and yet a

few other schools are managed by religious and charitable institutions. Each of these schools has its own approach towards teaching, management and has differing disciplinary measures as well as curricular, co-curricular and extra-curricular activities. They also differ in the type of students they recruit.

As a result of these vast differences, one finds differential performances of students in terms of types of school (Veeraraghavan, 1983), types of climates that exist in the schools (Miller 1965; Mc Dill et al. 1967; Pillai 1969; Guy 1970; and Sharma 1971) and the types of Job Satisfaction of the teachers (Reddy et al. 1978).

The present study has attempted to ascertain whether there is a difference in

- the Academic Performance of students in terms of different Types of School Organizational Climates, Teacher Effectiveness and Teacher's Job Satisfaction, as well as whether the interaction of the above three factors in any way influences the Academic Performance of students.

Keeping the above objectives in mind it was also hypothesized that:

- the academic performance of students of classes IV and V will vary in terms of different types of school.

- differential level of organizational climate, teacher effectiveness and teacher job satisfaction, individually and in varying combinations, will differentially affect the academic performance of students.
 - teacher effectiveness will vary in terms of the differential organizational climate in the schools.
 - job satisfaction will vary in terms of differential climate in the schools.
- there will be a linear correlation between teacher effectiveness and job satisfaction.

Four types of school were taken and 309 students from both classes IV and V from different schools, and 40 teachers were taken as sample for this study. The tools used were:

1. Organizational Climate Description Questionnaire (OCDQ) devised by Sharma (1973) to assess the climate that exists in the school.
2. Teacher Characteristic Description Form (TCDF) devised by Arora (1973) to measure the effectiveness of teachers.
3. Job Satisfaction Inventory (JSI) devised by Indiresan (1973) to measure the job satisfaction of the teachers.
4. The Academic Performance of students was considered in terms of the marks obtained by the students of classes IV and V in their annual examination conducted by the schools from the school record.

The results obtained show that:

1. ✓ The Academic Performance of public school students in both classes IV and V were significantly better than those from missionary, government and municipal school (in class IV, $F=18.65$, $P<.01$ and in class V, $F = 52.44$, $P<.01$).
2. y The Academic Performance of students varied in terms of the Organizational Climate of the school in both the classes IV and V (in class IV, $F= 453.15$ $P .01$ and in class V, $F = 577.24$ $P<.01$). That is, students from the Open climate schools had shown significantly higher academic performance than those from the Closed climate.
3. x The Academic Performance of students differed significantly in terms of the Effectiveness of the teachers (in class IV, $F = 95.12$, $P<.01$ and in class V, $F = 572.52$, $P<.01$). That is, students taught by Highly Effective (HE) teachers showed better Academic Performance.
4. The Academic Performance of the students from classes IV and V differed significantly in terms of the Job Satisfaction of the teachers (in class IV, $F = 13.42$, $P<.01$ and in class V, $F 1 131.81$, $P<.01$). In other words, students taught by the teachers having High Job Satisfaction (HJS) showed better Academic Performance than those taught by teachers having Low Job Satisfaction (LJS).

5. ✓ The Teacher Effectiveness combined with the specific type of climate in the school led to differential level of Academic Performance amongst the students of classes IV and V (respectively, $F = 61.61$, $P < .01$ and $F = 344.23$, $P < .01$). In other words, students of Open Climate school taught by the Highly Effective (HE) teachers scored high in Academic Performance than any other combination of school climate and Teacher Effectiveness.
6. Differential level of Job Satisfaction of the teachers combined with certain type of school Climate led to a differential level of Academic Performance amongst the students (in class IV, $F = 501.37$, $P < .01$ and in class V, $F = 139.52$, $P < .01$). That is, students of the Open Climate schools taught by the Highly Job Satisfied (HJS) teachers showed better Academic Performance, than any other combination of school Climate and the Job Satisfaction of teachers.
7. A combination of high level of Teacher Effectiveness and Job Satisfaction of the teachers and the Type of school (public school) in which the pupil studied led to a significantly high Academic Performance among the classes IV and V students (respectively $F = 21.45$, $P < .01$ and $F = 119.7$, $P < .01$) as compared to any other combination of Teacher Effectiveness, Job Satisfaction and the type of school.
8. A differential level of Organizational Climate combined with certain type of Effectiveness and Job Satisfaction of teachers lead to a differential level of Academic

✓ performance among the students (in class IV, $F = 440.43$, $P < .01$ and in class V, $F = 648.23$, $P < .01$). That is, in an Open Climate school the students, those who were taught by the Highly Effective teachers and having High Job Satisfaction also showed significantly better Academic Performance.

9. A positive correlation was found among the teachers in terms of Teacher Effectiveness and Job Satisfaction in the public school and missionary schools respectively ($r = .41$ and $.45$), whereas a negative correlation was obtained between these two factors in the government and municipal schools respectively (r being $-.38$ and $-.39$). That is, as the Effectiveness of the teachers increased and reached higher level, Job Satisfaction also increased linearly in the case of public school and missionary school, whereas in the case of government school and municipal school the relationship was in opposite direction. That is, as the Effectiveness of the teachers increased and reached higher level, the Job Satisfaction decreased and reached a lower level.

Limitations of the Study:

1. The categorization of the schools viz., public school, missionary school, government school and municipal school, is based on other studies and not exactly related to the typical classification followed by the Government of Orissa.

2. The four types of school taken for the study do not represent all the schools falling under the representative categories. The sample would have been representative if stratified random sampling method had been used. - for instance, Bhubaneswar (Orissa) could have been taken at 4 levels, viz., north, south, east and west. Within these four zones all the schools could have been listed down and categorized into public school, missionary school, government school, etc. Five or ten per cent of the categorized schools could have been chosen out of the total, from which students could have been randomly selected from the primary, middle and secondary level. This, however, was not possible because of the sample size of the students, teachers and the schools would have been too large to accommodate such a vast area in the M. Phil dissertation.

3. The three major variables considered in the study apart from the type of school were organizational climate, teachers' effectiveness and teachers' job satisfaction. Various other factors, such as intelligence, achievement motivation, socio-economic status, parental education and occupation, etc., could have also contributed to the academic performance. These economic, social, parental and psychological variables had not been controlled in the study. Furthermore, organizational climate, teacher effectiveness, and their job satisfaction have been considered only at two levels. There are

Various levels in-between and one could have manipulated the same experimentally.

4. Organizational climate had been considered only at two levels - open and closed climate. But, it would have been worthwhile to study some other types of climate which exists in-between the two extreme types of climate and would have been related with the performance of students in terms of the Climate, Teacher Effectiveness and their Job Satisfaction.

Despite all the above limitations the present study has been able to convincingly demonstrate that the performance of students varied significantly in terms of the type of schools, organizational climate, teacher effectiveness and job satisfaction of teachers. The coefficient of correlation between the teacher effectiveness and job satisfaction indicates how in order to be an effective teacher, one must also be satisfied with his teaching job.

The study has thus proved that the climate of the school, the efficiency level of teachers and their job satisfaction influence the academic performance of students. This trend has been obtained particularly in the public and missionary schools more than in the government and municipal schools. Obviously, the former appears to have some in-built system which may have led to such results.

The purpose with which the present study was set up has been fulfilled in the sense that it has shown the influence

of the type of school on the overall academic performance of the students. This has also led to the contention that if students have to be made perform at higher level, certain factors such as, Teachers' Effectiveness, their Job Satisfaction along with the climate of the school, etc, have to be improved and all the schools should be made to reach the standard of public school/missionary school, as it has been clearly demonstrated in the present study.

The findings of the present research have paved the way for further research work in this area, which could focus attention on the causative factors leading to higher academic performance of the students. The researcher proposes to extend the topic for his Ph.D. work to include some more types of schools, middle and senior classes of a school, and also rectify some of the limitations of the present study mentioned above. In addition the researcher proposes to explore the causative factors that led to better performance of the students in the public school, so that those aspects could be used in other schools which can in turn lead to higher academic performance amongst the students of any type of school.

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APPENDIX I

TEACHER CHARACTERISTICS DESCRIPTION FORM

Stated below under various heads are a number of characteristics supposed to make a teacher EFFECTIVE. You are requested to consider these carefully and indicate the degree of importance you attach to each one of them by checking () in the appropriate column. For instance, if you feel that 'Impressive Appearance' is indispensable for an effective teacher, please check in column 1. If you feel that 'Impressive Appearance' is not indispensable but yet a desirable trait of an effective teacher, kindly check in column 2. But, if you feel that 'Impressive Appearance' makes no difference to a teacher's effectiveness kindly check in column 3.

For the purpose of this study, the term 'indispensable' connotes that without an INDISPENSABLE characteristic, a teacher cannot be effective. A DESIRABLE characteristic does contribute to the effectiveness of a teacher, but its absence would not make him ineffective. A characteristic considered NOT IMPORTANT is supposed neither to increase nor diminish the effectiveness of a teacher.

TEACHER CHARACTERISTICS

Characteristics	I do so most of the time	I do so part of the time	I do not care much for this
	1	2	3

I. Personal Characteristics:

1. Impressive Appearance

(Well-groomed; neat and clean; having attractive posture and bearing; possessing personal charm).

Characteristics

I do so most of the time I do so part of the time I do not care much for this

2. Good Health

(Shows stamina and endurance; eager to act; alert about activity of the moment)

3. Appealing Manners

(Free from distracting mannerism; graceful, refined in speech and manner; cultured; relaxed; likable).

4. Pleasant and Distinct Voice:

(Has well-modulated and agreeable voice and tone of normal pitch; can be heard and understood by pupils).

5. General Personality:

(Has good temperament; sociable; optimistic; having sense of humour; smiling and cheerful).

6. Emotional Stability:

(In control of emotions, can meet difficulties with poise; can maintain even temper in all normal situations; exhibits self-control; unruffled by situations that develop in class-room).

7. Self-confidence:

(Sure of oneself; self-reliant; self-assured; confident and able to meet class-room situations).

8. Integrity of Character:

(Observes a sound code of moral conduct; has sense of values; responsible; consistent and predictable).

Characteristic	I do so most of the time	I do so part of the time	I do not care much for this
	1	2	3

9. Objectivity:

(Just and fair; impartial; criticises or praises; approves or disapproves, evaluates on the basis of factual evidence).

10. Quality of Leadership

(Purposeful; popular; capable of taking initiative and responsibility).

11. Sense of Duty and Responsibility:

(Regular and punctual; painstaking; dedicated to duty; dependable trustworthy).

12. Sound Judgment:

(Shows wisdom and selects right course of action; clear-headed and methodical).

13. Sportsman's Spirit:

(Can take criticism graciously; responsive to supervisory suggestions; does not pretend to know everything; recognises and admits own mistakes gracefully).

II. Professional Characteristics**Indispensable****Desirable****Not important****1****2****3**

1. Planning and Preparation for Lesson:

Evidence of careful and thorough planning; teacher decides in advance what and how things will be done, organises the pertinent material and keeps it handy before the class period begins, begins and finishes lesson in time).

2. Rigid plan execution:

(Teacher follows the planned outline closely, has everything going on schedule, does not deviate from it).

3. Flexible Plan Execution:

(Teacher changes planned outline readily in accordance with the needs of the class, mood of students, demands of weather or any other such circumstances).

4. Involvement of students in planning

(Teacher consults students in planning activities, knows how to plan with them and incorporate their ideas in plans).

5. Systematic Organisation of Subject Matter:

(Teacher organises subject matter in logical and orderly manner, sums up the topic well and creates interest in the next step).

6. Clear Presentation of Subject Matter:

(Presentation is methodical, psychological and comprehensive; exposition of subject matter is distinct and precise; subject is made interesting and 'alive').

Professional Characteristics	Indispensable	Desirable	Not Important
	1	2	3

7. Clear Explanation of Topics:

(Teacher explains clearly, in such a way that the students understand it. He explains ideas clearly by restating them in different contexts, points out implications and relationships, simplifies the abstract ideas and complex procedures effectively).

8. Ability of Expression:

(Verbal fluency; words come easily and clearly; good use and command of language, meaning always clear).

9. Skill of Correlating Subject Matter Effectively:

(Teacher effectively relates the subject to other areas of curriculum and practical life situations; draws examples and explanations from various sources and related fields).

10. Skill in Use of Dynamic Teaching Devices:

(Teacher uses variety of teaching methods effectively. He knows how, why and when any particular device is to be used to get his ideas across. He varies his approach in accordance with the needs of class).

11. Experimental Approach:

(Teacher has innovative spirit and tries to introduce new techniques in his class-room teaching and is always willing to experiment with ideas and approaches).

12. Ability to Conduct Discussion (without letting it go off the track, is able to draw out every student through discussion; encourages all students to participate in discussion).

Characteristics	Indispensable 1	Desirable 2	Not Important 3
<p>13. Skill in Questioning: (Teacher shows skill in the art of questioning. His questions are thought-provoking rather than fact finding).</p>			
<p>14. Knowledge of Evaluation Techniques- (Teacher knows modern evaluation techniques; sets good question papers and checks answer books methodically).</p>			
<p>15. Skill in Use of Instructional Material: (Teacher makes judicious selection and use of instructional material, draws figures, diagrams on the blackboard and, wherever necessary, uses maps, pictures and other teaching aids to explain the lesson).</p>			
<p>16. Skill in Stimulation of Interest and Motivation of Students: (Teacher has ability to arouse interest; encourages critical thinking and planning in students).</p>			
<p>17. Provision for Individual Needs of students: (Teacher anticipates and understands individual needs of students and observes their reactions. He recognises the individual differences in ability and assigns work accordingly and is aware when students fail to keep up).</p>			
<p>18. Orderly Maintenance of Records: (Teacher keeps accurate and upto date records of students examination marks and gradings, etc. and is prompt in sending out reports).</p>			

**III. Academic Background and
Scholarship**

**Absolu- Partly Mostly
tely true true true
1 2 3**

1. Good Academic Record:

(Teacher's general academic record is high and he has secured good marks in his examination).

2. Superior Intellect:

(Teacher has intelligent and logical thinking, uses commonsense in day-to-day dealings, has creative imagination and mental alertness).

3. Accurate Knowledge of Subject:

(Teacher has good grasp of the subject and can discuss the content of the matter with ease and confidence. His knowledge is upto date).

4. Ability to Bring Subject Matter to the Level of Students, Understanding:

(Teacher understands content of his subject well enough to bring it to the level of the students' understanding in the classroom. Elucidations and explanations are simplified enough to be easily understood by the students).

5. Broad Scholarship:

(Teacher mainly talks about the course subject but encourages discussion on related areas of knowledge also. He is adequately acquainted with all essential branches of human knowledge and is contemporary events. He adds to what the book says by giving additional information and points of view).

6. Interest in the Educational Field:

(Teacher understands modern educational trends, objectives of education, the purposes, curricula and organisation of educational-procedures and has enthusiasm for teaching).

Characteristic	Indispensable	Desirable	Not important
	1	2	3

7. Outstanding professional Achievement:

(Teacher is widely read, has done important studies in the field and published scholarly articles/books. He contributes to the meetings of professional and scholarly societies).

8. Urge for Professional Progress:

(Teacher tries to keep himself abreast of the upto-date knowledge of the subject and techniques of teaching through reading and taking part in seminars, work-shops and study circles).

IV. Pupil-Teacher Relationship

1. Natural Liking for Students:

(Teacher shows understanding of and sympathy with pupils and enjoys working with them. He is easily approachable to students).

2. Interest in Students' Welfare:

(Teacher shows concern for student's welfare in and outside school, takes note of their particular needs and requirements, pays attention to their material needs, mental hygiene and ethical standards of behaviour, and thus helps them build up their character and personality).

3. Respect for Student's Opinion:

(Teacher treats students as grown-ups and is interested in hearing their ideas. He invites discussion in the classroom and is considerate to students' feelings and tolerate of their minor errors).

Characteristic	Indispensable 1	Desirable 2	Not important 3
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4. Impartiality with Students:

(Teacher has no special favourites, nor does he dislike any student in the class. He looks at both sides of any issue. In controversy, he allows all concerned to have their say).

5. Recognition of Students' Merit:

(Teacher recognises merit and compliments deserving students. He gives special recognition to those who make a contribution to the knowledge of the class and praises them in front of others).

V. Classroom Management and Discipline

1. Provision of Congenial Atmosphere in the Classroom:

(Teacher is able to create an informal atmosphere in the class free from any stress or strain, and established proper rapport with students in which everybody is at ease).

2. Strict Disciplinarian:

(Teacher has definite rules and regulations to which no exception is allowed. He makes students do what he wants. They are allowed to speak only when asked. Defaulters of teacher's rules are brought to book).

3. Democratic Disciplinarian:

(Teacher administers discipline in a quiet, dignified, positive and fair manner. He ignores petty annoyances but takes severe note of major defaults).

Characteristic	Indispensable	Desirable	Not Important
	1	2	3

VI. Miscellaneous:

1. Popular with colleagues:

(Teacher is liked and respected by his colleagues. He co-operates with them and is loyal to school and other faculty members. He has team spirit and tries to promote better human relationship).

2. Attentive and Dutiful to Higher Authorities:

(Teacher respects policies and procedures formulated by higher authorities. He is respectful to seniors and welcomes suggestions for improvement).

3. Friendly with Parents:

(Teacher welcomes parents of his students who visit the school and responds pleasantly to their queries. He participates actively in parent-teacher meetings).

4. Interested in School Activities:

(Teacher understands his role as a member of school organisation and takes active interest in all school affairs and co-curricular activities).

APPENDIX II

TEACHERS JOB SATISFACTION INVENTORY

The respondent has to check the following statements on a 5-point scale. The alternatives for the 5 points are: (a) very much less than what it should be, (b) less than what it should be, (c) what it should be, (d) more than what it should be, (e) very much more than what it should be:

	Very much less than what it should be	Less than what it should be	Just what it should be	More than what it should be	Very much more than what it should be
	(a)	(b)	(c)	(d)	(e)

1. Salary I get is:
2. The cordiality of relationship with my colleagues is:
3. The interest of my head of the deptt. shows in my work is:
4. The security I have in my job is:
5. The cordiality of relationship with my head of the deptt. is:
6. The comforts of physical working conditions (like place of work, light, noise, temperature, etc.):
7. The liking I have for the nature of my work is:
8. The achievement I have attained in my job is:
9. The use of talents in my job is:
10. The responsibility I have in my job is:

(a) (b) (c) (d) (e)

11. The autonomy I have in my job is:
12. The technical competence of my head of the deptt. is:
13. The level of promotion I have reached in my job is:
14. The fairness of authority in my job is:
15. The prestige I have in my job is:
16. The freedom of expression in my job is:
17. The recognition I have in my job is:
18. The challenge of my assignment in the job is:
19. The fringe benefits (like housing, medical aid, provident fund, etc.) in my job are:
20. The possibility for advancement in my job is:
21. My involvement in my work is:
22. The help from the administration in my job is:
23. Opportunity to exercise leadership in my job is:
24. Opportunity to participation in decision making in my job is:
25. The ease of procedural formalities in my job is:
26. The sense of belonging I have in my job is:
27. The respect I have from my colleagues is:
28. The technical facilities for my work in my job are:
29. The workload I have in my job is:

APPENDIX III

SCHOOL ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

Instructions:

The items in this questionnaire describe the behaviour conditions that occur within a school. Please indicate to what extent each of these descriptions characterize your school. Please do not evaluate the items in terms of 'good' or 'bad' behavior, but read each item carefully and respond in terms of how well the statement describes your school.

Here is an example for your help.

1. Teachers at this school call each other by their first name.

- | | |
|--------------------|-----------------------------|
| (a) rarely occurs, | (b) sometimes occurs |
| (c) often occurs, | (d) very frequently occurs. |

In this example, the respondent has marked C to indicate that this type of behavior occurs 'often' in this school.

You may mark any other alternative which you think is suitable.

Your answers will be kept strictly confidential, and so please be frank and honest.

1. The mannerisms of teachers at this school are annoying.

- | | |
|--------------------|-----------------------------|
| (a) rarely occurs, | (b) sometimes occurs, |
| (c) often occurs, | (d) very frequently occurs. |

2. The principal uses an example by working hard himself.

- | | |
|--------------------|-----------------------------|
| (a) rarely occurs, | (b) sometimes occurs |
| (c) often occurs, | (d) very frequently occurs. |

3. The morals of the teachers in high.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
4. The principal uses constructive criticism.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs (d) very frequently occurs
5. Teacher's closest friends are from the staff members of this school.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs (d) very frequently occurs
6. The principal makes all class scheduling decisions.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
7. The principal is well prepared when he speaks at school functions.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
8. There is a small group of teachers who always oppose the majority.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
9. Routine duties interfere with the job of teaching. No.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
10. The principal explains his reasons for criticism to teachers.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs (d) very frequently occurs.

11. The teachers accomplish their work with great vim, vigour and pleasure.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
12. Teachers invite other staff members to visit them at home.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
13. The principal looks out for the personal welfare of teachers.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
14. The Principal schedules the work for teachers.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs (d) very frequently occurs
15. Staff meetings are organized according to a tight agenda.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
16. The Principal is in the building before teachers arrive.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
17. Teachers at this school show much school spirit.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
18. Teachers leave the grounds during the school day.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs

19. The Principal tells teachers of new ideas he has come across.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
20. The rules set by the Principal are never questioned.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
21. Teachers exert group pressure on non-conforming staff members.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
22. The Principal is easy to understand.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
23. The Principal exerts pressure that all the work must be done according to his will.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
24. Custodial service is available when needed.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
25. Teachers know the family background of other staff members.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
26. The teachers' diary requires too much work.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
27. School secretarial service is available for teachers use
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs.

28. The Principal checks the subject matter ability of teachers.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
29. The Principal helps teachers to solve personal problems.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
30. The Principal evaluates teachers' behaviour strictly according to rules.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
31. The Principal does personal favours for teachers.
(a) rarely occurs (b) sometimes occurs
(c) often occurs (d) very frequently occurs
32. Teachers seek special favours from the Principal.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
33. Most of the teachers here accept the faults of their colleagues.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
34. Teachers talk about their personal life to other staff members.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
35. The Principal gives suggestions to correct teachers' mistakes.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs

36. Teachers interrupt other staff members who are talking in staff meetings.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
37. The Principal helps teachers finish their work.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
38. School supplies are readily available for use in class-work.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
39. Teachers are contacted by the principal everyday.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
40. Teachers have run socialising together during school time.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
41. Administrative paper work is burdensome at this school.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
42. Teachers are informed of the results of a supervisor's visit.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
43. The Principal ensures that teachers work to their full capacity.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs

44. Teachers ask nonsensical questions in staff meetings,
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
45. In staff meetings there is a feeling of 'let's get things done'.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
46. Teachers work together preparing administrative reports.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
47. The Principal goes out of his way to help teachers.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
48. Extra duty for teachers is posted conspicuously.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
49. Sufficient time is given to prepare administrative reports.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.
50. Staff meetings are mainly Principal's reports.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
51. The Principal helps staff members settle their minor differences.
(a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs

52. Teachers ramble when they talk in staff meetings.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
53. Teachers organize curricular activities in groups.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
54. Teachers enjoy the lunch hour together.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
55. Teachers in this school, stay by themselves.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
56. The Principal invites suggestions from teachers in scheduling school activities.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
57. Teachers talk about leaving this school.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
58. Teachers spend time after school with students who have individual problems.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
59. The Principal tries to get financial benefits for the teachers.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs

60. There is considerable laughter when teachers gather informally.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very often occurs
61. Teachers socialize together in small selected groups.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
62. The Principal runs the staff meeting like a business conference.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
63. Instructions for the operation of teaching aids are available.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs
64. The Principal reminds the teachers of their duties very often.
- (a) rarely occurs, (b) sometimes occurs
(c) often occurs, (d) very frequently occurs.

APPENDIX: IV

DATA USED FOR ANALYSIS : CLASS IV & V

APPENDIX IV

DATA USED FOR ANALYSIS (CLASS IV)

A₁B₁C₁

85 80 58 50 95 42 90 95 50 85 80 75 92 85 65 72 80 78 80 85
 59 75 85 62 93 65 80 85 78 65 78 61 75 68 95 80 51 65 72 70
 95 98 58 70 83 80 70 55 66 80 85 75 55 67 85 65 70 55 70 95
 80 98 95 60 95 95 100 98 75 85 75 55 85 80 80 65 60 85 78 85
 65 70 80 56 60 70 78 78 50 60 65 95 62 48 98 68 85 78 58 95
 58 95 80 81 95 55 90 76 78 95 80 58 75 70 90 71 60 85 50 85
 82 75 59 50 65 68 70 58 55 70 48 59 70 60 55 70 68 71 80 45
 55 77 60 87 65 80 56 55 65 60 70 61 68 70 65 75 60 58 67 68
 70 65 73 56 49 50 83 65 45 57 60 65 55 78 75 70 65 68 70 72
 76 54 68 63 71 65 60 65 56 64 70 55 60 59 75 68 71 75 63 58
 66 70 89 56 63 65 70 56 70 65 51 63 55 65 62 66 70 75 46 70
 54 56 71 70 58 55 80 50 70 55 63 60 55 64 62 48 62 50 67 73
 70 60 55 58 75 50 65 71 58 55 61 60 65 56 45 65 60 48 50 52
 65 53 55 48 46 51 55 63 60 50 48 73 40 80 45 51 53 45 48 58
 60 65 65 45 80 50 45 55 63 60 58 64 65 55 63 70 61 48 80 48
 60 48 45 71 63 58 85 50 65 55 58 62 65 60 58 79 65 60 50 66
 45 70 45 60 76 70 58 56 70 75 65 50 56 50 55 60 55 88 50 65
 75 40 70 85 73 85 40 55 63 51 65 55 73

A₁B₁C₂

70 80 85 65 63 54 75 85 80 65 95 55 51 50 48 85 80 63 71 70
 75 65 45 51 50 75 65 70 80 60 68 70 81 80 66 68 58 91 45 56
 63 49 93 55 60 68 65 90 75 70 63 60 65 70 86 80 78 75 65 55
 48 70 65 95 68 51 50 48 51 73 80 78 65 70 78 82 70 75 68 54

50 98 65 70 75 71 89 60 65 90 75 85 65 80 89 63 75 80 70 75
81 57 63 55 93 68 75 49 64 60 65 70 82 75 55 90 70 68 65 58
70 75 65 70 65 60 55 85 70 63 70 63 58 85 78 58 50 55 61 90
65 55 61 88 45 55 60 68 70 65 58 80 65 68 70 65 65 70 70 68
70 58 60 65 60 75 68 55 65 70 68 64 78 76 56 50 58 63 62 65
48 65 61 70 75 66 52 50 45 58 65 70 53 58 61 67 58 65 67 69
56 68 65 70 75 65 60 76 63 65 70 95 58 80 88 70 65 70 58 53
95 68 56 70 55 80 78 58 90 90 63 78

A₁B₂C₁

65 68 52 65 80 75 70 68 65 75 55 63 75 80 65 89 85 72 55 67
78 69 62 64 90 65 71 58 70 63 59 62 80 68 70 59 62 88 81 85
73 68 98 70 89 75 80 82 60 66 65 72 70 53 61 65 70 69 60 58
67 70 55 59 62 67 85 72 70 75 61 57 90 68 51 56 80 50 80 75
68 90 65 68 60 71 82 63 65 95 58 70 65 88 60 77 70 75 65 90 55
60 64 75 58 63 70 77 89 77 75 65 55 58 50 68 76 63 57 64 75 66
57 90 55 63 68 79 54 50 65 70 63 65 49 51 63 60 50 55 61 84 55
48 85 50 63 66 65 64 58 55 61 70 55 50 43 69 50 53 60 65 55 58
47 56 55 60 51 50 73 58 75 70 63 68 70 71 63 68 55 57 63 69 72
60 60 65 58 64 61 70 59 48 63 66 65 70 75 64 66 68 70 55 45 79
50 54 58 69 45 85 48 80 53 58 45 48 56 63 65 58 64 57 53 75 65
53 55 48 51 56 76 56 50 48 45 47 50 55 50 45 58 55 64 60 71 88
65 60 45 80 51 59 50 48 50 45 58 45 70 60 45 48 50 56 60 50 45
55 40 68 60 54 48 45 80 65 80 54 55 48 40 50 65 56 50 45 48 50
55 45 50 54 55 60 51 78 55 63 60 65 49 56 57 65 68 51 55 48 65
56 72 61 45 65 48 51 45 70 56 53 55 50 68 45 50 46 75 58 61 55
71 62 65 61 57 70 65 75 71 60 63 50 65 65 58 53 50 55 58 50 48
55 60

A₁B₂C₂

78 77 59 68 78 61 80 85 60 50 75 60 85 70 52 58 48 66 78
75 65 65 55 60 78 75 56 65 65 70 82 57 48 60 58 60 85 63
50 56 85 70 80 50 50 79 65 58 61 53 70 67 62 53 52 75 66
58 54 50 62 76 85 65 50 82 65 65 72 65 67 65 55 60 60 50
55 45 62 52 58 68 51 45 59 50 55 60 53 54 62 60 55 40 45 62 58
56 45 78 70 59 63 75 50 55 60 65 80 71 48 57 35 63 49 50 56 40
56 60 53 50 62 70 55 52 50 43 58 55 42 75 45 48 50 45 51 46 66
51 48 38 51 45 65 45 40 40 63 40 48 41 40 53 42 52 38 45 57 65
51 50 48 55 45 46 55 58 44 57 55 43 85 50 63 55 45 48 71 54
45 48 51 63 57 77 61 45 51 58 54 56 61 40 52 50 53 58 40 55
58 55 50 50 55 61 55 40 69 45 44 57 80 51 60 48 75 60 45 41
31 40 45 40 68 71 45 45 40 60

A₂B₁C₁

65 40 65 70 60 53 45 62 40 50 45 51 62 43 45 53 58 50 40 35
45 55 45 61 65 45 50 46 48 59 58 55 50 50 46 47 45 40 63 45
45 45 48 40 45 36 33 45 40 38 51 48 31 53 45 61 53 36 45 40
48 38 45 40 48 32 48 41 44 45 64 51 48 41 45 35 38 35 53 48
41 35 38 31 30 41 45 38 36 45 42 36 38 30 39 42 30 35 30 34
38 30 35 31 20 33 25 30 30 35 35 30 32 30 32 40 31 30

A₂B₁C₂

55 61 63 70 65 55 80 48 45 60 44 63 70 78 51 86 65 48 61 45
55 80 38 52 50 68 50 55 48 56 63 50 45 57 51 70 45 60 81 60
45 60 63 48 45 70 50 41 45 68 35 40 45 40 41 32 48 40 46 40
35 38 70 35 40 64 30 28 31 35 50 46 38 35 60 34 32 30

A₂B₂C₁

50 56 45 65 75 35 47 52 60 45 55 41 60 35 50 38 50 39 60
45 50 43 50 41 45 43 41 63 50 45 47 50 62 50 41 48 35 55
44 48 41 50 40 35 38 40 45 38 40 42 45 50 43 45 38 35 40
44 40 35 38 40 35 40 32 30 38 36 40 45 45 36 33 42 35 40
53 48 40 35 45 40 40 45 38 36 30 38 32 40 35 30 48 33 45
30 40 38 35 30 32 55 38 37 31 43 40 46 41 36 45 33 50 41
50 38 35 40

A₂B₂C₂

40 38 35 30 31 34 38 40 45 28 30 25 36 30 34 44 45 40 35 38
42 45 40 48 35 38 40 40 41 33 30 35 38 40 42 32 35 38 40
35 30 40 41 30 35 30 40 40 25 20 35 40 41 34 46 45 48 35 40
40 48 36 40 35 41 45 40 46 35 43 40 43 40 41 36 48

DATA USED FOR ANALYSIS : CLASS V

A₁B₁C₁

80 82 70 85 70 65 72 70 65 78 80 85 77 80 75 68 70 63 65
 67 71 68 61 63 64 66 69 70 75 70 85 70 71 80 68 64 68 80
 71 70 75 65 70 70 85 75 80 73 66 68 60 65 75 70 80 82 80
 70 74 70 69 60 63 66 70 80 75 85 80 70 69 61 73 76 86 80
 75 70 72 74 80 85 75 70 60 63 68 70 75 80 75 80 70 68 65
 70 75 80 85 75 65 70 75 80 70 77 75 80 65 70 71 73 75 68
 60 65 80 71 80 72 83 60 70
 75 75 50 55 80 85 80 60 60 80 90 95 61 85 71 70 66 80 50
 55 75 98 55 65 68 98 85 55 65 85 75 85 62 68 60 65 60 50
 68 98 90 60 55 60 80 85 75 50 66 76 80 55 50 90 60 60 70
 68 70 55 55 75 85 95 50 60 55 80 88 60 60 75 55 50 55 60
 70 65 82 98 58 60 55 85 80 56 65 95 52 55 60 75 50 45 75 75
 80 80 85 85 80 55 76 71 70 68 60 75 80 90 65 78 98 68 80
 95 53 70 85 95 82 48 68 65 78 98 80 55 98 72 60 98 90 58 100
 77 59 100 92 64 72 62 61 95 98 98 65 65 65 60 60 62 75 80 80
 100 87 75 77 98 95 98 90 92 65 85 87 95 98 80 100 90 85 80 90
 96 95 90 85 95 72 55 100 100 98 56 60 72 65 60 60 78 62 85 87
 65 60 62 69 68 60 65 95 85 56 95 90 85 80 78 80 75 85 72 81
 85 86 77 75 81 65 77 75 87 78 68 67 65 69 71 87 68.

A₁B₁C₂

60 65 71 74 80 63 90 67 71 74 80 63 90 67 71 62 68 70 67 75
 69 66 60 89 65 55 71 72 75 67 70 90 75 80 64 58 75 70 68 83
 64 68 60 91 94 71 76 65 82 87 85 95 68 91 67 69 95 72 70 78
 75 80 93 65 72 74 86 59 67 92 55 68 71 70 94 88 63 64 86 69
 70 75 70 73 75 80 73 97 59 63 84 55 78 57 95 74 89 88 72 0
 70 58 65 70 73 79 70 93 65 67 90 57 75 80 87 83 80 78 69 64

85 71 80 62 83 85 78 69 85 83 65 90 71 74 80 67 65 85 98
70 72 70 75 80 83 76 70 83 80 85 86 63 64 68 70 75 78 83
80 81 93 75 89 63 61 65 75 64 68 72 76 75 90 75 81 93 70 90
95 87 70 71 73 76 79 60 94 68 92 75 70 81 75 81 70 95 65 68
80 64 88 70 73 80 75 81 98 90 79 64 66 97 70 73 76 83 82 85
56 68 65 63 73 70 80 69 71 70 58 71 89 60 58 62 90

A₁B₂C₁

75 80 72 65 68 75 80 83 85 80 80 75 80 69 55 67 72 70 82 78
70 67 80 85 84 80 80 73 75 78 71 68 65 59 73 70 75 82 81 75
70 78 63 67 77 68 75 80 76 71 68 65 75 80 76 78 81 70 76 82
85 75 60 68 58 71 67 69 77 75 72 80 82 85 70 75 69 65 72 75
74 79 80 65 59 64 73 78 80 75 60 73 77 70 82 80 76 67 69 66
76 75 83 74 82 80 78 76 70 68 75 65 67 73 70 73 80 68 65 75 73 71
76 64 65 70 55 45 67 45 50 65 46 46 40 58 61 59 50 62 57 50 60
47 51 53 63 55 58 55 51 42 51 50 47 45 67 43 58 72 69 57 50 53 56
66 43 55 41 66 43 55 57 59 46 63 65 57 58 57 48 50 48 63 57 53
56 63 41 56 56 25 57 58 60 60 63 69 55 45 50 83 55 68 58 62 60
58 55 57 60 65 71 55 59 61 50 73 60

A₁B₂C₂

47 50 45 58 40 33 25 45 48 56 50 48 61 70 48 45 52 50 55 63 68
48 45 50 52 54 52 50 56 58 61 66 57 45 38 57 48 51 55 48 65 67
49 51 49 48 52 57 51 58 47 49 53 55 57 50 63 51 60 58 54 50 45
48 53 57 63 40 45 38 42 52 61 43 41 50 55 50 48 45 47 48 65
58 50 51 58 45 50 61 63 50 43 41 45 40 49 38 43 35 40 51 43 45
40 46

59 60 45 51 48 48 58 48 50 58 57 58 51 71 65 60 55 68 58
54 60 62 38 47 51 59 65 62 65 71 71 65 63 45 48 58 67 45
48 51 65 48 50 53 59 61 65 67 71 45 60 55 49 51 63 43 54 70
45 48 70 51 49 51 43 54 50 45 57 41 60 48 50 53 45 61 45 50
45 48 50 53 63 65 58 69 50 58 46 49 57 55 61 66 71 60 45 60
45 58 45 75 51 44 51 57 38 49 58 49 61 58 47 36 48 70 65 61
70 51 65 65 67 58 75 32 57 70 68 70 42 54 68 61 69 48 51 45
63 45 56 64 48 71 48 55 51 41 62 47 58 58 62 70 39 65 55 47
67 45 54 56 62 64 35 60 48 48 61 58 48 59 40 58 64 44 61 45 55
71 52 50 47 70 65 49 68 45 68 60 41 56 50 72 65 42 60 54 65 57
37 45 56 63 44 35 58 53 58 68 35 55 50 61 64 43 48 48 55 42 68
49 43

A₂B₁C₁

95 68 95 60 90 58 90 65 65 68 88 67 80 54 62 75 79 65 62 87 60
58 80 60 40 78 55 66 60 60 82 60 78 69 61 70 63 72 50 37 65 45
70 42 52 38 55 41 52 45 45 51 61 63 51 58 42 46 48 54 40 55 35
38 56 43 39 48 60 55 45 55 43 53 40 48 40 45 48 51 55 60 45 38
46 58 50 43 38 35 40 41 62 35 38 33 30 38 40 42 40 51 40 41 35
33 41 50 32 39 35 35 30 30 35 33 40 30

A₂B₁C₂

75 68 65 60 65 58 61 64 48 64 54 71 67 70 70 50 75 65 69 66 70
75 71 60 59 60 65 55 65 65 60 55 68 75 70 65 68 67 65 80 50 60
48 51 68 55 56 55 60 45 55 60 55 60 48 56 57 55 60 45 56 52 55
55 50 68 64 52 45 65 62 45 60 48 50 45 50 48

A₂B₂C₁

56 62 65 48 48 51 62 70 55 45 58 75 60 65 48 63 60 68 49
50 65 71 63 66 60 65 49 55 57 63 60 70 52 54 68 56 55 70
57 75 48 56 48 54 60 61 48 45 49 55 45 48 55 48 56 38 45
40 36 43 45 41 46 50 44 48 47 45 48 5 49 38 51 32 45 40
32 61 55

A₂B₂C₂

65 50 50 48 55 58 41 53 45 51 46 60 35 60 50 45 55 61 40 38
47 45 48 43 50 45 41 38 35 50 55 40 38 51 43 40 55 40 45 41
35 40 38 60 35 41 44 30 43 42 45 40 38 35 41 44 45 38 41 36
45 51 40 53 38 40 35 46 47 40 50 36 49 35 46 27 50 41 45 40
38 41 45 35 41 40 45 35 30 41 56 43 44 50 41 45 43 46 40 38
32 40 28 33 39 50 58 45 53 60 45 58 66 35 40 48

N.B.

- A₁B₁C₁ - Open climate, high teacher effectiveness and high job satisfaction
- A₁B₁C₂ - Open climate, high teacher effectiveness and low job satisfaction
- A₁B₂C₁ - Open climate, low teacher effectiveness and high job satisfaction
- A₁B₂C₂ - Open climate, low teacher effectiveness and low job satisfaction
- A₂B₁C₁ - Closed climate, high teacher effectiveness and high job satisfaction
- A₂B₁C₂ - Closed climate, high teacher effectiveness and low job satisfaction
- A₂B₂C₁ - Closed climate, low teacher effectiveness and high job satisfaction
- A₂B₂C₂ - Closed climate, low teacher effectiveness and low job satisfaction.

APPENDIX. V

TEACHER EFFECTIVENESS SCORES

<u>Public</u>	<u>Missionary</u>
140	138
136.5	119.5
132	137.5
127.5	119.5
122.5	129.5
136.5	135
129	114
136.5	134.5
126.5	123.5
122	124
<u>Government</u>	<u>Municipal</u>
126	123
101.5	127
112	107.5
97	112
104.5	118
113	102.5
133	102
110	105
146	107
<u>98.5</u>	<u>102.5</u>

APPENDIX. VI

JOB SATISFACTION SCORES

Public

84

80

77

82

79

80

97

82

69

64

Missionary

85

58

97

102

97

79

71

96

83

73

Government

83

84

81

69

76

78

81

81

64

86

Municipal

82

81

61

76

70

87

68

70

75

65