A Comparative Study of Teacher-Pupil Relationship in Public Schools and Other Schools of Uttar Pradesh

ABSTRACT

THESIS SUBMITTED FOR THE DEGREE OF

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IN

EDUCATION

By

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The present investigation is, "A comparative study of teacher-pupil relationship in public schools and other schools of U.P." This relationship between teacher and student is mainly determined by the teacher's attitude towards the student and the student's attitude towards the teacher. These attitudes depend on the fact how the teachers and students perceive each other.

The study reveals that the students of non-public schools whether co-educational or single sexed, hold more favourable attitudes towards their teachers than the students of public schools. The teachers of non-public schools seem to be more favourably disposed towards their students than the teachers of public schools. Thus, both the teachers and the students of non-public schools are more favourably inclined towards each other than the students and teachers of public schools.

The schools located in rural areas have usually common behavioural characteristics. Interpersonal relations between the teacher and the students follow: the cultural traditions where the teacher is revered, respected and more or less enjoys the same position as parents. Naturally, students who interact with the teacher develop psychological identification with them. Rural masses are basically conservative.
in their cultural identity through their social, cultural and academic institutions. This does not mean that the ray of social change has not illuminated them rather the change variables have hardly pierced the protective cultural and religious shell.

The public schools have adopted the western system and traditions of schooling. The style of life adopted in public school is cosmopolitan and reflects the symbols, manners and patterns of social behaviour of high status groups of western society. Teachers as well as students come from different strata of society and for all practical purposes are total strangers to each other. They act and interact on different psychological planes. It is a travesty of facts that urbanites and particularly, people occupying higher echelons of society embrace modernity and try to imitate the western mode of behaviour. The western system encourages free and frank discussions and one is trained to develop one's views and opinions. In other words they are never stimulated to accept uncritically the actions of their peers or elders related to them. These aspects are reflected in their response patterns.
Methods and Procedure:

The investigator selected public and non-public schools of U.P. Public Schools in U.P. are residential, and unisexed schools, whereas in non-public schools, there are single sexed and co-educational schools. The investigator selected both types of schools from rural and urban areas for this comparative study.

Tools used:

Two rating scales were used to gauge the characteristics of students and teachers and their personal liking towards each other. Both were developed by Bryan and American Council of Education respectively.

Validity:

The validity of both the scales on the whole was tested by correlating each characteristics of the subject with personal liking. The product moment was used for the calculations of co-efficient of correlation. All the correlations were found to be significant at .01 level and hence there exists a positive relationship in both the scales.

Reliability:

The split half method was employed to determine the reliability of the both scales. Pearson Product Moment Correlation technique was applied to data. In order to find
out the reliability of the test Spearman Brown Prophecy formula was used. Reliability co-efficients for the students and teachers were .98 and .98 respectively. The co-efficient were statistically significant beyond 1% level.

**Sampling:**

The investigator collected 683 rating scales from teachers and 683 ratings scales from students regarding their relationship to each other.

**Hypotheses:**

Hypotheses were split into major and subsidiary ones. The Major hypotheses, stated below based on cumulative scores. This is followed by comparision of each characteristic separately, which constitute the subsidiary null hypotheses.

Major Hypotheses are as follows:

1. The students of non-public (coeducational) institutions would hold favourable attitude towards their teachers than the students of single sexed, public schools.

2. Students of non-public single sexed schools (c) would favourably endorse the characteristics possessed by the teachers than the students of public schools. (A)
3. The teachers of public schools (A) would hold more favourable attitude towards individual characteristics possessed by their students than the teachers of non-public (co-educational) schools (B).

4. The teachers of public schools (A) would hold more favourable attitude towards individual characteristics possessed by their students than the teachers of non-public (single sexed) schools (C).

**Statistical Analysis:**

Keeping in view the purpose of the present study, the Kolmogorov - Smirnov two sample test method was employed to compare the teacher pupil relationship of the two types of schools.

**Findings:**

The first three hypotheses have been accepted in the sense that there exist difference between the two types of schools. The value of K.S. are very high (statistically highly significant). The comparison of mean of values of schools also supported our analysis. The major hypotheses were tested first and it was followed by the comparisons of schools on various characteristics which are theoretically and empirically considered to be the core parameters of attitudes. The
value of the last hypothesis is insignificant. The differences in means of single sexed non-public and public schools is negligible. Statistical differences between non-public single-sexed and public single-sexed schools are insignificant whereas the statistical differences between non-public co-educational schools and single-sexed public schools were observed.

When the characteristics are individually compared, the teachers of the non-public schools have favourably endorsed the characteristics (method, knowledge and academic career and social adjustment with adults) of their students compared with their counterparts in public schools. The public school teachers on the other hand, have endorsed 'conduct' and 'social adjustment with peers'. The teachers of the two groups have more or less equally endorsed the remaining characteristics and probably due to this, the overall hypothesis (No. IV) was found to be statistically insignificant.

The findings may also be interpreted in terms of sex differences. It is a matter of common knowledge that in co-educational institution there exists a better sense of competition and cooperation. Students are generally regular,
punctual and more disciplined. It is observed that girls are more respectful towards their teachers and generally follow the rules and regulations of the schools. Thus, it is observed that the above mentioned aspects might have influenced the results.

The basic factors that might have influenced the results of the present investigation are socio-cultural variables, sex differences and organizational climate.
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CERTIFICATE

This is to certify that Miss Kausar Bano carried out research work under my supervision on "A Comparative Study of Teacher-Pupil Relationship in Public and Other Schools of Uttar Pradesh" for the degree of Doctor of Philosophy in Education in the Department of Education, Aligarh Muslim University, Aligarh. The present thesis contains several new informations on the Teacher Pupil Relationship. The entire work has been done by Miss Kausar Bano on her own.

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Kausar Bano
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### BIBLIOGRAPHY
INTRODUCTION

Change is an inevitable law of nature. What is recurrent today, after undergoing the traumas of time, grows out-dated and often odious. Gleaning through the annals of Indian history one is struck by the system of education that prevailed in the ancient times. The system has registered sharp changes. And there are many factors that account for bringing this change. However, past is linked with present. The same holds true in the case of our educational system. The system has undergone a thorough change, yet the values associated with the system have survived (though to a very negligible extent) in the wake of new sensibilities—educational, economic, social and cultural. As already stated, it is quite fascinating to have a look at our ancient educational system. In fact, the educational system as such, as we perceive today, did not exist at all. There was nothing formal. Today to conceive of something without a concrete or formal or procedural system appears almost unbelievable. But, there were days when the concepts with which we have been so familiar did not exist at all.

Life in all its walks had an indelible bearing of religion in the ancient days. To contend that religion and clergy
governed the matters from cradle to grave is certainly not a sweeping statement, for social histories attest to it that in the past religion, or in other words the clergy whether Christian or Hindu or Pagan, was the leader in every walk of life. There was nothing possible without their consent. Indian education, like all other activities of life, was tied tenaciously to religion. Since there did not exist a formal system, to ascertain facts or data is a herculean task. Yet, one may from a general idea, as verified by the accounts rendered by social historians, that religious education was imparted along with occasional lessons in temporal affairs by the clergy. Moreover, as per the religious structures, only Brahmins, a notable section of the society were privileged to attain knowledge. This also greatly hindered the spread of education. In the absence of any formal set-up; education was imparted in a casual manner without any attendance, degree and diploma. There were no academic bodies, syllabuses and many other things which have by now become synonyms to education. Inspite of this fact that any system as such did not exist, it had very rich conventions. Those associated with this profession were held in great esteem, they were even idolized. Similarly, students, howsoever small in number almost worshipped their teachers and were ever ready to lay their lives for the teacher. Thus, the feature, which is of
some significance to us today, relates to the fact that this profession was regarded as a noble profession, and there existed an inevitable and laudable teacher-student relationship. Since there were no mercenary motives attached to the profession the relationship rested on selflessness, mutual faith, respect, affection, obedience and understanding. This went a long way in establishing and strengthening healthy ties between the teacher and pupil.

The Mughals after having taken over the cultural life of India failed to initiate or affect any thorough change in the educational set-up. The only remarkable change that seems to have taken place during their period is that the doors of education were now thrown open to a larger public. The traditional guru-chela relationship and the student lessoned under some distant tree were replaced by the establishment of a handful of Madarsas, where education was still characteristically religious. Moreover, education even in the days of the Mughal rule was a privilege for the upper strata of society. In addition to this, there was no room for girls' education in the cultural environment developed up by the Mughals. In short, education was still confined to a very small section of society. Like the custom prevalent in ancient days, the Mughals say to it that pecuniary motives were not to play
any role in this sacred profession. Similarly, the educational system did not register any formal shape during the Mughal period.

With the establishment of British rule in India, marked changes in the educational set-up took place for like all other walks of life on Indian society, education also experienced foreign inferences. And Britishers being the rulers, intellectually advanced, and equipped with the latest techniques succeeded remarkably in giving new shape to the Indian educational system. The educational system so far neglected, informal, and catering to the needs of the privileged sections of the society was transformed into an advanced, formal and public enterprise. They affected a drastic change in the set-up. The Western education system was undoubtedly deliberate, organised and thoroughly formal, as it was soon subdivided into a) primary education and b) secondary education. Moreover, now the doors of education were open to all irrespective of caste, creed or class. However, backward classes being socially and economically retarded failed to avail themselves of this opportunity and benefitted little from it. It was only after independence and the crusade launched by Mahatama Gandhi, the great champion of the backward cause, that the Harijans got equal opportunities
to get education. Similarly, the changed social and economic structure of the society also necessitated women's education. However, it was implemented after much stiff opposition and hostility of the old guards.

Undoubtedly, the educational system improved a lot, as already stated, it got transformed into a definite well-organised, well-planned, formal and useful discipline, due to the westernization of the educational system.

But equally important is the fact that the profession lost much of its prestige, sacredness and dignity. With the formalisation of education mercenary motives entered into. And what by then had been so selfless was poisoned by materialism. The concept of education which had in the beginning revolved around the idea of imparting and assimilating maximum knowledge was reduced to a money-making or rather money-exhorting affair. Gone were the noble and laudable values attached hitherto. Learning for the sake of learning was replaced by learning for livelihood. Consequently, the halo so captivating, so selfless, so sincefe and so commendable, has almost vanished. The teacher-student relationship has received an irreparable set back due to this conceptual change of education. Speaking in concrete terms, now the rapport that is no more visible is due to fact that under the
new educational system there are very little chances of student coming close to the teacher, for there are limited school hours. Since, now education is public, the schools are generally overpacked owing to the large population of the country thus almost making it impossible for any relationship to exist between the teacher and the taught.

The above verse gives a respectable picture of a teacher. The pupil who is astonished to see the God and his teacher at the same time is unable to decide whether he should first bow before God or his teacher. But after a moment he realises that he should bow first before his teacher because it is only through him that he has gained knowledge about God. It is an evidence for the high status, the teacher enjoys in Indian culture.

The teacher, who was regarded almost akin to parents according to the old concept has by now dwindled into a paid employee who is paid for lecturing for few hours a day. Similarly, students who used to be obedient, respectful to their teachers and interested in assimilating the maximum possible knowledge have now become interested
only in getting certificates and degrees. The keenness for acquiring knowledge does not exist any more, education has now become a means to get an employment.

Student turmoil and growing indiscipline is the result of this very concept of education. The potent cause is a growing gulf between teacher and pupil. The growing gulf is the result of the materialistic attitude of the society and neglect of the moral values and dignity of the profession of teaching itself. The parties responsible for this state of affairs are mainly three (1) Parents, (2) Students and(3) Teachers. Any attempt to achieve the desired end would be successful only when all the three forementioned parties are handled in the proper way. Parents must develop an attitude of respect and honour toward teachers, who are supposed to educate and inspire their children with their own noble character. If they develop such an attitude naturally their wards will also be encouraged to honour their teachers. At the same time the teachers are also to be trained in such a way that they might be proud of the dignity of their profession, irrespective of their material gain. In short, the society as a whole must be reformed on the basis of moral and ethical values in order to revive the desired
teacher-taught relationship.

The existing political, social and economic malases also account for a general decline in the rapport between teachers and students. Due to dirty politicking in the educational institutions, inadequate pay-scale of the teachers background of the students, the relationship has weakened a lot. As the teachers over-burdened by the work-load and struck hard by personal grievances fail to cope with students' psychological and emotional entanglements, students, naturally, do not look up to their teachers favourably.

As already mentioned, the past somehow manages to effect the present. Some how or the other the Indian society is still alive to the fact that education is a sacred pursuit and the students by and large imbibe this cultural heritage. So, the things are not at their worst. The old values have survived though they have been weakened a lot due to social stresses and strains.

Since the present research aimed at exploring the factors accounting for the teacher-student relationship, a thorough study was made of the essential factors. The data gathered in this connection amply proves that the rural areas of the country that fortunately happen to be the least affected by materialism and mercenariness, reflect
still an amiable and cordial teacher-student relationship. As the charts attest to, it was found that in the rural school, teachers occupy the most important position in the society, whereas in the urban schools, the status of a teacher is regarded to be important. But things have changed a lot in the case of public schools, where a complete westernization of the educational setup has taken place. Consequently, the teachers have been relegated to an inferior status in the public schools. Moreover, the students in these schools generally hail from the upper class of society. Therefore, they are courageous enough to indicate boldly the shortcomings of the teachers, as they are brought up in families with a liberal outlook. Partly due to the old conventions and partly owing to the lack of courage, the students belonging to the rural schools have hardly dared to express their views about their teachers in an unfavorable manner.

**CONCEPT OF TEACHER PUPIL RELATIONSHIP**

The teacher's influence on the young person's personality development is second to that of the parents because the personality pattern is already partially formed when the child enters school and because the child spends less time at school and has a less intimate relationship with
the teacher. However, the teacher's influence is second only to that of parents.

The influence of the teacher's attitude and behaviour on the students personality patterns originates from two major sources: the kind of relationship that exists between the teacher and student and the effect of the teacher on the emotional climate of the school.

The relationship between teachers and student is determined in part by the teacher's attitude towards the student and in part by the students attitude towards the teacher. These attitudes depend on how the teacher and the student perceive each other. When the teacher perceives the young person as a troublemaker or as a disinterested, lackadaisical student, her attitude towards him will, understandably, be far less positive than if she perceived him as a cooperative, interested learner.

If the student has a hostile attitude towards the teacher, it will be reflected in his interactions with the teacher and will influence her attitudes towards him and her treatment of him. His hostile attitude may be due to pressures from parents, siblings, and peers, to unpleasant experiences with the teacher, to dislike of the subject
she teaches or the way she teaches it, or to the acceptance of unfavourable stereotypes of teacher as given in mass media.

Teacher-pupil relationships normally become more formal and less warm as students continue their education (as shown below).

Friendly interaction with teachers decreases as children grow older, as shown in observational periods. (Adapted from H.R. Marshall). Some students find their relationships with specific teachers more pleasant and more satisfying than their relationships with their parents. Some identify so strongly with a teacher that they try to model their behaviour as well as their looks and dress after those of the teacher. This is especially common among girls during the "crush stage" in early adolescence.
FACTORS INFLUENCING TEACHER-STUDENT RELATIONSHIP

1) Favouritism:
Many students perceive their teachers as "playing favourites". This they resent, just as they resent parental favouritism toward a sibling. Few teachers recognize that they are showing favouritism and even fewer will admit it if it is brought to their notice but students themselves often get the opposite impression.

While the expression of favouritism, even in its mildest form, is an individual matter, certain children and adolescents are more likely to be favoured by their teachers than others. Students who make good grades are usually favourites partly because it is ego satisfying for teachers to have students doing well and partly because good students are ordinarily cooperative members of the class, causing little or no trouble.

Students who are dependent on their teachers, asking for help with their lessons and with extra-curricular activities, give their class mates the impression that teachers prefer them and spend more time with them than with those who are more independent.

Even though many teachers try to help the educationally and socially deprived children in their classes, these
students believe that teachers prefer students from higher socio-economic backgrounds. Some teachers definitely show a preference for those from more favourable home backgrounds because they find them more promising and more talented students.

Boys tend to be more troublesome in the classroom than girls and have less interest in doing their school work well. As a result, teachers often show a preference for girls. It is not surprising, then, that girls perceive their teachers as more friendly toward them than do boys, who often feel rejected and "picked on" by their teachers.

ii) Attitude toward students:

Students sense very quickly their teacher's attitude toward them and their interest or lack of interest in them. Studies reveal that student's ratings of teachers as good or poor are based more on the teacher's interest in and treatment of the students than on teaching techniques. "Good" teachers like their students, are interested in them as people, encourage them to work up to capacity and to conform to school rules, are personally secure and self assured, and are the leaders of the classroom group.
By contrast teachers rated as poor are perceived by students as hostile and indifferent, unfriendly and punitive in their attitudes, lacking in understanding of young people and their capacities and needs, primarily concerned with their own affairs, and weak and vacillating in situations where leadership is needed. Since they seem to be unsure of themselves and of their ability to handle students, students take advantage of them, work below capacity and cause trouble in the classroom.

iii) Teaching Techniques:

When students feel that their teachers are boring, that classes are dull and uninspiring, and that what they are expected to learn has little relevance to their daily lives, they are tempted to "stir up a little excitement". They develop an antagonistic attitude toward the teachers who seem boring to them and dislike the subjects taught by these teachers. In addition, they have little aptitude to study.

Teaching techniques may be regarded as boring because they are too advanced or too simplified for the age or intellectual level of the majority of the class members. Young and inexperienced teachers tend to use too advanced teaching techniques while older teachers tend toward the
other extreme. Students who are avid comics readers or television watchers often find the subject matter of their text books and classes dull by contrast.

iv) Classroom Control:

Just as children and adolescents resent authoritarian control in the home and strict and punitive parental attitude so do they resent such control and attitudes in the classroom. They regard ultrapermissive and vacillating disciplinarians as weak and ineffectual and show contempt for them, ridiculing them behind their backs and boasting about how easy it is to "get away" with things.

Even though they may rebel against rules, especially if they regard them as unfair, most children and adolescents have more respect for teachers who ask them to conform to rules and regulations. If young people have a voice in setting up the rules and if they serve on committees that handle school disciplinary problems, they regard such procedures as democratic and fair and the teachers who follow them as good sports. Under such conditions, a student-teacher-relationship marked by understanding and respect develops.

PERSONAL ADJUSTMENT OF THE TEACHER:

The well-adjusted teacher is far more respected and liked by students than the poorly adjusted, and a warmer
student-teacher relationship is possible. Studies of the personal adjustments of teachers have led Heil and Washburne to conclude that teachers are of three types. The first "turbulent" teachers, are blunt, impulsive, tense and unpredictable; they tend to express their feelings and thoughts in verbal and physical aggressions. The second, equally harmful to the psychological well being of the students and to the emotional climate of the classroom, are the "fearful" type. Such teachers are insecure, helpless dependent and defensive. Not only do they fail to win the respect of their students but, even worse, students sense their insecurity and quickly take advantage of them. The third type are better in most respects for students and for classroom climate. These are the "self controlled" teachers. Sensitive to the attitudes of others, at the same time they want things to run smoothly and they expect their students to conform to school regulations. Even though they sometimes tend to be rigid, they command greater student respect than the other two types.

Effects of Teacher-Student Relationship on Student's Personalities:

The kind of relationship that exists between teacher and students and the way the student perceives that rela-
tionship have a direct effect on the student's self concept. If a student believes that the teacher dislikes him and if he interprets the teacher's words and actions to mean that he is rejecting and "picking on" him for whatever he says or does, he will come to think of himself as a martyr. By contrast, a student who does his work conscientiously, works up to capacity, causes no classroom disturbance, and does not demand too much of the teacher's time and attention, is perceived favourably by the teacher and is able to establish a satisfying teacher - student relationship. If he sees himself as a "good" person as he believes his teacher sees him, this will have an ego-inflating effect on his self concept.

Indirectly, the teacher student relationship influences the students' personality in two ways; through its effect on the emotional climate of the classroom and through its effect on student achievement. An important factor in determining what the emotional climate of the classroom will be is the kind of relationship the teacher has with students. Even if the teacher's relationship with only a few students is unfavourable the entire classroom climate can be affected adversely. This is especially true if the poor relationships involve popular students or if the majority of students
side with and sympathize with a student or students who they believe have been treated unfairly by the teacher.

The second way in which the student - teacher relationship indirectly influences the student personality is through the effect the relationship has on the student's motivation for academic achievement. When the student perceives the relationship as warm and friendly, his achievements are far better than when he perceives the relationship as hostile, punitive or rejectant. Many underachievers are the product of a hostile teacher - student relationship.

The effects are greatest during early school years when the personality pattern is still in the formative stage and when the teacher is more instrumental in the child's life than she will be later. Further more, the relationship may have the effect of reinforcing a pattern set in the home- or of modifying it, if the teacher-student relationship differs markedly from the parent - child relationship. Solomon declares, "A child with both stable parents and stable teachers is fortunate. Conversely, emotional problems are aggravated when a child with unstable parents is exposed to unstable teachers".

There is further evidence of the influence teacher - student relationships have on the student's personality.
Patterns of behaviour, developed as a result of learning to view himself through the eyes of the teachers, carry over into the student's relationships with people outside the school. The impulsive teacher sets a model for impulsive behaviour in her students, while the experienced, reflective teacher sets a model for stable, self-assured behaviour & positive personal relationships outside the school. Farnsworth writes.

"What a teacher is and does is more influential on students than anything he may say. It is sometimes a shock to teachers to realize how much their students are concerned with what they do, say, read, wear, enjoy and their manner and behaviour generally".
INDIAN PUBLIC SCHOOLS

No body denies that public schools in this country provide good education. Boys who come out of these schools have poise and self confidence, qualities which are greatly needed in our public life. Inspite of high fees charged by public schools, they maintain long waiting lists. These schools provide facilities for physical education and games, character building and intellectual development, which we would like to introduce in ordinary secondary schools also. In matters of educational standards too, these schools leave little to be desired and we would like all our schools to strive to attain the same standards.

Public schools are secondary schools and the secondary school system in India is extremely complex. Secondary schools fall into two broad categories. Government schools are those set up and managed by the state; private schools, on the other hand, are owned and run by non-governmental groups and organisations. Out of 27,600 secondary schools in the country, approximately 18,000 or 65 percent are under private management. Among the private school we may differentiate those, which are independent (i.e. they receive no government grants-in-aid) from those which receive a regular annual grant and are bound

by the rules and regulations of the grant-in-aid code.

Both independent and aided private schools may be secular or "denominational", that is, schools which are founded and administered under constitutional guarantees by various religious bodies. Most of the better known christian denominational schools are affiliated to the Inter-state board for Anglo-Indian Education. There are about 300 such schools educating over 2,00,000 students. Approximately 50 percent of these schools are independent, the rest receiving grants-in-aid from the government.

The Indian public schools are private, independent and secular institutions of secondary education. The Sainik and Military schools, which form part of the public school complex, have been established by the government and receive annual grants-in-aid. They are, however, considered to be "private" and "independent" because they are managed by autonomous boards of Governors and are not obliged to follow the regulations of the grants-in-aid code.

The Indian public schools, as we have noted above, are independent and secular. Both are often confused in the public mind as denominational schools because they share certain common features: fees are high, the clientele is largely restricted to the upper income groups of society, the medium of instruction

is English, and they are believed to maintain high academic standards. This confusion of the public schools with other independent schools is further compounded by the practice of some schools appropriating the label "public" for the cachet which the name gives them. In Delhi, for example the three public schools are Air Force Central School, Modern School and Delhi Public Schools (which became an Associate Member of the Indian public schools conference in 1970). Salwan public school and Frank Anthorny Public School are, notwithstanding the name, not public schools in the technical sense of the term.

Briefly, a public school is one whose headmaster has been admitted to the Indian Public Schools Conference (IPSC) by Election. To qualify for membership of the Conference, a school has to comply with a set of technical criteria relating to the academic freedom of the headmaster, conditions of service of the staff, facilities of the headmaster, conditions of service of the staff, facilities for games and extra-curricular activities, the residential accommodation for a certain proportion of the student body.

The Indian public schools broadly conform to the following description. They are mainly residential schools with an independent Board of Governors. Each school is divided into several more or less autonomous units called "houses" in which 40 or more boys live under a housemaster. There is prefect system of authority which provided selected boys with
opportunities for training in responsibility, leadership and service. Extensive facilities are available for a wide range of extra-curricular activities; games, athletics, physical education, crafts, art, music, dramatic and a variety of hobbies. The central emphasis in both academic and extra-curricular activities is on the "all-round" development of personality by the cultivation of academic skills and the qualities of initiative and responsibility, self-disciplined, team spirit, sportsman, fairplay, a refined taste and the spirit of public services.

The public schools, because of their high fees, are exclusive institutions catering to the needs of the upper social classes and the rich. The style of life adopted in the public schools is cosmopolitan and tends to reflect the symbols, manners and patterns of social behaviour of high status groups in Western Society. Great stress is placed on fluency in spoken English and several cultural and recreational pursuits such as art, music, horse riding, mountaineering and shikar are associated with elite styles of life.  

Though the contemporary public schools fit this general pattern of formal organisation, educational and cultural emphasis, it would hardly be correct to assume that they are

alike in every respect. On the contrary, there are significant variations between the schools not only in traditions but also in the mode of organisation, the composition of the student population and the quality of the academic programme. Most of the schools are predominantly residential, but there are a few mainly day schools which have limited facilities for boarders.

Like their English prototypes, most of the Indian public schools are all male institutions. Only a few are co-educational. Such as Modern School, New Delhi, Air Force Central School, Sanawar, Lovedale and Hansraj Morarji. Of these only Sanawar and Lovedale have residential facilities for girl students. All the Sainik and Military schools are exclusively for boys. Most of these schools though not all have preparatory or Junior schools attached to them. The public schools are believed to recruit their students on all India basis, yet the catchment area of students and the staff tends to be regional rather than national. Modern schools for example, recruit, most of its students and staff from Uttar Pradesh and Punjab, Lovedale from Southern states of Tamil Nadu, Kerala, Andhra Pradesh and Mysore.

Apart from the Sainik and Military schools, which were founded by the government to prepare boys of ability for entry into the National Defence Academy and the Indian Military Academy, a few public schools such as Shri-Shivaji, Sanawar,
Lovedale and Punjab Public school have strong military traditions of which they are very proud. Though Sanawar and Lovedale are better known public schools. It seems true to say that the more pronounced the military orientation of a school, the less the esteem in which it is held among the public schools.4

Among British Public schools the most famous are known as the 'Seven'. These are charterhouse, Eton, Harrow, Rughly, Shrewsbury, Estminster and Winchester.5 The masters of the schools were asked to rank the seven Indian leading public schools. According to 84% the masters (excluding Military schools) the following are the Indian Equivalent of the British "Seven". Doon School, Mayo College, Modern School, Scindia, Lovedale Sanawar and Punjab Public School. It should be noted that these schools are not listed herein on evaluative rank order, except Doon School which is considered by an overwhelming majority of the masters to be the most outstanding public school in the country.

In recent times the public schools have become the Centre of bitter controversy because they are believed to offer the social and economic advantages of a good education to a socially

4. SSPMS Samachar, 120 (July 31, 1965) p.2.
exclusive clientele. At the core of this controversy is the hotly debated issue of the equalisation of educational opportunity in a democratic society. The arguments of the critics of the public schools is that they appear to function as exclusive pockets of entrenched privilege and are responsible for the creation and maintenance of a caste of modern mandarins.

In Britain especially after world War II, the public schools came in for severe criticism because they were held to be "citadels of privilege" catering primarily to the needs of the upper social classes and exercising a divisive influence in British Society. This opposition to the public schools was largely the outcome of a combination of educational, social and political factors, the most important being the considerable expansion and improvement of secondary schools in the state system, the rapid speed of a democratic ethos and the socialist ideology of the British Labour Party. The wide-spread criticism of the British Public Schools resulted in two government sponsored inquiries, the Fleming Committee (1942) and the recent public school Commission (1965). The main concern of both these commissions was to advise the government "on the best way of integrating the public schools with the

state system of education", and to suggest ways by which public school education should be made available to boys and girls capable of profiting thereby, irrespective of the income of their parents.9

In India the criticism directed at the public schools has also been motivated by educational, social and political concern. The critics of the Indian Public Schools generally concede that they offer a good education to those who can afford to pay for it. At the same time, it is asserted that this academic excellence functions as a mechanism for the perpetuation of privilege. (By providing a privileged education to the children of the upper social classes, the public schools are accused of promoting class distinctions in a socialistic pattern of society and also of encouraging a style of life and patterns of behaviour which are considered to be Western and not sufficiently in harmony with the ideals and values of Indian culture. In the Lok Sabha and elsewhere, politicians have repeatedly attacked the public schools as "undemocratic" and "foreign" because of their origins and general outlook, and have urged the government to abolish them. Dr. K.L. Shrimali, former Union Minister of Education (1958-63) for example, warned public school head-masters that the "social and economic changes that are taking place in our society will

not only remove difference in wealth but will also get rid of all those institutions which enable the wealthy classes to buy certain material advantages for their children.

A HISTORICAL RETROSPECT

After 1857 when India was brought under the direct rule of the British Royalty and Parliament, some serious thought was given to providing higher and better education to a class of people whose sympathy it was necessary to win in the political interest. It was a period of consolidation of power and reassessment of politics. Except for a few rulers and upper class people not many could come forward for the European type of learning. The mass of people were busy earning a bare living for themselves. The Muslims suffered from a sense of political humiliation that the British had perpetrated on them and, therefore, as a group they were difficult to please. Except in the three Presidencies where some form of European education had already been started now here was the impact of the British arrival and their learning so apparent or widespread. The major limitations of the British rulers were lack of financial resources for education and their inability to bring as many of their race as they wanted during times of dire need. Therefore, they were forced to be selective in their provision of education as well as in making friends.

where else except among the indigenous ruler could they find the qualities which they sought for to qualify for their friendship. If this group of people was prepared to offer its hand friendship, the others who showed equal or perhaps greater interest was the "new" middle class who had their economic axes to grind. Education grew in numbers and quality as both ends i.e. at the top and down below. Former education was equivalent to good manners, broad mindedness, liberalism and the latter it signified an instrument of economic grains. The history of Indian education is the story of demand and supply of education for an everswelling number of middle and lower middle class people.

The first school of this type was founded in the year 1861 and named Raj Kumar College, Rajkot meant for the sons and relatives of princess Kathiawar. The other college was named after Lord Mayo at Ajmer established in 1873. This college was also established only for princess. Some other colleges were also established but they had neither the curricula of the British School nor its strict regimen. This class of students had no definite goal in life except that these schools had English as a medium of instruction and prepared students for the Cambridge School Certificate examinations, they had nothing to qualify them to be called

12. Gibson, J.T.M. in a Handbook of the Indian Public School P. 12
public schools.

The proper beginning of the Public Schools in India was made in 1928 when as eminent lawyer from Calcutta, Mr. S.R. Dass, started collecting funds for opening a chain of such schools. His sons had been taught at a public school in England and he had himself intimate knowledge of their work and worth. Indeed he became the Law Member of Lord Irwin's Executive Council in 1927 on the condition that he would be permitted to use his influence for collecting money for the propogation of the public school idea. He died without fulfilling his dream. He had, however, collected 20 lacks in cash. His followers including Sir Joseph Bhore, Chairman of Indian Public Schools Society carried on work and succeeded in founding India's first Public School at Dehra Doon with 70 pupils. Mr. S.R. Dass had got a Society registered as the Indian Public School Society in 1928 which performed the job. Mr. Dass has included in the Article of the Association, the object of founding this school, which was to keep it free from distinction of caste, creed or social status.

After that many Public Schools had been established. They all were working to achieve the same goal they thought it necessary to combine into a single body. "The Indian Public School Conference" came into existence in October 1939, and the headmasters of the Public Schools were requested to be its members. The Indian Public School Conference had its origin
in a meeting of heads of schools in June 1939 immediately before
the War. It was attended by seven heads and Mr. J.P. Sargent,
Education Commission, Government of India. Numerous problems
pertaining to education were considered. For instance, they
discussed about the inadequate provision of examination in
Indian languages, the formation of association etc. They wished
to adopt and adapt a few characteristics of the English Public
School in India. Mr. Sargent, later Sir John, was somehow
favourably inclined towards them, although he stated frankly
that in England he opposed and criticised the English Public
Schools. But his enthusiasm for them was the result of his
liking for certain good qualities these schools possessed. Be
that as it may, the I.P.S.C. took birth with the efforts of
the headmasters of nine schools which included Smith-Pearse,
Foot Barry, Marchant etc. The I.P.S.C. in the beginning had
agreed to work in consultation with the Board of Anglo-Indian
and European Schools. One could easily understand the motives
behind this agreement. Both had English headmasters and
English as the medium of instruction as boys and girls of
these schools were supposed to rule over India. With a common
interest it is impossible not to be sympathetic with each other
programme. But this is all incidental. The Principal reason
was that the products of these schools were supposed to be the
pillars of the British Empire in India. How could their managers
think otherwise?
Despite of the fact that these schools had to face much public criticism, the I.P.S.C. stood by solidly like a rock and continued effecting improvements in their working and management. It should be obvious to the reader that simply by opening these schools to all did not affect their character. The only change came in the form of accepting pupils from rich families. Even as it is, it was definitely a step forward and the due credit must be given to them. The initial enthusiasm was more personal than public and broadmindedness of the originators of I.P.S.C. was not shared uniformly at the top.

The Public Schools numbered 14 in 1951. The tuition fees as reported in the above mentioned publication ranges from Rs. 60 per annum to Rs. 2,100 for ten months, in the latter case, however, inclusive of hostel fees. Not all were residential and except in one or two cases hostel accommodation fell short of the actual intake capacity. Indeed, not all had a large number of students because their number varied from 91 to 530. At least three were co-educational. It is interesting to note that except the Sardar School, Gwalior which had 10,291 books in library, none other had more than 8,900 volumes and in fact most had about 3,000 books only. The disparity in the starting salary of the teacher and the principal ranged from Rs. 100 to Rs. 1,000. Considering the affluence educational standards and the English models that they reportedly boasted of, the above facts are damning. These figures speak neither
of their popularity nor of particularly high standard of education. On the contrary, except that these institutions had succeeded in keeping themselves away from the public gaze and surrounded themselves in a shroud of mystery and therefore acquired a kind of halo, one wonders why did the government or the politicians not think of ignoring them as closed private shops.

According to a study conducted in 1965, the public schools numbered 26. In 1970 there are 44 public schools in India.

LIST OF PUBLIC SCHOOLS IN INDIA

1. Air Force School,  
Behind Subroto Park,  
DELHI CANTT. - 10

2. Birla Public School,  
Pilani (RAJASTHAN)

3. Birla Vidya Mandir,  
NAINITAL (U.P.)

4. Bishop Cotton School,  
SIMLA.

5. Colvin Taluqdar's College,  
LUCKNOW (U.P.)

6. Daly College,  
INDORE

7. Doon School,  
DEHRA DUN (U.P.)

8. Hansraj Morarji Public School,  
Andheri, BOMBAY.

9. Hyderabad Public School,  
Begumpet, HYDERABAD.
10. Lawrence School, LOVEDALE (NILGIRIS).
11. Lawrence School, SANAWAR (SIMLA HILLS).
15. Military School, BANGALORE.
16. Belgaum Military School, BELGAUM.
17. Chail Military School, CHAIL (SIMLA HILLS).
18. Dholpur Military School, DHOLPUR.
19. Modern School, Barakhamba Road, NEW DELHI.
20. Punjab Public School, NABHA.
21. Rajkumar College, RAIPUR (M.P.)
22. Rajkumar College, RAJKOT (GUJRAT).
23. Rishi Valley School, Rishi-Valley P.O. CHITOOR (A.P.)
24. Sadul Public School, BIKANER (RAJASTHAN).
SAINIK SCHOOLS

25. Sainik School, 
AMRAVATHI NAGAR (MADRAS).

26. Sainik School, 
BHUBNESHWAR (ORRISSA)

27. Sainik School, 
BIJAPUR (MYSORE)

28. Sainik School, 
CHITTORGARDH (RAJASTHAN)

29. Sainik School, 
JAMNAGAR (GUJRAT).

30. Sainik School, 
KAPURTHALA (PUNJAB).

31. Sainik School, 
PÜRULIA (W.B.)

32. Sainik School, 
KUNJPURA (KARNAL).

33. Sainik School, 
REWA (M.P.).

34. Sainik School, 
SATRA (MAHARASHTRA).

35. Sainik School, 
P.O. Srojninagar, 
LUCKNOW (U.P.)

36. Scindia School, Fort, 
GVALIOR.

37. Scindia Kanya Vidyalaya 
GVALIOR.

38. Shri Shivaji Preparatory 
Military School, 
POONA.

39. Vikas Vidyalaya, 
RANCHI (BIHAR).
VALUES AND GOALS OF PUBLIC SCHOOL EDUCATION

At the time that the Doon School was founded and Pearce and his colleagues were discussing the reorganisation of the chief's colleges, the focus of their concern was the instrument function of the internal structure of the public schools in achieving their specific educational goals: character formation and training for leadership. It must be remembered that Pearce, Smith Pearce, Marchant, Foot and the other headmasters were public school men who believed unquestioningly in the values and purposes of public school education. The pattern of education which the English headmasters of Chief's colleges esteemed and aimed at reproducing in Indian Public Schools appears to be none of other than a scheme of values and a set of moral norms which continue to define even today and essential elements of British Public School tradition and its code of conduct.
In seven essays later published in a book form as THE INDIAN PUBLIC SCHOOL (1942), Smith-Pearce, Pearce, Marchant and Foot set out what they believed should be the aims and ideals of the Indian Public Schools. In his conception of aims of public school education, Sargent, who wrote the preface, assumes that the ideals and values of British Public Schools have equal validity for Indian Public Schools. They are "varieties", he writes, which are, "Valid the world over and the schools my friends envisage are founded mainly on them. Like Sargent the headmasters of the Chief's Colleges and Foot of Doon School, who were the moving spirits behind the formation of I.P.S.C., were confident that British approach to elite education would be equally affective in training Indians for positions of responsibility. Yet Smith-Pearce as also Marchant and Foot, noted that the British Public Schools were institutions embedded in a culture that greatly valued tradition.

To compensate for the lack of tradition, on which British Public Schools depended for the transmission of the norms and values of elite behaviour, these headmasters substituted what Foot called, "Conscious planning" in the training of character of leadership. The essays which comprise "The Indian Public Schools" are perhaps, best interpreted as applications of this "conscious planning" to five major aspects of public school education, training of the mind, training in leadership,
training in physical fitness, training for leisure and religious education.

These essays have a special importance. Together with I.P.S.C. Memorandum of Association and Rules, they inaugurate a tradition which defines values and ideals of the Indian Public Schools and invest them with the qualities of permanence and continuity. The overall goal of public school education, as envisaged by these English headmasters, is the all round training of character, "intellectual and moral - for the production of men competent to take responsibility", or as they formulated it in the Memorandum of Association, the "Primary object" of Public School education was to "prepare boys of ability for positions of leadership and responsibility in all walks of life".

It was expected that the Public School boy would develop into what Marchant called a "Cultured gentleman" with a "considered opinion of his own" who had learned to "delight in living things of nature" cultivate an aesthetic appreciation of art and music and from a cultured taste. This notion of the "cultured gentlemen" involved a variety of social skills. Great value was attached to speaking English with fluency and a cultured accent, to social poise and to the social manners, characteristic of the style of life in elite circles.

The gentleman was expected to develop skill and interest in certain kinds of sporting activities and hobbies which
function as status symbols of leisure by which he was to be recognised. The boys were offered opportunities to participate in such sporting activities as shikar, mountaineering, fishing and tennis; hobbies such as painting, wood carving, clay modelling, bridge and chess, travel, music and the theatre were encouraged and boys were taught to love and look after animals, particularly dogs and horses. These, it was believed, would provide cultured gentleman with resources for the socially appropriate kinds of recreational pursuits.

The code of moral conduct set a high premium on truthfulness and fearlessness, and stressed the moral obligation of public service to justify privilege. To religious education was assigned a pedagogical role in strengthening commitment to this scheme of moral values and norms of behaviour. The headmasters were faced with difficult problem of providing religious education for boys belonging to different religious faiths. In British public schools the chapel was a central importance in the task of imparting a moral education with the emphasis on character training for leadership. In India it was Foot's solution to the problem of religious pluralism that set the pattern for the other public schools; he replaced the chapel with the daily school Assembly, and religious doctrine with non-sectarian prayer and "practical religion".

Like the chapel, the Assembly symbolised the unit of the school community; and the message of the assembly, like that of
the chapel, was aimed at motivating adherence to the norms and religious value embodied in the approval code of public school conduct. What was termed, "practical religion" was understood as the sustained effort on the part of the school community to express the ideals of cooperation, self discipline, tolerance, personal and social responsibility, in some form of social service.

In the task of moral education of the boy, religion was supported by games and sport. The cult of bodily fitness and manliness was combined with an intense moral purpose in the public school obsession with organised games and sports. Organised games were highly valued because they were thought to develop in the boys toughness endurance, resourcefulness, cooperation and unselfishness, fair play, loyalty, obedience self-control and leadership.

The value and standards of behaviour of the contemporary public school are intimately related to the overall objectives of all round training of character for responsibility, leadership in public service and the professions. In the training of character the qualities selected for special emphasis are honesty, self-confidence, loyalty, courage, manliness, cooperation, self-restraint, team spirit, initiative, responsibility and the spirit of service. This Arnodian conception of character is most clearly discerned in statements about the aims and objectives of public school education. "Every effort is made
states a headmaster, to infuse our boys with the spirit of loyalty devotion and patriotic service, and to inculcate qualities of leadership, personality, discipline and team spirit among them”.

The notion that a privileged form of education carries with it the obligation of public service is constantly and insistently promoted in public schools. Public service is conceived in terms of the "house" and the school community, and is extended to the wider society that forms the external social and cultural environment of the school. In the development of this spirit of service a crucial pedagogical role is played by the "house" arrangement of community living, the prefect system and programmes of social service. If the house system teaches the boy to subordinate his private interests to those of the group, the prefect system, apart from the training boys in the handling of authority, aims at the concrete demonstration of the belief that power and privilege are only justified when used for the greater service of the community. The considerable powers given to prefects are expected to be exercised for the good of the school community.

The spirit of public service is commonly accepted as a valid criterion for the evaluation of the school's effectiveness in the training of character. "It would be of little avail" observes a headmaster, "claiming that the sense of service
stressed here since the earliest days fitted our boys to utilise their talents in modest cooperation with others to the benefit of the country if our old boys in their careers did not substantiate this claim. The careers which are highly esteemed are those which are most clearly associated with public service: the Administrative service, the Defence forces and politics.

It is frequently said by headmasters that not enough public school boys enter careers associated with public service. As they perceive it, few boys are entering the Indian Administrative Service (I.A.S.) or the Indian Foreign Service (I.F.S.) and that there has been a falling off in the number joining the Defence services. In terms of absolute number it could be said that few public school boys have entered the I.A.S. or I.F.S. as compared with those who join business or the professions. In some schools there appears to have been a discernible trend, as a former headmaster of Doon had often pointed out, towards careers in business firms rather than in the army or the various government services. But this does not seem to be typical of the public schools as a group. With respect to the I.A.S., what seems to be a smaller number of public school boys constitutes in fact a substantial proportion of the recruits. Morris-Jones (1964) found nearly 100 out of 350 I.A.S. Officers had received a public school education. This shows that public boys are over represented in the I.A.S. though their number does not come up to the expectations of the headmasters.
CHAPTER III

REVIEW OF THE LITERATURE
REVIEW OF THE LITERATURE

The literature on pupil-teacher relationship is too extensive to be surveyed adequately in just one chapter. The present survey is confined, therefore, to only the most relevant studies that are expected to provide a proper perspective for the present investigation, i.e. studies which have a bearing either upon the matter at hand or the method of studying the problem. The investigator inspite of her best efforts could not find any study relevant to the present investigation that had been carried out in India. Hence the survey is bound to include such researches also as have been carried out in some educationally advanced countries abroad.

It is clear from a survey of the literature that few evaluations of teacher's characteristics made by children have been undertaken in the U.K. recommendations to do this were by no means new. James ward (1926), lecturing towards the end of the nineteenth century on the application of mental science to education, had suggested to teachers, "surely one of the first steps towards the understanding of the young is to know how they regard us". Evans (1954) has pointed out that studies of the kind mentioned above were undertaken in the U.K. and elsewhere in the last decade of the nineteenth century. However, by the mid-thirties of this century, such
studies had petered out children – evaluation of the teachers
do crop up, but as incidental rather than central themes in
researches.

Studies dealing with pupil – teacher relationship appeared
for the first time in 1930. Most of the studies were concerned
with student's attitude towards school subjects and the schools.
Some investigators studies students attitude towards teachers
while others attempted to relate attitude with certain factors
such as intelligence, school achievement, conduct and marks,
rural or urban background, sex and socio-economic status. Still
other investigators studied the attitudes of teachers toward
students and also related these attitudes to educational qualifi-
cations and length of experience of the teachers.

In one of earliest investigations Pritchard (1935) studied
the relative popularity of secondary school subjects among a
large number of students both male and female. Each pupil was
provided a list of subjects and asked to rank the subjects in
order of his preference, mentioning the reasons for the first
and the last choice. The investigator found that the school
work, liked best by students of both the sexes, was of the kind
in which there was self – activity, or in which they could prove
things and discuss and argue. The investigator also found
evidence of strong desire on the part of the pupils for variety,
to link up the school subjects with everyday life and to consider
them as mature persons. In a rather similar study, Shakespear (1936) found that students in higher classes generally liked those subjects which permitted physical activity. At about the age of eleven plus, pupil showed some devotion to subjects where noticeable results could be obtained, and achievement in a subject influenced its popularity.

Tenenbaum (1940) held that children's attitude to a school was not intimately correlated with other variables, namely intelligence, achievement in school work, conduct and marks. He concluded, therefore, that the theory that failure is always associated with resentment was not borne-out. On the other hand, Drummond (1947), using a simplified type of attitude - questionnaire in which the statements to be checked took the form of a discussion around certain points between a group of boys and girls, found the attitude to school on the part of the backward adolescent rather luckeworm. She suggested that more attention might be given to them.

Stacey (1949) compared the attitude of girls and boys and also those of town and country children towards the school. He noticed little difference between the two sexes and none between children drawn from town and country. The attitude of the pupils remained stable for over a year except for a change among twelve-year olds. This change in the attitude of twelve year olds might have been due to the warning of the
interest in new surroundings and new subjects.

Arvindson (1956), in a study of factors determining school achievement of first year secondary pupils, found evidence that home background was by far the most important single non-intellectual factor. It was much more important than attitude to school as such, although Arvindson noted an instability of attitude at that stage. He showed that home background had almost as much to do with school success as intelligence itself and sometimes more. This confirms what was found earlier by a number of other investigators that the direct correlation between attitude and school achievement is low, at any rate among young children corresponding to those in early years of the secondary school. It is suggested that given a minimum basic willingness to learn the required material, attitude to school in itself does not greatly influence school achievement at that stage unless possibly the attitude is strongly adverse. Given the ability and a favourable home, pre-adolescent and young adolescent pupils will succeed at school whether they like the school or not and, in most cases, liking or disliking for school is neither very strong nor very stable. This may well because the material concerned may be acquired almost as much through what goes on outside the school as through what they learn inside.

It, however, seems more likely that as the material to be learned gets more complex and structured, attitude to school, which includes attitudes to learning in the school, assumes
greater importance as determinant of success. Also as time goes on, such attitudes will presumably become more positive.

In a similar investigation Allen (1960) measured the attitude of fifteen year old pupils of central London secondary modern school through interview and Likert and Thurstone attitude type of scales. The results show that girls were less favourably inclined towards the school than the boys at the fourth year stage, at the end of which they were to leave the schools. The results also show that in the beginning the girls are more favourably disposed than the boys, but that at the end of two years, there was nothing to choose between these two sexes. Towards the end of the school life, however the attitude of the two sexes showed signs of decline in interest. The results obtained through interview reveal that both boys and girls were equally concerned as to whether the teaching imparted to them was interesting, useful and effective? The pupils liked competent teachers and appreciated teachers friendly to them and treating them as their equals in certain respects. They like competent teachers but also complained of punishment.

Oeser and Hammond (1954) found that inspite of the authoritarian character of the class room, children did not reject school or the teacher, though they did not favour situations in which they were closely controlled.

Oeser and Emery (1954) have thrown further light on the way children see the school and the teachers. In a
way children see the school and the teachers. In a rural community in Australia, a school ideology test was given on the lines suggested by Baveals. The conclusions of their study are handicapped by the fact that they were drawn from results in the only school in the community studied. Nevertheless, it was found, as might be supposed, that children saw the teacher as possessing the greatest potency in the school situation. Their behaviour was directed principally towards the teacher and not towards the school work itself. The relative potency of the teacher was seen as greater by the children in the lower grades than those in the higher. Older children were a little more aware that behind the school demands stand the parents and other adults. There seemed, too, a slight though insignificant tendency for school work to be less attractive in the eyes of senior children. Even so, there did not seem to be very great difference with increasing age.

In one of the earliest studies in the U.K. dealing with children's evaluations of teachers behaviour, Hollis (1935) obtained data from a large number of children of different ages in both mixed and single sexed schools. Children were required to rank seven statements descriptive of a teacher's behaviour and it was found that the quality of "explaining difficulties patiently is conclusively the most popular". "Being friendly and sympathetic" was ranked second, with "just and fair" third, fourth and fifth were "humour" and allowing pupils to ask
plenty of questions. The teacher having wide interests was the ranked sixth while "discipline" was ranked as least important.

Tschechtelin (1940) devised an attitude test for measuring the attitudes of some elementary school children in America towards their teachers. The major aspects of the teachers personality were found as the investigator put it. "through logical analysis subsumed under seven general areas, i.e. they were aspects chosen as the weakness, since important areas of judgement on which the subject's attitudes are partly based, may be overlooked.

The seven chosen aspects were:

1. Liking for the teacher;
2. Ability to explain;
3. Kindliness and friendliness and understanding;
4. Fairness in marking;
5. Keeping order with children;
6. Amount of work required;
7. Liking for lessons.

Two tests were devised, one of which was administered to over 1,300 children from grades IV to VII, i.e. from nine to thirteen year old. The results revealed that the average attitude of children towards their teachers was substantially favourable, and it was rather more so with rural than the city children. No consistent trend was found in regard to age or grade; and no appreciable correlation was found between attitudes as measured
and intelligence test score, or between attitude and achievement. As the scores of boys and girls did not appear to be separated it was not possible to observe any difference between them. If they had been separated it might also have been possible to see a trend with age. It was quite possible, say, for a trend on the part of girls to be cancelled out or marked by a trend as compared to the attitude the boys and vice-versa. No trend could be discernible either way if the scores were mixed.

Jersild (1940) in a study of characteristics of teachers, was concerned with adult recollection of teachers while we may not find very much that is relevant to our study in hand, there are some interesting conclusions drawn from children's accounts of their teachers in both elementary and high schools. Here the major headings under which teachers are characterized appear to be provided by the actual data, and are not predetermined by the investigator.

These headings are:-

1. Human qualities as a person
2. Physical appearance, grooming voice
3. Characteristics as a disciplinarian or director of the class
4. Performance as a teacher (teaching)
5. Participation in activities; providing gaiety or entertainment
6. Miscellaneous and general
Children mentioned discipline more negatively in relation to teachers they disliked than otherwise. Physical appearance of teachers was mentioned more frequently by girls than boys.

Reyans in 1951 recorded classroom observation related to four dimensions of pupil classroom behaviour (alert - apathetic, responsible - obstructive, confident - uncertain, initiating - dependent) and eighteen teacher behaviours (fair - partial, democratic - autocratic, responsive - aloof, understanding - restricted, kindly - harsh, stimulating - dull, original - stereotyped, altered - apathetic, attractive - unimpressive, responsible - evading, steady - erratic, poised - excitable, confident - uncertain, systematic - disorganized, adaptable - inflexible, optimistic - pessimistic, integrated - immature, broad - narrow).

Various studies and comparisons of the attitudes, educational viewpoints, verbal understanding, and emotional adjustment of teachers were undertaken in the course of the development. Some of the trends which were observed included the following:--

1. The attitudes of elementary teachers toward pupils, toward administrators, and also toward fellow teachers and non-administrative personnel in the schools were markedly more favourable than were similar attitudes of secondary teachers.

2. The attitudes of teachers who were judged by their principals to be superior in teaching performance were significantly and
distinctly more favourable toward pupils, and also toward administrators, than the attitudes of teachers who were judged by their principals to be unsatisfactory or poor.

3. Neither amount of teaching experience nor age appeared to be highly associated with teacher attitudes, although there was a slight tendency for the attitudes of secondary teachers of greater experience to be slightly more favourable toward administrators and somewhat less favourable toward pupils than other experience groups.

4. More favourable attitudes toward pupils were expressed by women teachers in the secondary school, but among elementary teachers there was a tendency for men to possess more favourable pupil attitude than did women.

5. Teachers whose observed classroom behaviour was judged to be more characteristically warm and understanding and more stimulating possessed more favourable attitudes toward pupils and also more favourable attitudes toward administrators.

6. Actual pupil behaviour in the classroom (based upon Reyans assessments) did not appear to be related to the attitudes held by teachers.

7. The educational viewpoints expressed by secondary teachers were of a more traditional or learning-centred nature, while those of elementary teachers learned more in the direction of
permissiveness, within the secondary school, science and mathematics teachers appeared more traditional in their viewpoints and English and social studies teachers more permissive in theirs.

8. Teachers judged to be more warm and understanding in their classroom behaviour, and to a somewhat lesser extend, those judged to be more stimulating expressed more permissive educational viewpoints. Teachers judged to be more businesslike and systematic showed a slight tendency toward more traditional viewpoints.

9. The verbal understanding scores obtained by secondary teachers were significantly higher than those of elementary teachers, English and foreign language teachers excelling other subject-matter groups within the secondary school.

10. Men teachers at both the elementary and secondary levels appeared to be markedly more emotionally stable than women teachers.

11. There was a tendency for elementary teachers who were judged to be warm and understanding in classroom behaviour, and also those judged to be stimulating in their classes, to manifest superior emotional adjustment.

12. There seemed to be no observable relationship between scores on the validity of response scale and the classification of teachers by amount of teaching experience, age, sex, grade or subject taught, or observed classroom behaviour.
Morris (1955) studying the moral values of adolescents, incidentally studied the changes in attitudes to teachers using a role comparision method. He found a tendency among older pupils to choose more in personal roles while deciding their like for the good teacher.

A.B. Fitt (1956) describes the construction of a thurstone-type attitude test scale concerning children's attitude to school and gives the results after experimenting it with over 1,200 children of different age, social, economic and school type groups in New-Zealand. At all levels girls showed a more favourable attitude to school than boys. This was more marked in the lower primary school pupils. Brighter pupils liked school better than duller ones, and this was especially the case with boys. Children from the more favoured areas tended to like school more than the others, again more so in the case of boys, but it was difficult to distinguish the relative effects of ability from the environmental factors connected with it.

Coster (1958) observed that the response of pupils of different income levels to an attitude questionnaire was more likely to vary on items refering to the subject's relations with teachers and other pupils than on items requiring objective appraisal of the school or the school work employed.

Taylor (1962) asked 800 children from primary and secondary schools to rank items descriptive of a "good teacher" in four scales. The items of each scale were choosen from statements
made by children in short essays about a good teacher. The four scales were so organised as to sample three hypothesized areas of the good teacher's classroom behaviour, discipline, teaching and personal qualities. These three areas for comparative evaluation were put together in the fourth scale.

The analysis of his data reveals that children in junior schools trend to emphasise the good teacher's personal qualities, notably his patience and kindness, sympathy and understanding. All children of both sexes and in all schools evaluated most highly the good teacher's teaching which they probably perceived as a means to satisfy the need they have in the society, to be taught and to learn.

However children at different levels of maturity have different needs. Thus, fourth year secondary school children, especially the boys, emphasise much more than the younger children the good teacher's personal qualities, particularly his cheerfulness, good temper and sense of humour.

The analysis of the remaining scales indicate that the item ranked sixth, i.e. the teacher's care for discipline in each scale is common for all children at all stages. This suggests his being permissive; of his teaching his timing of lessons and his personal qualities, his appearance and his dress etc.

Friendliness, cheerfulness and good temper are ranked highest within the area of personal qualities by both boys and
girls in the fourth year of the secondary school and by girls in the second year. Junior school children and second secondary school boys gave first preference to the good manners, patience and kindly understanding of the "good" teacher.

The analysis of the check-list suggests that a significant characteristics of the "good" teacher in the eyes of children may well be his readiness to join with them in their activities.

Micheal (1957) attempted to ascertain the attitude of 976 students randomly drawn from eleventh and twelfth grades of high school students towards factors considered to be of importance in the promotion of classroom enjoyment and towards various methods employed by the teachers in instruction and evaluation. The relative importance of six factors ranked with respect to their significance in contributing to classroom enjoyment were (a) teacher's method of teaching, (b) teacher's personality (c) confidence in teacher's knowledge of the subject (d) good marks obtained in the courses (e) short assignments and (f) no special emphasis on discipline. For both boys and girls and within each school, the order of the importance of the above factors remained constant.

In the questionnaire students were asked to specify other factors that they considered to be of importance in making classes enjoyable. Four factors mentioned by more than ten
students may be grouped under the following categories:—

1. Lack of favoratism on the part of teacher;
2. Special interest of teacher in individual student;
3. Opportunity for group discussions and participation of the teachers in them; and
4. Morale of the class.

Tayler (1964) had undertaken an investigation to ascertain whether there is significant agreement as to the nature of the teacher student relationship. Teachers with different training were asked to sort statements descriptive of teacher-student relations. It was found that there was much agreement as to the nature of the ideal teacher-student relationship.

The most ideal teacher-student relationship is heavily weighed with positive communication statements and the least ideal is weighed with distance statements.

There is a great similarity between the ideal teacher-student relationship and the ideal therapeutic relationship.

Non-teachers can describe the ideal teacher-student relationship in about the same manner and as well as the teachers. Also, there was considerable variation in background of the sorters, and theory training does not specifically or directly determine the concept of an ideal teacher-student relationship.

Boydell (1974) is an exploratory study examined the nature of the teacher-pupil contact in informal junior classroom in terms of the teacher's method of talking to children and the
teacher's conversational approach. The results of this exploratory study showed that talking to children privately, one at a time, was by far the most popular teaching method and in accord with the Plowden Report maxim that "any class", however homogenous it seems, must always be treated as a body of children needing individual and different attention.

The image of the teacher's role which emerges here may be somewhat at variance with the popular view of the informal teacher. A teacher who stimulates children to formulate their own ideas, probes and extends their levels of understanding by detailed questioning, praises their efforts whenever appropriate, and refrains from using simple directives preferring in the words of "Plowden Report" to collaborate with children to lead from behind.

Tuppen (1966), designed Guttman scale to study attitudes of teachers in junior schools of the one thousand teachers involved in this study, half belonged to the streamed and half came from the non-streamed schools. It was found that teachers in non-streamed schools were more progressive than teachers in the streamed ones. Younger teachers tended to hold more progressive opinion than older teachers.

Moskowitz (1975) studied "best" typical and first year teachers in three urban junior high schools. A number of significant differences in found in teaching behaviour during
the first contact with classes and this behaviour became more dissimilar with time. The best teacher's behaviour was concerned with student feelings, joking and giving suggestions to students that could be of benefit to them. They are set expected, standard, and oriented students about subject matter while new teachers tended to concentrate more on administrative and routine matters. In a study of relationship between 11th and 12th grade students (16 - 17 years olds) and their teachers, Michael Herrold and Cryan (1951) asked students to rank a number of matters concerning their enjoyments of classes. The results showed that both boys and girls within each of the several schools ranked the items concerned in the same order. There was no difference in ranking as between one school and another, one age or ability level and another.

It is difficult to say precisely how much value to attach to the particular tests of items ranked in this way since the items appear from the report to be simply what the investigator considered important. However, the important thing found was that their ranking did not vary. In brief, the list as ranked is as follows:

1. Teacher's method of teaching
2. Teacher's personality
3. Confidence in teacher's knowledge of the subject
4. Good marks
5. Short assignments
6. No special emphasis on discipline
Since that time there has been an increase in efforts to ascertain the casual factors which are responsible for the connection between personal relations of students and teachers and the total learning accomplishment of students. One technique which has been used extensively is that of sampling the opinions and attitudes of students. Baxter's study 1941, is an example of the use of this technique. Other earlier studies such as those of Hart, 1934 and Hopkins are in substantial agreement on the attitudes of students concerning the personal and professional qualities they desires in teachers. In general, the qualities admired in teachers by their students are those qualities which are universally admire and relate well to teachers who are fair in their dealings with their students, who are understanding and accepting in their relations, and who respect personalities of students for their intrinsic worth.

These findings have been reinforced by Witty, 1950 in his study of 12,000 letters submitted in a radio contest in which students were invited to write letters dealing with the topic. "The teacher who has helped me most". Witty showed that there was great consistency as the traits most admired. Generally speaking, warm friendly relations with students and a well adjusted personality were the most important traits in the eyes of students. Specific skill in teaching was in item of some frequency in the letters. A study of Bush, 1957 showed that no
single factor can be the cause of successful teaching. But he maintained on the basis of his findings that the student teacher relationship is among the most important. Bollinger's data indicate that students are responsive to such traits in teachers as fairness, good command of subject matter and high ideals.

Tiedman found that the teacher who was disliked by student was the domineering, authoritarian person. The older the student the more intense they dislike. Evidence collected by Tenenbaum, 1946 indicates that 20% of children in school greatly dislike their teachers and 28% hope that when they go to work they will not have a "boss" like their teacher. 6% dislike all teacher. The evidence indicates that when the student dislikes school it is largely because of the teacher.

Brook over, 1948 was able to show that a student who had a high degree of person to person interaction with a given teacher, as determined by a rating scale, also tended to rank that teacher high with respect to general teaching competence as measured by the Purdue Rating scale. Further his evidence indicated that teachers who show a high degree of person to person interaction with many students tend to be rated high as instructors.

The question of whether increasing the teacher's knowledge and understanding of students problems will improve learning in the classroom has received attention. Ojemann and Wilkinson
used two equated groups with an increased knowledge of students by the teacher as the variable. The knowledge dealt with understanding of motives, psychological equipments, attitudes, emotional control and the like of the students in the group studied. A comparison was made of the experimental and control groups using pretests and final tests and planned observations. The author concluded that there was a significant difference in favour of the experimental group. Members of this group - whose teachers had superior knowledge of their students - made greater gains in achievement, had better attitude toward school, enjoyed school more, showed more mutual acceptance, exhibited feelings of personal inferiority, revealed a decrease in personal maladjustments and possessed a more logical motivation toward school work. Ojemann and Wilkinson also concluded that the attitudes of teachers toward their students were improved as a result of increased knowledge of their problems of adjustment.

It should be noted, however, that there are limitations in the degree to which knowledge of this kind can function. Eberman 1952 and Jenkins have reported that when a teacher unaware of complexity and interdependence of the factors at work in the group, a gap is created between the teacher's knowledge and understanding and his ability to apply his knowledge to specific problems. Although there is evidence that understanding of students is an essential aspect of teaching method, there is a
reason to believe that this attribute is not found among many teachers, even among those of substantial experience. Data collected by the commission on Teacher Education of the American Council of Education indicate that among teachers there is a widespread lack of skill and appropriate attitude needed for the study and understanding of the children. The study was indicated that teacher student relations can be improved through intensive child study activities.

Further evidence with respect to this problem was provided by Bush 1958 who reported surprising inconsistencies between teacher's perceptions of their rapport with students and the actual attitudes of those students toward the teacher - Bush found some teachers who had effective relationships with a large proportion of their students, while others were able to relate well to only a few students. He concluded that generally speaking those teachers who know most about their students and who are sympathetic and accepting with respect to individual abilities and needs of children have the best chance of establishing good relationships with a majority of students in their classes.

Evidence with respect to the relation between the social attitude of teachers and those of their students is inclusive, and more research is needed in this area. Bollinger using groups attitude tests, found no insignificant relationship between gains in social qualities made by students and the social
attitudes and qualities possessed by their teachers. On the other hand, Maier and Schnierta reported data who indicate that the students of liberal teachers tend to become liberal in their view while the students of conservative teachers tend to become more conservative. The precise casual relationship remain obscure.

Charles Norris Johnson, 1974 found that the most ideal teacher-student relationship according to the raters of his study, was heavily weighted with positive communication statements. The ideal teaching relationship may be summarized as good or excellent communication in a peer relationship which is emotionally close or very close.

The least ideal teacher-student relationship was heavily weighted on the status dimension at the level where the instructor feels superior or looks down on the students, and on the emotional distance dimension at the level where the instructor draw away from the student. The least ideal teaching relationship, according to the raters, can be characterized as no communication in a relationship where the instructor draws away from the students emotionally and feels very superior to him.

The present investigation, "a comparative study of teacher pupil relationship in public schools and others schools of U.P." reveals the different pattern of organization of schools, sex difference, different socio-economic backgrounds, and
social adjustment of different socio-economic groups, different social values and a comparison of teacher pupil relationship in two kind of schools in India. This study also reveal the western impact and its social values on teacher pupil relationship.
CHAPTER IV

METHOD AND PROCEDURE
METHOD AND PROCEDURE

The present investigation is, "A comparative study of teacher pupil relationship in public schools and other schools in U.P." The relationship between teacher and student is mainly determined by the teacher's attitude towards the students and the students' attitude towards the teacher. These attitudes depend on the fact how the teachers and students perceive each other. When the teacher perceives the pupil as a trouble maker or dis-interested his attitude towards him will be less positive than if he perceives him as a cooperative interested learner. In this study data were obviously collected from both teachers and students by employing suitable tools.

The investigator selected public and non-public schools of U.P. Public School in Uttar Pradesh are residential and uni-sexed schools. The pattern of each school is always similar. In public schools there are two kinds of schools found in Uttar Pradesh i.e. Public Sainik School and Public Schools. Both types of schools are taken into consideration. Whereas in non-public schools, there are single sexed schools as well as co-educational schools. The investigator selected both types of schools from rural and urban areas for this comparative study.

Tools Used:

The investigator reviewed previous studies and found that Tschechtelin (1940) devised an attitude test for measuring
the attitudes of pupils for their teachers. The major aspects of the teachers' personality taken into consideration were:

(1) Liking for the teacher
(2) Ability to explain
(3) Kindliness and friendliness and understanding
(4) Fairness in marking
(5) Keeping order with children
(6) Amount of work required
(7) Liking for the lessons

Jersild (1943) believes that the following characteristics should be considered as far as teachers are concerned:

(1) Human qualities as a person
(2) Physical appearance, grooming voice
(3) Characteristic as disciplinarian or director of the class
(4) Performance as a teacher
(5) Participation in activities; Providing gaiety or entertainment
(6) Miscellaneous and general

Reyana (1951) has classified four dimensions of pupils' class-room behaviour (alert-apathetic, responsible-obstructive, confident-uncertain, initiating-dependent) and eighteen teacher behaviour (Fair-partial, democratic, autocratic, responsive-aloof, understanding-restricted, kindly-harsh, stimulating-dull, original-sterotyped, alter-apathetic, attractive-unimpressive, responsible-evading, steady-erratic, poised-exitable, confident-uncertain, systematic-disorganized, adoptable-inflexible, optimistic-pessimistic, integrated -
Tyler (1962) asked 800 children from primary and secondary schools to rank items descriptive of a "good teacher" in four scales. The findings are as follows:

1. Discipline
2. Teaching and personal qualities
3. Sympathetic attitude
4. Cheerfulness and sense of humour

Micheal (1957) attempted to ascertain the attitudes of 976 students towards factors considered to be of importance of class-room enjoyment and towards teachers' evaluations. The relative importance of six factors ranked with respect to their significance in contribution to the class-room enjoyment were:

1. Teacher's methods of teaching
2. Teacher's personality
3. Confidence in teacher's knowledge of the subject
4. Good marks obtained in the class
5. Short assignments
6. No special emphasis on discipline

In the questionnaire students were asked to specify other factors that they considered to be important as the follows:

1. Lack of favouratism on the part of teacher
2. Special interest of teacher in individual student
3. Opportunity of group discussions and participation of the teacher in them
4. Morale in the class
In a detailed study Bush (1957) used a rating scale developed by Bryan (1937) which consisted of twenty items which are as follows:

(1) Knowledge of the teacher
(2) Teacher's fairness in marking
(3) Personal liking towards teacher
(4) Learning from this teacher
(5) Subject liked by the student
(6) Discipline in the class-room
(7) Sympathy
(8) Value of the study, the topics and problems of this class
(9) Ability to assist students in planning and organizing class-room work
(10) Explaining things clearly
(11) Fairness of this teacher's decision regarding the students
(12) All round ability of the teacher
(13) Personal appearance of this teacher
(14) Share decisions with students
(15) Freedom of work
(16) Concern about students problems and understanding
(17) Liking of teacher for students
(18) Any likable quality possessed by the teacher which is not mentioned above
(19) Any undesirable quality or habit possessed by teacher which is not mentioned above
(20) Any other comment to indicate the judgement of this teacher.

In a critical evaluation of the items considered significant for the evaluation of teacher's characteristics it is realised that the following three items have been in frequently used:
(1) Any likable quality possessed by the teacher which is not mentioned above
(2) Any undesirable quality or habit possessed by teacher which is not mentioned above
(3) Any other comment to indicate the judgement of this teacher

Thus we are left with seventeen items. These seventeen items reveal the reaction of the pupils to the personality of each teacher in the class and his reaction to the class as a whole.

These seventeen characteristics were evaluated by the students on a five point scale. Such biographical informations as age, sex, religion, rural/urban background and the class in which the student was studying, parents education, occupation, income etc. were also recorded.

Another scale with nine items was used to gauge the characteristics of students. This scale was administered to the teachers to ascertain their reactions about their students. This was again a five point scale. This scale was originally developed by American council of Education. This five point scale consisting of nine items gives the teacher's opinion about pupil's present and future success and adjustment:

(1) Efforts
(2) Method
(3) Conduct
(4) Quality of thinking
(5) Teacher's liking for student
(6) Social adjustment (child)
(7) Social adjustment (adult)
(8) Emotional balance of the child
(9) Knowledge and career

**Validity**

The validity of both the scales on the whole was tested by correlating each characteristic of the subjects with personal liking. The product moment was used for the calculation of co-efficient of correlation. In student's questionnaire, each of the sixteen characteristics of teachers as perceived by their students were correlated with their liking for the teachers by product moment method. The same method was used for verifying the validity of teachers scale by relating the teacher's personal liking for the students. The level of significance for their relationships was also determined.

By using random sampling, we selected 45 students. Their perceptions of teachers' characteristics and teachers' responses about them were noted. Table I gives a detailed list of correlational values and the level of significance of personal liking of students with other characteristics possessed by the teacher and also shows the product moment co-efficients of correlation between personal liking and other characteristics of teachers.

In Table-II, the correlation factors relating the personal liking of teacher with other qualities possessed by their
students and their level of significance are shown.

As indicated in Table-II, all the correlations were found to be significant at .01 level and hence there exists a positive relationship in all the cases. It shows that both of our scales are valid and will fulfil our purpose.

**TABLE-II**

Showing a detailed list of correlational values and level of significance of personal liking of students with other characteristics possessed by the teacher and also the product moment co-efficients of correlation between personal liking and other characteristics of teachers.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Characteristics of teachers</th>
<th>Co-efficient of correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Knowledge</td>
<td>.499 *</td>
</tr>
<tr>
<td>2.</td>
<td>Fairness of grading</td>
<td>.280 **</td>
</tr>
<tr>
<td>3.</td>
<td>Amount of learning</td>
<td>.367 *</td>
</tr>
<tr>
<td>4.</td>
<td>Discipline ability</td>
<td>.936 *</td>
</tr>
<tr>
<td>5.</td>
<td>Subject Interest</td>
<td>.366 *</td>
</tr>
<tr>
<td>6.</td>
<td>Sympathy</td>
<td>.289 **</td>
</tr>
<tr>
<td>7.</td>
<td>Teacher's utility</td>
<td>.290 **</td>
</tr>
<tr>
<td>8.</td>
<td>Planning and Organization</td>
<td>.356 *</td>
</tr>
<tr>
<td>9.</td>
<td>Explaining Capability</td>
<td>.395 *</td>
</tr>
<tr>
<td>10.</td>
<td>Fairness of Decision</td>
<td>.410 *</td>
</tr>
<tr>
<td>11.</td>
<td>All round ability</td>
<td>.428 *</td>
</tr>
<tr>
<td>12.</td>
<td>Personal Appearance</td>
<td>.326 *</td>
</tr>
<tr>
<td>13.</td>
<td>Share Decision</td>
<td>.101</td>
</tr>
<tr>
<td>14.</td>
<td>Freedom of work</td>
<td>-.0058</td>
</tr>
<tr>
<td>15.</td>
<td>Concern about pupils problems</td>
<td>.345 *</td>
</tr>
<tr>
<td>16.</td>
<td>Teacher's Personal liking</td>
<td>-.088</td>
</tr>
</tbody>
</table>

* Significant at 1% level
** Significant at 5% level
TABLE- II

Showing the correlation factors relating the personal liking of teacher with other qualities possessed by their students and their level of significance are shown.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Characteristics of students</th>
<th>Co-efficient of correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Effort</td>
<td>.520 *</td>
</tr>
<tr>
<td>2.</td>
<td>Method</td>
<td>.791 *</td>
</tr>
<tr>
<td>3.</td>
<td>Conduct</td>
<td>.548 *</td>
</tr>
<tr>
<td>4.</td>
<td>Quality of thinking</td>
<td>.639 *</td>
</tr>
<tr>
<td>5.</td>
<td>Social adjustments (Peers)</td>
<td>.456 *</td>
</tr>
<tr>
<td>6.</td>
<td>Social adjustments (Adults)</td>
<td>.424 *</td>
</tr>
<tr>
<td>7.</td>
<td>Emotional Stability</td>
<td>.302 *</td>
</tr>
<tr>
<td>8.</td>
<td>Knowledge &amp; Academic Career</td>
<td>.411 *</td>
</tr>
</tbody>
</table>

* Significant at 1% level.
Reliability:

In order to find out the reliability of the test it was administered to fifty subjects randomly drawn from the schools to obtain their scores on the scales. The split-half method was employed to determine the reliability of the test. For this purpose the scores obtained after the test were divided into odd and even scores. Pearson product Moment correlation technique was applied to the data. The correlational value which was found to be applied reliability of the/test, In order to find out the reliability of the test, Spearman Brown Prophacy formula was used. Reliability co-efficients for the students and teachers scales were .98 & .98 respectively. The co-efficients were statistically significant beyond 1% level, so it was inferred that the rating scale was a reliable instrument for measuring attitudes.

Sampling:

The investigator mailed many letters to the heads of various educational institutions in Uttar Pradesh, explaining to them the purpose of the study and sought permission to collect data from their institutions. The heads of some institutions in Lucknow, Dehradun, Varanasi and Jaunpur acknowledged the letters and showed their willingness to extend help and cooperation to the investigator for the collection of data from their institutions.
First of all data were obtained from Public Inter College Kerkat, Jaunpur, Sanatan Dharam Inter College, Jaunpur, and J.R. Girls Inter College Dobhi, Jaunpur. The researcher obtained the lists of students of IX and X classes studying in these institutions. A list of teachers taking IX and X classes was also secured from the heads of the institutions. As the number of students in these three educational institutions was quite large, the collection of data was spread over a week. Following the principle of simple random sampling the investigator selected every second student from each test, for inclusion in the sample. Thus data were to be obtained from 465 subjects from these institutions.

The Hindi Version of the rating scale, "What do you think of your teacher" was administered to those selected for the sample of the present study. The students were asked to read each of the seventeen statements carefully and to put a tick (✓) mark on any one of the five response categories which explicitly expressed their opinion about the teacher in question. The subjects acted accordingly and all of them were able to record their responses on the scale in about 45 minutes.

The investigator spent seven days to collect data from the three educational institutions of the Jaunpur.

After collecting data from the students the investigator approached the teachers and requested them to rate the students
of their class on the five point scale. In all the institutions the teachers cooperated with the investigator.

The list of students was supplied to the teachers along with rating scales. Teachers were kind enough to return the duly filled scales to the investigator next day. Having completed collection, the investigator left Jaunpur and reached Lucknow. The investigator adopted the same procedure in collecting data from U.P. Sainik School. The investigator obtained data from students and teachers of Agerasen Kanya Inter College, Varanasi. Lastly, data were collected from teachers and students of Doon School, Dehradun by the investigator.

The data from 815 subjects were scrutinized. It was found that some of the questionnaires were either incomplete or not properly filled. Thus 132 questionnaires were discarded and 683 questionnaires which were completed and properly filled in were retained for the present research.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Schools</th>
<th>Place</th>
<th>Rural/Urban</th>
<th>Girls</th>
<th>Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>U.P. Sainik School</td>
<td>Lucknow</td>
<td>Urban</td>
<td>-</td>
<td>85</td>
</tr>
<tr>
<td>2.</td>
<td>Doon School</td>
<td>Dehradun</td>
<td>Urban</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>3.</td>
<td>Public Inter College Kerakat</td>
<td>Jaunpur</td>
<td>Rural</td>
<td>20</td>
<td>205</td>
</tr>
<tr>
<td>4.</td>
<td>Sanatan Dharam Inter College</td>
<td>Janupur</td>
<td>Rural</td>
<td>-</td>
<td>150</td>
</tr>
<tr>
<td>5.</td>
<td>J.R. Girls Inter College, Dobhi</td>
<td>Janupur</td>
<td>Rural</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Agerasen Kanya Inter College</td>
<td>Varanasi</td>
<td>Urban</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Subjects</td>
<td>683</td>
<td></td>
<td>143</td>
<td>540</td>
</tr>
</tbody>
</table>
Hypotheses:

It would be clear that we selected three types of schools i.e. Public Schools (a), Non-Public (co-educational school) (b) and non-public (single sexed school); (c). In each school, the attitude of students towards their teachers and the attitude of teachers towards their students have to be ascertained. The review of literature impresses us with the fact that there are some characteristics (knowledge, fairness in grading, discipline, sympathy, personal appearance etc.) on the basis of which the teachers are evaluated by their students. Similarly, the teachers evaluate their students on some characteristics (effort, method, social adjustment, emotional stability etc.). Thus it is proposed to set two types of hypotheses.

The attitude of teachers towards their students and vice-versa.

Hypotheses were also split into major and subsidiary ones. The major hypotheses, stated below, are based on cumulative scores. This is followed by comparison of each characteristic separately which constitute the subsidiary hypotheses. In order to make these hypotheses easily apprehensible various null hypotheses framed, are indicated in Appendix 'C'.

Major hypotheses are as follows:

(1) The students of non-public (co-educational) institutions would hold favourable attitude towards their teachers than the students of single sexed,
public schools.

(2) Students of non-public single sexed schools (C) would favourably endorse the characteristics possessed by the teachers than the students of public schools. (A).

(3) The teachers of public schools (A) would hold more favourable attitude towards individual characteristics possessed by their students than the teachers of non-public (co-educational) schools (B).

(4) The teachers of public schools (A) would hold more favourable attitude towards individual characteristics possessed by their students than the teachers of non-public (single sexed) schools (C).

These hypotheses have been statistically. The statistical methods used and various null hypotheses framed in support of general hypotheses are discussed at appropriate places. (See Appendices)

Statistical Analysis:

The rating scale through which data were obtained from the subjects were scored. As a five point rating scale ranged most favourable through neutral to least favourable. The following numbers 5, 4, 3, 2 and 1, respectively were assigned to five responses.

In scoring the questionnaire the frequency on each response was recorded.

Keeping in view the purpose of the present study, the Kolmogorov-Smirnov two sample test method was employed to
compare the teacher pupil relationship of the two types of schools. This two tailed test is sensitive to any kind of difference in the distribution from which the two samples were drawn—differences in location (central tendency) in dispersion, in skewness etc.
CHAPTER V

RESULTS AND DISCUSSION
RESULTS AND DISCUSSION

The investigator proposes to present the results obtained through statistical analysis in the present chapter. This is followed by the discussions and interpretation of results. Table-3 represents the major hypotheses of their results.

Perusal of Table-3 leads to the inescapable conclusion that the first three hypotheses have been accepted in the sense that there exist differences between the two types of schools studied by the investigator. More precisely, the students of co-educational institutions differ in their attitudes towards teachers with the students of public schools (A). As regards the attitude of teachers towards their students, differences were observed between the above mentioned institutions (Hypotheses- 3). The lone exception is hypothesis- 4 where differences between the attitudes of teachers towards their pupils were found to be insignificant.

A closer scrutiny of Table- 3 reveals that the first two values of Ks. are very high (statistically highly significant) the third value is barely significant, whereas the last value is insignificant. Keeping in mind the hypotheses we may be inclined to accept that the standards of the two schools definitely differ in the attitudes towards their teachers but the same is not true of the teachers as far as their students are concerned.
Table- 3. Major Hypotheses with Ks. values

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Hypotheses</th>
<th>Value of Ks.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The students of non-public (co-educational institutions would hold a more favourable attitude toward their teachers than the student of single-sexed public schools.</td>
<td>48.0411*</td>
</tr>
<tr>
<td>2.</td>
<td>Students of non-public single-sexed schools would more favourably endorse the characteristics possessed by their teachers than the students of public schools.</td>
<td>166.30*</td>
</tr>
<tr>
<td>3.</td>
<td>Teachers of public schools would hold a more favourable attitude toward individual characteristics possessed by their students than the teachers of non-public co-educational schools.</td>
<td>10.39**</td>
</tr>
<tr>
<td>4.</td>
<td>The teachers of public schools would hold more favourable attitudes toward their pupils than their counterparts in non-public single-sexed schools.</td>
<td>8.733</td>
</tr>
</tbody>
</table>

* Significant at .01 level  
** Significant at .05 level
Table-4, Attitude of Students Toward Their Teachers.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Schools</th>
<th>Mean Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Non-public schools (co-educational)</td>
<td>69.12</td>
</tr>
<tr>
<td></td>
<td>Public schools (Single sexed)</td>
<td>62.77</td>
</tr>
<tr>
<td>2.</td>
<td>Non-public schools (Single sexed)</td>
<td>71.049</td>
</tr>
<tr>
<td></td>
<td>Public schools (Single sexed)</td>
<td>62.79</td>
</tr>
</tbody>
</table>

Table-4, represents the arithmetic means of the groups studied by the investigator. It is found that the students of non-public co-educational schools have a higher mean value (69.12) than the students of public schools (62.77). This indicates that the students of the former schools are more favourably disposed towards their teachers than the students of the latter schools.

This comparison lends weighty support to our statistical analysis where the differences in the attitudes of the students of the two schools towards their teachers were found to be statistically significant. Thus it may be concluded that the students of non-public (co-educational schools) hold more favourable attitudes towards their teachers than the students of public schools.

Moreover, the contents of Table-4, show that the mean value of non-public schools (single sexed) is higher (71.049).
than that for students of the public schools (single sexed), which is 62.79. A similar trend is discernible here as well. Broadly speaking, the students of non-public schools (single sexed) hold a more favourable attitude towards teachers than their counterparts in the public schools. This re-affirms our earlier statistical analysis (Hypotheses- II).

Table- 5. Attitude of Teachers Towards Their Students

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Schools</th>
<th>Mean Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Non-public schools (co-educational)</td>
<td>32.86</td>
</tr>
<tr>
<td></td>
<td>Public schools (single sexed)</td>
<td>33.297</td>
</tr>
<tr>
<td>2.</td>
<td>Non-public schools (single sexed)</td>
<td>34.63</td>
</tr>
<tr>
<td></td>
<td>Public schools (single sexed)</td>
<td>33.297</td>
</tr>
</tbody>
</table>

As regards the attitude of teachers of the two schools towards their students, the teachers of non-public co-educational schools have a mean equal to 32.86, whereas the mean of teachers in public schools (single sexed) is equal to 33.297. The mean values of the two groups show that the teachers of public schools (single sexed) have a more favourable attitude towards their students, though the mean value is only a little higher.

The differences in means of single sexed non-public schools and public schools is negligible. The statistical analysis also reveals that the attitude of teachers of the two
schools towards their students hardly differs. It is inter­
ting that the means reported in Table-5, to a great extent,
resemble each other. Statistical difference between non-public
co-educational schools and single sexed public schools were
observed. Whereas, the differences between single sexed non­
public schools and public schools were insignificant. It should
be pointed out that Kolmogorov Smirnov test takes into account
any kind of difference in the distributions from which the
samples are drawn. It is plausible that the differences between
the means may not have influenced the results as the variation
in dispersion of the two groups might have done.

It may be reiterated that the major hypotheses were tested
first, and it was followed by the comparisons of schools on
various characteristics which were theoretically and empirica­
ally considered to be the core parameters of attitudes, whether
of the students or the teachers. Differences in attitudes of
the students of the schools studied are reported in Table (4,
6, 7). The null hypotheses framed and the computations done
are reported in Appendix-C.
Table- 6. Attitude of Students Towards Their Teachers; Non-public (Co-educational) schools and single sexed public schools.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Value of $X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amount of knowledge</td>
<td>124.10*</td>
</tr>
<tr>
<td>2.</td>
<td>Fairness in grading</td>
<td>82.23*</td>
</tr>
<tr>
<td>3.</td>
<td>Personal liking</td>
<td>3.73</td>
</tr>
<tr>
<td>4.</td>
<td>Learning</td>
<td>3.66</td>
</tr>
<tr>
<td>5.</td>
<td>Personal appearance</td>
<td>17.21*</td>
</tr>
<tr>
<td>6.</td>
<td>Discipline</td>
<td>16.89*</td>
</tr>
<tr>
<td>7.</td>
<td>Subject interest</td>
<td>42.59*</td>
</tr>
<tr>
<td>8.</td>
<td>Sympathy</td>
<td>49.46*</td>
</tr>
<tr>
<td>9.</td>
<td>Teacher's utility</td>
<td>28.71*</td>
</tr>
<tr>
<td>10.</td>
<td>Planning and organization</td>
<td>16.08*</td>
</tr>
<tr>
<td>11.</td>
<td>Clear explanation</td>
<td>18.07*</td>
</tr>
<tr>
<td>12.</td>
<td>Fairness and decisions</td>
<td>38.01*</td>
</tr>
<tr>
<td>13.</td>
<td>All-round ability</td>
<td>32.48*</td>
</tr>
<tr>
<td>14.</td>
<td>Share decisions</td>
<td>38.25*</td>
</tr>
<tr>
<td>15.</td>
<td>Freedom of work</td>
<td>8.04</td>
</tr>
<tr>
<td>16.</td>
<td>Teachers concern about students problems</td>
<td>60.79*</td>
</tr>
<tr>
<td>17.</td>
<td>Students opinion about teacher liking</td>
<td>30.04*</td>
</tr>
</tbody>
</table>

* Significant at .01 level.
The investigator finds that the two schools differ markedly with each other on most of the individual characteristics possessed by the teacher as evaluated by their students. Out of the seventeen characteristics, significant differences between the students of the two schools were observed merely on three characteristics namely, 'personal liking', 'learning' and 'freedom of work'. It means that the attitude of the students towards their teachers may not be judged on the basis of these three characteristics as far as non-public (co-educational) schools and single sexed public schools are concerned. In other words, they do not differ with each other as far as 'personal liking', 'learning' and 'freedom of work' are concerned. Table-7, presents the mean values of the two groups which affirm the conclusion as to which group holds more favourable attitudes towards their teachers with respect to the characteristics on which they have evaluated their teachers.

When we go through Table-7, we observe a general trend. The general trend indicates that invariably on almost all the characteristics except freedom of work, and liking of teacher; the non-public school averages are higher. Since freedom of work was also found to be insignificant in our earlier analysis, the solitary exception is the last characteristic. Thus, it may concluded that on every characteristics the students of non-public(co-educational) schools have more favourably respon/
than their counterparts in the public schools except in case of the students' opinion of liking their teachers where the reverse is true. This further reaffirms our earlier finding that the students of non-public co-educational schools hold a more favourable attitude about their teachers than the public schools students. This is true of the over-all characteristics as well as when the characteristics are individually compared.

Table-7. Attitude of Public Schools and Non-public School students towards their Teachers.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Mean (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public School (Single Sexed)</td>
<td>Non-public (Co-educational)</td>
</tr>
<tr>
<td>1.</td>
<td>Amount of knowledge</td>
<td>3.72</td>
</tr>
<tr>
<td>2.</td>
<td>Fairness in grading</td>
<td>3.96</td>
</tr>
<tr>
<td>3.</td>
<td>Personal liking</td>
<td>3.62</td>
</tr>
<tr>
<td>4.</td>
<td>Learning</td>
<td>3.37</td>
</tr>
<tr>
<td>5.</td>
<td>Personal appearence</td>
<td>4.35</td>
</tr>
<tr>
<td>6.</td>
<td>Discipline</td>
<td>3.34</td>
</tr>
<tr>
<td>7.</td>
<td>Subject interest</td>
<td>3.56</td>
</tr>
<tr>
<td>8.</td>
<td>Sympathy</td>
<td>3.86</td>
</tr>
<tr>
<td>9.</td>
<td>Teacher's utility</td>
<td>3.66</td>
</tr>
<tr>
<td>10.</td>
<td>Planning and organization</td>
<td>3.73</td>
</tr>
<tr>
<td>11.</td>
<td>Clear explanation</td>
<td>3.95</td>
</tr>
<tr>
<td>12.</td>
<td>Fairness in decisions</td>
<td>3.80</td>
</tr>
<tr>
<td>13.</td>
<td>All-round ability</td>
<td>3.76</td>
</tr>
<tr>
<td>14.</td>
<td>Share decisions</td>
<td>3.61</td>
</tr>
<tr>
<td>15.</td>
<td>Freedom of work</td>
<td>3.47</td>
</tr>
<tr>
<td>16.</td>
<td>Teachers concerned about students problems</td>
<td>3.71</td>
</tr>
<tr>
<td>17.</td>
<td>Students opinion about teacher's liking</td>
<td>3.36</td>
</tr>
</tbody>
</table>
Table-6 shows the comparison between the attitudes of single sexed public and non-public school students towards the characteristics possessed by their teachers.

It is quite explicit that the students of single sexed public and non-public schools differ markedly in their attitude towards their teachers with regard to the majority of the characteristics. Insignificant differences were found on 'personal liking' and 'discipline'. It may be noted that 'personal liking' was also found to be insignificant as in earlier analysis. Thus, it may be fairly concluded that the students of the various schools do not differ with each other as far as 'personal liking' is concerned. This seems to be the common characteristic which operates in the same way for all the three schools.

Table-7. Shows attitudes of students towards their teachers; non-public single sexed schools and single sexed public schools.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Value of $X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amount of knowledge</td>
<td>116.97*</td>
</tr>
<tr>
<td>2.</td>
<td>Fairness in grading</td>
<td>95.71*</td>
</tr>
<tr>
<td>3.</td>
<td>Personal liking</td>
<td>2.99</td>
</tr>
<tr>
<td>4.</td>
<td>Learning</td>
<td>10.45**</td>
</tr>
<tr>
<td>5.</td>
<td>Discipline</td>
<td>7.05</td>
</tr>
<tr>
<td>6.</td>
<td>Personal appearance</td>
<td>14.60*</td>
</tr>
<tr>
<td>7.</td>
<td>Subject interest</td>
<td>44.54*</td>
</tr>
<tr>
<td>S.No.</td>
<td>Characteristics</td>
<td>Value of $X^2$</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>8.</td>
<td>Sympathy</td>
<td>41.81*</td>
</tr>
<tr>
<td>9.</td>
<td>Teachers utility</td>
<td>43.75*</td>
</tr>
<tr>
<td>10.</td>
<td>Planning and Organization</td>
<td>27.57*</td>
</tr>
<tr>
<td>11.</td>
<td>Clear explanation</td>
<td>30.25*</td>
</tr>
<tr>
<td>12.</td>
<td>Fairness in decisions</td>
<td>38.64*</td>
</tr>
<tr>
<td>13.</td>
<td>All-round ability</td>
<td>105.42*</td>
</tr>
<tr>
<td>14.</td>
<td>Share decisions</td>
<td>28.23*</td>
</tr>
<tr>
<td>15.</td>
<td>Freedom of work</td>
<td>14.73*</td>
</tr>
<tr>
<td>16.</td>
<td>Teacher's concern about students problems</td>
<td>111.15*</td>
</tr>
<tr>
<td>17.</td>
<td>Student's opinion about liking of teacher towards students</td>
<td>15.39*</td>
</tr>
</tbody>
</table>

The mean values of two groups of all the seventeen characteristics are reported in Table-9.

On comparing the means of the two schools on the various characteristics it is observed that the average of the public school students (characteristic number seventeen) is higher than the average of the non-public schools. The analysis reported in Table-8 indicates insignificant difference between the means of the two schools on 'personal liking' and 'discipline', thus may conclude that by and large the students of

* Significant at .01 level
** Significant at .05 level
the non-public schools hold a more favourable attitude towards their teachers than the students of public schools. It hardly needs to be pointed out that a similar general trend was observed when we compared non-public (co-educational) and public schools. Interestingly enough, here also characteristic No. 17 yielded a higher average value for the public school than the non-public school.

The hypotheses III & IV deal with the attitudes of teachers towards their students. Attitudes of teachers have been measured with respect to nine characteristics on which they have evaluated their students. The comparison of attitudes of teachers (single sexed public schools and non-public co-educational schools) on various characteristics is reported in Table-10.

Table-9 The Mean Values of the Two Groups on All the Characteristics of Teacher on Which the Students Rated Them.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Mean (X) Public School</th>
<th>Non-Public School (Single Sexed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amount of knowledge</td>
<td>3.72</td>
<td>4.67</td>
</tr>
<tr>
<td>2.</td>
<td>Fairness in grading</td>
<td>3.96</td>
<td>4.61</td>
</tr>
<tr>
<td>3.</td>
<td>Personal liking</td>
<td>3.62</td>
<td>3.67</td>
</tr>
<tr>
<td>4.</td>
<td>Learning</td>
<td>3.37</td>
<td>3.68</td>
</tr>
<tr>
<td>5.</td>
<td>Personal appearance</td>
<td>4.35</td>
<td>4.68</td>
</tr>
<tr>
<td>6.</td>
<td>Discipline</td>
<td>3.34</td>
<td>3.56</td>
</tr>
<tr>
<td>7.</td>
<td>Subject interest</td>
<td>3.56</td>
<td>4.11</td>
</tr>
<tr>
<td>8.</td>
<td>Sympathy</td>
<td>3.86</td>
<td>4.45</td>
</tr>
<tr>
<td>S.No.</td>
<td>Characteristics</td>
<td>Mean (X)</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public School</td>
<td>Non-Public School (Single sexed)</td>
</tr>
<tr>
<td>9.</td>
<td>Teacher's utility</td>
<td>3.66</td>
<td>4.28</td>
</tr>
<tr>
<td>10.</td>
<td>Planning and Organization</td>
<td>3.73</td>
<td>4.02</td>
</tr>
<tr>
<td>11.</td>
<td>Clear explanation</td>
<td>3.95</td>
<td>4.38</td>
</tr>
<tr>
<td>12.</td>
<td>Fairness in decisions</td>
<td>3.80</td>
<td>4.43</td>
</tr>
<tr>
<td>13.</td>
<td>All round ability</td>
<td>3.76</td>
<td>4.54</td>
</tr>
<tr>
<td>14.</td>
<td>Share decisions</td>
<td>3.61</td>
<td>4.01</td>
</tr>
<tr>
<td>15.</td>
<td>Freedom of work</td>
<td>3.47</td>
<td>3.47</td>
</tr>
<tr>
<td>16.</td>
<td>Teacher's concern about students problems</td>
<td>3.71</td>
<td>4.53</td>
</tr>
<tr>
<td>17.</td>
<td>Student's opinion about teacher's liking</td>
<td>3.36</td>
<td>3.24</td>
</tr>
</tbody>
</table>

Table-10 Attitude of Teachers Towards Their Students; Non-public, Co-educational Schools and Single-sexed Public Schools.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Value of X²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Effort</td>
<td>2.10</td>
</tr>
<tr>
<td>2.</td>
<td>Method</td>
<td>2.03</td>
</tr>
<tr>
<td>3.</td>
<td>Thinking</td>
<td>2.15</td>
</tr>
<tr>
<td>4.</td>
<td>Conduct</td>
<td>7.71</td>
</tr>
<tr>
<td>5.</td>
<td>Personal liking</td>
<td>38.01*</td>
</tr>
<tr>
<td>6.</td>
<td>Social adjustment (Peers)</td>
<td>14.21*</td>
</tr>
<tr>
<td>7.</td>
<td>Social adjustments (Adults)</td>
<td>14.33*</td>
</tr>
<tr>
<td>8.</td>
<td>Emotionally balanced</td>
<td>3.23</td>
</tr>
<tr>
<td>9.</td>
<td>Knowledge &amp; career</td>
<td>7.26</td>
</tr>
</tbody>
</table>

* Significant at .01 level.
The teachers of the two schools differ with each other primarily in regard to 'personal liking' and 'social adjustment with peers and adults'. It is interesting that no differences were observed between the attitudes of the teachers of the two schools on such characteristics as 'effort', 'method', 'thinking', 'conduct', 'emotionality' and 'knowledge & career'. It seems that the differences pertain to personal aspects more than anything else. It hardly needs to be mentioned that personal aspects are the major determiners of our attitudes. Thus, it may be construed that the results are in the expected direction. The means of the teachers of the two schools are reported in Table-11.

This comparison of the means of the two groups shows that public school teachers have, on the average, more favourably endorsed, in comparison to the teachers of non-public (co-educational) schools, the following characteristics; conduct, thinking, personal liking and knowledge and academic career. Our earlier analysis (Table-10) indicated that the teachers of the two schools did not differ with each other in respect to thinking, conduct, and knowledge and academic career. The differences between the two groups were observed with respect to personal liking, social adjustment with peers and adults. Here, the teachers of public schools had greater personal liking than the teachers of non-public (co-educational) schools. However, the non-public school teachers obtained higher averages than their counterpart
with respect to social adjustment with peers and adults. Here, no general trend is discernable, as was observed in the earlier analysis.

Table-11 Attitude of Teachers Towards Their Students in Single Sexed Public Schools and Non-Public Schools.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Public School (Co-educational)</th>
<th>Non-Public School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Effort</td>
<td>3.48</td>
<td>3.61</td>
</tr>
<tr>
<td>2.</td>
<td>Method</td>
<td>3.46</td>
<td>3.54</td>
</tr>
<tr>
<td>3.</td>
<td>Conduct</td>
<td>4.15</td>
<td>4.14</td>
</tr>
<tr>
<td>4.</td>
<td>Thinking</td>
<td>3.48</td>
<td>3.40</td>
</tr>
<tr>
<td>5.</td>
<td>Personal liking</td>
<td>3.75</td>
<td>3.30</td>
</tr>
<tr>
<td>6.</td>
<td>Social adjustments(Peers)</td>
<td>3.64</td>
<td>3.76</td>
</tr>
<tr>
<td>7.</td>
<td>Social adjustments(Adults)</td>
<td>3.57</td>
<td>3.75</td>
</tr>
<tr>
<td>8.</td>
<td>Emotionally balanced</td>
<td>4.20</td>
<td>4.31</td>
</tr>
<tr>
<td>9.</td>
<td>Knowledge and academic career</td>
<td>3.46</td>
<td>3.18</td>
</tr>
</tbody>
</table>

The comparison of attitudes of teachers of single sexed public and non-public schools towards their students is presented in Table-12.

We observe that the teachers of the two schools differ with regard to 'method', 'conduct', 'Social adjustment with peers and adults' and 'knowledge' and 'academic career'. Social adjustment with peers and adults has emerged as a common factor
Tabe-12. Attitude of Teachers Towards Their Students in Single Sexed Public and Non-public Schools.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Value of $X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Effort</td>
<td>5.91</td>
</tr>
<tr>
<td>2.</td>
<td>Method</td>
<td>31.75*</td>
</tr>
<tr>
<td>3.</td>
<td>Conduct</td>
<td>12.79**</td>
</tr>
<tr>
<td>4.</td>
<td>Thinking</td>
<td>4.76</td>
</tr>
<tr>
<td>5.</td>
<td>Personal liking</td>
<td>3.08</td>
</tr>
<tr>
<td>6.</td>
<td>Social adjustment (Peers)</td>
<td>34.58*</td>
</tr>
<tr>
<td>7.</td>
<td>Social adjustment (Adults)</td>
<td>36.03*</td>
</tr>
<tr>
<td>8.</td>
<td>Emotionally balanced</td>
<td>4.56</td>
</tr>
<tr>
<td>9.</td>
<td>Knowledge &amp; academic career</td>
<td>25.27*</td>
</tr>
</tbody>
</table>

* Significant at .01 level
** Significant at .05 level
Table- 13. Attitude of Teachers Towards Their Students in Single Sexed Public and Single Sexed Non-public Schools.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Characteristics</th>
<th>Mean (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Public Schools</td>
</tr>
<tr>
<td>1.</td>
<td>Effort</td>
<td>3.48</td>
</tr>
<tr>
<td>2.</td>
<td>Method</td>
<td>3.46</td>
</tr>
<tr>
<td>3.</td>
<td>Conduct</td>
<td>4.15</td>
</tr>
<tr>
<td>4.</td>
<td>Thinking</td>
<td>3.48</td>
</tr>
<tr>
<td>5.</td>
<td>Personal liking</td>
<td>3.75</td>
</tr>
<tr>
<td>6.</td>
<td>Social adjustment (Peers)</td>
<td>3.64</td>
</tr>
<tr>
<td>7.</td>
<td>Social adjustment (Adults)</td>
<td>3.57</td>
</tr>
<tr>
<td>8.</td>
<td>Emotionally balanced</td>
<td>4.20</td>
</tr>
<tr>
<td>9.</td>
<td>Knowledge &amp; academic career</td>
<td>3.46</td>
</tr>
</tbody>
</table>
in both the analysis. The new factors that were found significant in the present analysis were 'method', 'conduct' and 'knowledge and academic career'.

The means of teachers of single-sexed public and non-public schools are reported in Table-13.

The non-public school teachers have secured higher averages on seven characteristics, whereas the public school teachers have higher averages on 'conduct' and 'social adjustment with peers'. Since effort, thinking, personal liking and emotionally balanced characteristics were found to be statistically insignificant, the differences on the rest of the characteristics become more important for comparison. The teachers of the non-public schools have favourably endorsed the characteristics (method, knowledge and academic career and social adjustment with adults) of their students compared with their counterparts in public schools. The public school teachers, on the other hand, have endorsed 'conduct' and 'social adjustment with peers'. The teachers of the two groups have more or less equally endorsed the remaining characteristics and probably due to this, the overall hypothesis (No.IV) was found to be statistically insignificant.

It is evidently clear that the students of non-public schools, whether co-educational or single-sexed, hold more favourable attitudes towards their teachers than the students of public
schools. When we analyse the attitudes of the students of these three schools with respect to the individual characteristics of the teachers, the earlier assertion is reaffirmed. More precisely, the students of the non-public school unequivocally favourably perceive the characteristics on which they have evaluated their teachers barring occasional exceptions. Similar conclusion accrues out of the analysis of the teacher's attitudes. Here again the teachers of the non-public schools seem to be more favourably disposed towards their students than the teachers of the public schools. Thus, both the teachers and the students of non-public schools seem to be favourably inclined towards each other than the students and teachers of public schools.

Apparently the results seem to be startling in reference to the fact that public schools are revered and the best is invariably associated with them. But there are differences between the common notions and empirical findings which has been once again projected by our investigations. Let us explore and explain the factors which might have influenced the findings.

Attitudes, though acquired, are believed to be determinants of behaviours. They predispose individuals to respond favourably or unfavourably towards issues, objects or situations. They may be conceived as the foundation on which the massive structure of
behaviour pattern is erected. This does not mean that the individual could actually indulge in a particular type of behaviour rather it should be understood that he would have the tendency to act in a particular way.

Thus, attitudes lay down the guide lines for the inter-personal behaviour. Naturally, the teacher-student relationship should be analysed and understood in the perspective of attitudes. Since attitudes are acquired, they incorporate personal experiences, cultural values and the whole socialization syndrome. They influence our perceptions, evaluations and judgements. It is relatively enduring so the attitudes would sustain our perception for a considerable period of time and generally momentary events and incidents may not dramatically and radically change them. Thus our findings would have to be interpreted in the light of cultural background, organizational set up of the schools socio-economic factors operating upon the teachers as well as on the students of both the schools and other multiplicity of variables. Let us briefly describe the general background of the schools first to evaluate the influences of other values.

The non-public schools included in the present investigations are located in the districts of Jaunpur and Varanasi. A few schools were situated in urban areas and few in rural areas.

It has been mentioned in (Chapter-II) that 60% of the non-public secondary schools are under private management. The
schools located in rural areas have usually common behavioural characteristics. Inter-personal relations between the teacher and the students follow the cultural traditions where the teacher is revered, respected and more or less enjoys the same position as father. Naturally, students who interact with the teacher develop psychological identification with them. The same is true of small town schools, especially the urban schools (Janupur and Varanasi) studied by the investigator. These two Eastern district towns of Uttar Pradesh are embodiments of our social, cultural and religious inheritance. Rural masses are basically conservative in their outlook and have preserved their cultural identity through their social, cultural and academic institutions. This does not mean that the ray of social change has not illuminated them rather the change variables have hardly pierced the protective cultural and religious shell. Now let us interpret our findings in the light of the above discussed background.

It was observed by the investigator that the teachers as well as the students of non-public schools were mostly drawn from the immediate vicinity. Their social and cultural background were basically the same and, naturally, their interactions were guided by the same set of values and norms. It is, therefore, not surprising that the teachers were unhesitatingly idealized and their actions were always positively perceived. Thus the students favourably endorsed most of the characteristics of the
teachers and vice-versa. We are trained to accept ungrudgingly the actions of our elders which the non-public schools demonstrated by eliciting favourable responses to most of the characteristics of their teachers. The findings may be interpreted in terms of social conformity. If we follow this line of argument, then it is not difficult to deduce that the present findings are in the expected direction but at the same time apparently this seems to be astounding.

The public schools are private, independent and secular institutions of secondary education. They are mostly residential and most of the schools are all male institutions. All the Sa-inik and Military schools are exclusively for boys and these were established by the government and receive annual grant-in-aid. They are, however, considered to be 'private' and 'independent' because they are managed by an autonomous board of governors and are not obliged to follow the regulations of the grant-in-aid code.

The public schools because of their high fees, are privileged institutions catering to the needs of the upper social classes and the rich. The style of life adopted in the public school is cosmopolitan and reflects the symbols, manners and patterns of social behaviour of high status groups of western society. Great stress is laid on fluency in spoken English.
The non-government public schools have adopted the western system and traditions of schooling. The students have to wear specified uniforms, their extra-curricular activities are meticulously planned and executed. Strict discipline is maintained and even slight deviations are not tolerated. Teachers as well as students come from different strata of society and for all practical purposes are total strangers to each other. They act and interact on different psychological planes. The students come from high socio-economic income group. It is a travesty of facts that urbanites and particularly, people occupying higher echelons of society embrace modernity and try to imitate the Western mode of behaviour. The Western system encourages free and frank discussions and one is trained to develop one's views and opinions. In other words, they are never stimulated to accept uncritically the actions of their peers or elders related to them. It is probably, these aspects which are reflected in their response patterns. The students come from higher socio-economic group whereas the teachers come from lower or middle income group. The differences, no doubt, might have led to the differences in perceptions. Our findings amply demonstrate that the students unfavourably endorsed the characteristics of their teachers. It may be interpreted that they might have frankly evaluated the characteristics and hardly bothered about the concept
of social conformity. Our contention gets supports from Kabir (1954), who opines that "by providing a privileged education to the children of the upper social classes, the public schools are accused of promoting class distinctions in a socialistic pattern of society and also of encouraging a style/and patterns of behaviour which are considered to be western and not sufficiently in harmony with the ideals and values of Indian culture". In the Lok Sabha and elsewhere politicians have repeatedly attacked the public schools as "undemocratic" and "foreign" because of their origins and general outlook, and have urged the government to abolish them. Dr. K.L. Shrimali, former Union Minister of Education (1958-63) for example, warned public school headmasters that the "social and economic changes that are taking place in our society will not only remove difference in wealth but will also get rid of all those institutions which enable the wealthy classes to buy certain material advantages for their children".

We may also visualize that the teachers coming from lower or middle income groups subscribe to traditional values and their students display hardly any regard to the traditional values. Thus, it is not difficult to visualize a conflicting situation which might have differently influenced the responses of the two groups.
The organizational climate in public schools is basically regimentational. The teachers are trained and compelled to adopt regimentational postures which might have adversely affected the students sample. Almost everywhere, regimentation is disliked and the disdain shown to it by the adolescent group might not have been the exception. Thus, unfavourable perceptions of both the groups should be interpreted both in terms of socio-economic differences and organisational values.

Our findings are corroborated by Anderson, who found that dominative behaviour on the part of the teachers led to unhappiness and frustration in children, while integrative behaviour on the part of teachers reduced conflict and infused harmony among children.

Witty (1947), found that a cooperative, democratic attitude, kindliness and consideration for individual pupil and patience were among the highest ranking traits mentioned by pupils for the teacher who had helped them most.

Beelick (1973), reported that the major sources of students' dissatisfaction are the teacher's behaviour and school policy.

Taylor advocates that "evaluation of the kind made by children and teachers in this inquiry are, no doubt, determined by the psychological location of the latter, that is by his
personal needs, his perception of educational objectives and by his status - as a pupil a teacher with particular background and training, or as a student." He further opines, "It is probably that this behaviour on the part of the class teacher in the streamed school is seen by the children as essential if their need to be taught is to be met. Similarly, in the unstreamed junior schools, children emphasise the good "teachers' personal qualities, particularly his patience, sympathy, kindness and understanding which is no doubt required of the teacher in the informal situation demanded in teaching children of widely differing abilities".

Banks (1971) found a significant difference between the students perception coming from high and low income groups. Probably, this factor might have influenced our results. Verma (1968) found personality trait to vary with different socio-cultural groups. Dikshit and Sharma (1970) obtained significant differences between the values of boys and girls. Pitt (1956) observed that girls showed a more favourable attitudes towards school than boys. Kambell & Hurlock (1961) suggest that daughters as compared to sons are more permissive in their concept of the teacher-pupil relationship. These studies are indicative of the fact the sex differences influence our perceptions in general and the perception of the
teacher-pupil relationship in particular. Our findings may be interpreted in terms of sex differences as well. We have observed earlier that the teachers and students of non-public schools (co-educational) endorsed the all seventeen characteristics more favourably than the teachers and students of single sexed schools. It is a matter of common knowledge that in co-educational institutions there exists a better sense of competition and cooperation. Students are generally regular, punctual and more disciplined. It is also observed that girls are more respectful towards their teachers and generally follow the rules and regulations of the schools. Thus, it may be observed that the above mentioned aspects might have influenced the results.

It is not difficult to extract the basic factors that might have influenced the results of the present investigation. Socio-cultural variables, sex differences and organizational climates seem to have influenced our results. Thus it is quite justifiable to believe that the differences do not basically pertain to public and non-public schools rather the differences are due to the three aspects of socio-cultural differences, organizational climate and sex differences.

The investigator feels that the present work may open new avenues of future research. It may be suggested that the per-
ception of teacher's characteristics may be taken as dependent variable and family background, father's occupation and the student's intellectual development as dependent ones. Also perception of teacher's characteristics may be explored with reference to the students motives, achievement, affiliation, power etc. Age variables can not be disregarded.
WHAT DO YOU THINK OF YOUR TEACHER

Following are questions about teachers. Below each question is a scale which you can check to indicate your answer to the question. Please answer frankly and honestly. Your teacher will never know how you, as an individual rate him or her.

Please fill up the following blank spaces:

Name:................. Class:.............
Age:........... Rural or Urban:........
Sex:.......... Name of Teacher:...........
Religion:.......... School:................

Particulars of the Parents:

<table>
<thead>
<tr>
<th></th>
<th>Father</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alive/Dead</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>Education</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>Occupation</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>Monthly income</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>Step parents if any</td>
<td>......</td>
<td>......</td>
</tr>
</tbody>
</table>

Your position in order of birth
First:..............
Middle:..............
Last:............... 
Does your mother work?
1:- What is your opinion concerning the amount of knowledge this teacher has of the subject taught. Mark one.

5. Has a masterful knowledge of the subject taught - seems to know almost everything about it. Evidently reads and studies widely in the field.

4. Has a very good knowledge and understanding of the subject.

3. Has a satisfactory knowledge and understanding of the subject.

2. Knowledge limited to pupil text-book states facts incorrectly once in a while.

1. Insufficient knowledge- state facts incorrectly rather often. Seriously lacking in the understanding of important parts of the subjects.

2:- What is your opinion concerning this teacher's fairness in marking.

5. Absolutely fair. All pupils get exactly the grades they deserve.

4. Tries to be fair and nearly always succeeds.

3. Most pupils get the grades they deserve. A few are graded either too high or too low.

2. Certain favourites are nearly always graded too high, and certain disliked pupils are nearly always graded too low.
1. Very unfair. Grades are nearly always determined by factors (things) that should have no influence.

3:- How will you like this teacher personally?

5. I like this teacher extremely well.

4. I like this teacher better than most of the teachers I have had.

3. I like this teacher about as well as most of the teachers I have had.

2. I like this teacher less than most of the teachers I have had.

1. I have a strong dislike for this teacher.

4:- How much are you learning from this teacher.

5. I learn surprisingly large amount from this teacher.

4. I learn more from this teacher than I have learned from most of the teachers I have had.

3. I learn about as much from this teacher as from most of the teachers I have had.

2. I learn less from this teacher than I have learned from most of the teachers I have had.

1. I learn practically nothing from this teacher.

5:- What is your opinion of the discipline practiced by the members of this class?
5. Every one is so busy and interested with the class work that no discipline problems ever arise.

4. Nearly all students are so interested in and busy with the class work that very few discipline problems ever arise.

3. Good cooperation is evident on the part of most students. Most students pay attention to the work at hand.

2. Occasionally members of the class are too inattentive and disorderly to do well the things that they should be doing.

1. Common general disorder. Work is often interrupted by disorderly and noisy students.

6: - At present, how will you like the subject by this teacher?

5. I am deeply interested. I work willingly and enthusiastically most of the time under this teacher.

4. Must interested. I like the subject quite well.

3. I have a fair amount of interest in and liking of the subject.

2. I have little interest in and liking for the subject.

1. I hate the subject.
7:- What is your opinion concerning the sympathy shown by this teacher?

5. Always kind, considerate and friendly. Always able to see and understand the students' point of view when a question, problem or difficulty arises.

4. Nearly always kind, considerate and friendly. Nearly always able to understand the students' position and willing to help students through their difficulties.

3. Generally kind, considerate and friendly but every once in a while fails to see the students' point of view.

2. Tries to be kind and helpful, but it is often impatient and sarcastic. Usually has difficulty in seeing the students' side of the question.

1. Almost always harsh, faultfinding and inconsiderate.

8:- What is your opinion concerning the value that the study of the topics and problems of this class has for you?

5. Considering the thing that are being studied and considering the manner in which the class is being conducted, I think that I have profited as much or more from this class than from any other class in which I have ever been enrolled.

4. I rate this class above average in usefulness and value.
3. I judge this class to be about average in usefulness and value.

2. The things that I have got from this class may be helpful to me sometime but I doubt it.

1. I think that the time spent in the class to date has been a complete waste of time for me.

9: What is your opinion concerning the ability of this teacher to assist students in planning and organizing classroom work?

5. This teacher is unusually efficient in classroom leadership. All students always have well made and clearly understood plans for the classroom work.

4. This teacher does a good job of assisting most students in forming useful and clearly understood plans for their work.

3. This teacher is about as effective as most teacher in assisting students to make plans that are useful in guiding their efforts.

2. The teacher often does a poor job for helping to plan the work. As a result, much time is wasted.

1. The students have not clearly understood plans in mind. They often waste time when they should be working.
10:- What is your opinion concerning the ability of this teacher to explain things clearly?

5. All explanations are easily understood. Students have in no difficulty/understanding the points or things that this teacher discuss/from time to time. Even hard things are made to seem easy.

4. Nearly all explanations are easily understood.

3. Most of the explanations and comments of this teacher are understood by students.

2. Nearly half of the explanations and comments by this teacher are hard to understand.

1. Most explanations are difficult to understand. Students generally have trouble in understanding what this teacher really tries to say.

11:- What is your opinion concerning the fairness of this teacher's decision regarding the students?

5. Absolutely fair and impartial in all matters.

4. Tries to be fair and nearly always succeeds.

3. Most students are treated fairly. A few receive special advantages and a few fail to get what is coming to them.
2. Certainly favorites nearly always receive undeserved favour and privileges and certain disliked students are discriminated against.

1. Very unfair. Many decisions are influenced by things that should have no influence - Marked favouritism shown toward some students.

12:- What is your opinion concerning the general (all round) teaching ability of this teacher?

5. One of the strongest teacher I have ever had from the standpoint of real teaching ability.

4. Has more teaching ability, than most of the teachers I have had, but can not be classed as one of the very best.

3. Neither outstanding nor inferior - falls about in the middle.

2. Weaker than most of the teachers I have had, but not one of the very poorest.

1. One of the poorest teacher I have ever had from the standpoint of real teaching ability.

13:- What is your opinion concerning the personal appearance of this teacher?

5. Always neat and clean in dress and personal appearance.
4. Nearly always careful about his personal appearance
3. Generally careful about his personal appearance.
2. Often careless about his personal appearance
1. Very careless. Seems to care nothing about his appearance.

14:- To what extent do students in this class share decisions with the teacher?
5. At all times we have an opportunity to discuss and decide how we shall study and how shall work.
4. As a class we usually have something to say in planning our work, although on some matters the teacher does the deciding.
3. Part of the time the teacher decided, and part of the time we as a class decide what we shall study and how we shall go about it.
2. Once in a while we are permitted to have something to say about our work but usually the teacher does most of the deciding.
1. The teacher always tells us what to do and how to do it.

15:- To what extent do you feel free to work as you wish in this class?
5. I have the greatest freedom to do the things the way I think best.
4. Sometimes I have to do things a certain way but almost always I can do things my way.

3. About half of the time I can do things the way I want to, and about half of the time I have to do them the way I am told.

2. Once in a while I can do things as I wish, but usually I have to do things as I am told.

1. I am always told how to do things. I can never do them my way.

16: What is your opinion of the extent to which this teacher understands you and is concerned about you and your problems?

5. This teacher is very concerned about my problems and always understood them.

4. This teacher tries to understand my problems and is usually somewhat concerned about them, although not always.

3. This teacher has only a fair amount of understanding of my problems and is only moderately concerned about them.

2. Occasionally this teacher may have some concern about and understanding of my problems, but only very slightly.
1. This teacher has no concern about my problems. He never tries to understand them.

17: How well do you think this teacher likes you personally?

5. This teacher likes me better than anyone else in class.

4. This teacher likes me better than most of the other students.

3. This teacher likes me about as much as most of the other students.

2. This teacher likes me less than most/other students in the class.

1. This teacher dislikes me a lot.
WHAT DO YOU THINK OF THIS PUPIL

Name of the Pupil:........................................
Class:........................................
Teacher's Name:........................................
Name of the School:........................................

We are interested in obtaining your opinion about this particular student. Will you please check the item as directed.

What are his work habits and study skills.

(A) EFFORTS:
5. Really applies himself with energy - Excellent effort.
4. Tries most of the time - Good effort.
3. Exerts a fair amount of effort.
2. Makes half hearted attempts to work
1. Almost completely lacking in effort

(B) METHOD:
5. Always uses very effective study methods
4. Usually uses rather effective study methods
3. Usually uses fair study methods
2. Usually uses rather ineffective study methods
1. Always uses almost completely ineffective study methods.
(C) WHAT IS HIS CONDUCT IN CLASS?
5. Excellent - cooperates and does everything he can to see that the class goes forward effectively.
4. Usually good and cooperative, although not always.
3. Fluctuates - sometime good and sometime not - about half and half.
2. Usually bad and non cooperative although not always.
1. Extremely bad - make disturbances - interferes with work of others and so on.

(D) HOW WELL DO YOU LIKE THIS STUDENT PERSONALLY?
5. I like this student extremely well
4. I like this student better than most of the students I have had.
3. I like this student about as well as most of the students I have had.
2. I like this student less than most students I have had.
1. I have a strong dislike for this student.

(E) WHAT IS YOUR JUDGEMENT AS TO THE QUALITY OF HIS THINKING?
5. Excellent
4. Good
3. Average
2. Fair
1. Poor
(F) **HOW WELL IS HE ACCEPTED BY OTHERS?**

(Check in each colour)

<table>
<thead>
<tr>
<th>Same age</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Sought by others</td>
<td>.......</td>
</tr>
<tr>
<td>4. Well liked by others</td>
<td>.......</td>
</tr>
<tr>
<td>3. Little noticed by others</td>
<td>.......</td>
</tr>
<tr>
<td>2. Tolerated by others</td>
<td>.......</td>
</tr>
<tr>
<td>1. Avoided by others</td>
<td>.......</td>
</tr>
</tbody>
</table>

(G) **HOW WELL BALANCED EMOTIONALLY DOES HE APPEAR TO BE?**

5. Usually good balance of responsiveness and control.
4. Usually has a good balance. Only occasionally does he show emotional difficulties.
3. Sometimes shows balance and at other times a lack of it.
2. Frequently show instability, although not always.
1. Very easily and often moved to fits of depression and anger or becomes very unresponsive and apathetic.

(H) **WHAT ABOUT THE KNOWLEDGE, ACADEMIC CAREER OF THIS STUDENT?**

5. Excellent
4. Good
3. Average
2. Fair
1. Poor
Validity and Reliability of the Questionnaire
Calculations of product moment co-efficient of correlation between personal liking of the student and the characteristic - Amount of knowledge of the teachers.

\[ \bar{X} = 152 \]
\[ \bar{Y} = 191 \]
\[ \sum X^2 = 544 \]
\[ \sum Y^2 = 853 \]
\[ \sum XY^2 = 629 \]

\[ r = \frac{45 \times 629 - 152 \times 191}{\sqrt{(45 \times 544 - 152 \times 152)(45 \times 853 - 191 \times 191)}} \]

\[ = \frac{-727}{\sqrt{1367}(1904)} \]

\[ r = 0.449 * \]

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of the students for their teachers and teacher characteristic - *Fairness in grading*.

\[
\begin{align*}
\bar{X} &= 152 \\
\bar{Y} &= 193 \\
\bar{X}^2 &= 544 \\
\bar{Y}^2 &= 879 \\
\bar{XY} &= 663 \\
\end{align*}
\]

\[
\gamma = \frac{45 \times 663 - 152 \times 193}{\sqrt{\left(45 \times 544 - 152 \times 152\right) \left(45 \times 879 - 193 \times 193\right)}}
= \frac{499}{\sqrt{1379 \times 2306}} = 0.280 \quad **
\]

** Significant at 5% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of students for their teachers and the teacher's characteristic - Amount of learning.

\[ \text{\$X} = 152 \]
\[ \text{\$Y} = 152 \]
\[ \text{\$X}^2 = 544 \]
\[ \text{\$Y}^2 = 558 \]
\[ \text{\$XY} = 527 \]

\[ r = \frac{45 \times 527 - 152 \times 152}{\sqrt{(45 \times 544 - 152 \times 152)} \sqrt{(45 \times 558 - 152 \times 152)}} \]

\[ r = \frac{611}{\sqrt{(1376)} \sqrt{(2006)}} \]

\[ r = .367^* \]

* Significant at 1% level.
CALCULATIONS

Showing product co-efficient of correlation between personal liking of students for their teachers and the teachers characteristic - Discipline ability.

\[
\begin{align*}
\bar{X} & = 152 \\
\bar{Y} & = 150 \\
\bar{X}^2 & = 544 \\
\bar{Y}^2 & = 570 \\
\bar{XY} & = 550 \\
\end{align*}
\]

\[
\gamma = \frac{45 \times 550 - 150 \times 152}{\sqrt{\left( 45 \times 544 - 152 \times 152 \right) \left( 45 \times 570 - 150 \times 150 \right)}} = 0.936
\]

\[
\gamma = 0.936^*
\]

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of students for their teachers and the characteristic of the teacher - Subject Interact.

\[ \begin{align*}
\sum x &= 152 \\
\sum y &= 175 \\
\sum x^2 &= 544 \\
\sum y^2 &= 750 \\
\sum xy &= 608 \\

\gamma &= \frac{45 \times 608 - 152 \times 175}{\sqrt{(1376)(45 \times 750 - 175 \times 175)}} \\
\gamma &= \frac{760}{\sqrt{(273 \times 644)}} = 0.366 \\
\gamma &= 0.366 * \\
\end{align*} \]

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of students for their teachers and the teacher's characteristic - Sympathy.

\[
\bar{x} = 152 \\
\bar{y} = 178 \\
\bar{x}^2 = 544 \\
\bar{y}^2 = 714 \\
\bar{xy} = 598 \\
\]

\[
\gamma = \frac{45 \times 598 - 152 \times 174}{\sqrt{1376 (45 \times 714 - 174 \times 174)}} \\
\gamma = \frac{462}{\sqrt{1376 (1854)}} \\
\gamma = \frac{462}{1597.217} = .2892** \\
\]

** Significant at 5% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of the students for their teachers and the teachers characteristic - Teacher's utility.

\[
\begin{align*}
\bar{x} &= 152 \\
\bar{y} &= 170 \\
\bar{x}^2 &= 544 \\
\bar{y}^2 &= 696 \\
xy &= 586 \\
\gamma &= \frac{45 \times 586 - 152 \times 170}{\sqrt{1376 (45 \times 696 - 170 \times 170)}} \\
\gamma &= .290 **
\end{align*}
\]

** Significant at 5% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of students for their teachers and the teacher's characteristics - Planning and Organization.

\[ \sum x = 152 \]
\[ \sum y = 179 \]
\[ \sum x^2 = 544 \]
\[ \sum y^2 = 758 \]
\[ \sum xy = 618 \]

\[ r = \frac{45 \times 618 - 152 \times 179}{\sqrt{1376 \left( 45 \times 758 - 179 \times 179 \right)}} \]

\[ r = \frac{602}{\sqrt{1376 \times 2069}} \]

\[ r = 0.356 \] *

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of students for their teachers and the teacher's characteristic - Explaining capability.

\[
\begin{align*}
\sum X &= 152 \\
\sum Y &= 181 \\
\sum X^2 &= 544 \\
\sum Y^2 &= 779 \\
\sum XY &= 627 \\
\end{align*}
\]

\[
Y = \frac{45 \times 627 - 152 \times 181}{\sqrt{1376 \times (45 \times 779 - 181 \times 181)}}
\]

\[
Y = \frac{703}{\sqrt{(1376) (2294)}} = 0.395
\]

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking and the teacher's characteristic - "Fairness of decision".

\[ \sum x = 152 \]
\[ \sum y = 177 \]
\[ \sum x^2 = 544 \]
\[ \sum y^2 = 735 \]
\[ \sum xy = 612 \]

\[ r = \frac{45 \times 162 - 152 \times 177}{\sqrt{1376 (45 \times 735 - 177 \times 177)}} \]
\[ r = \frac{636}{\sqrt{(1376)(1746)}} \]
\[ r = \frac{636}{1549.99} \]
\[ r = .410 * \]

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking and the teacher's characteristic - All round ability.

\[ \begin{align*}
\sum X &= 152 \\
\sum Y &= 183 \\
\sum X^2 &= 544 \\
\sum Y^2 &= 801 \\
\sum XY &= 636
\end{align*} \]

\[ r = \frac{45 \times 636 - 152 \times 183}{\sqrt{1376 \left( 45 \times 801 - 183 \times 183 \right)}} \]

\[ r = \frac{804}{\sqrt{1376 \times (2556)}} \]

\[ r = 0.428^* \]

* Significant at 1% level.
CALCULATIONS

Showing product moment co-efficient of correlation between personal liking of students for their teachers and the teacher's characteristic - Personal appearance.

\[ \bar{X} = 152 \]
\[ \bar{Y} = 202 \]
\[ \sum X^2 = 544 \]
\[ \sum Y^2 = 956 \]
\[ \sum XY = 695 \]

\[ r = \frac{45 \times 695 - 152 \times 202}{\sqrt{1376 \left( 45 \times 956 - 202 \times 202 \right)}} \]
\[ r = \frac{571}{\sqrt{(1376)(2216)}} \]
\[ r = 0.326^* \]

= Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlation between Personal liking of students for their teachers and teachers' characteristic- Shafe Decision.

\[ \bar{X} = 152 \]
\[ \bar{Y} = 177 \]
\[ \bar{X}^2 = 544 \]
\[ \bar{Y}^2 = 751 \]
\[ \bar{X} \bar{Y} = 602 \]

\[ r = \frac{45 \times 602 - 152 \times 177}{\sqrt{1376 (45 \times 751 - 177 \times 177)}} \]

\[ r = \frac{186}{\sqrt{(1376)(2466)}} \]

\[ r = 0.101 \]
CALCULATIONS

Showing Product moment co-efficient of correlation between personal liking of students for their teachers and the teachers characteristic - Freedom of work.

\[
\begin{align*}
\sum X &= 151 \\
\sum Y &= 157 \\
\sum X^2 &= 544 \\
\sum Y^2 &= 641 \\
\sum XY &= 530 \\
\end{align*}
\]

\[
r = \frac{45 \times 530 - 152 \times 157}{\sqrt{1376(45 \times 641 - 157^2)}}
\]

\[
\gamma = -14 \sqrt{\frac{1376}{(4146)}}
\]

\[
\gamma = -0.0058
\]
CALCULATIONS

Showing Product moment co-efficient of correlation between personal liking of the students for their teachers and the teachers characteristic—Concerned about students' problems.

\[ \begin{align*}
\bar{X} & = 152 \\
\bar{Y} & = 181 \\
\sum X^2 & = 544 \\
\sum Y^2 & = 779 \\
\sum XY & = 625 \\
\end{align*} \]

\[ r = \frac{45 \times 625 - 152 \times 181}{\sqrt{1376 (45 \times 779 - 181 \times 181)}} \]

\[ \gamma = \frac{613}{\sqrt{(1376)(2294)}} \]

\[ \gamma = 0.345^* \]

* Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlation between personal liking of the students for their teachers and the teachers' characteristic- Teachers personal liking for students.

\[ r = \frac{\sum XY}{\sqrt{\sum X^2 \sum Y^2 - (\sum X)(\sum Y)^2}} \]

\[ r = \frac{-114}{\sqrt{1376}(1206)} \]

\[ r = -0.088 \]

\[ r = -0.088 \]
CALCULATIONS

Calculations of Product moment co-efficient of correlations between personal liking of the teacher and the characteristic - Efforts of the students.

\[ r = \frac{N \Sigma XY - \Sigma X \Sigma Y}{\sqrt{N \Sigma X^2 - (\Sigma X)^2} \sqrt{N \Sigma Y^2 - (\Sigma Y)^2}} \]

\[ r = \frac{45 \times 595 - 158 \times 116}{\sqrt{(45 \times 584 - 158 \times 158) (45 \times 631 - 166 \times 166)}} \]

\[ r = \frac{547}{1050 \times 77} = .520^* \]

* Significant at 1% level.
CALCULATIONS

Calculations showing Product moment co-efficient of correlations between personal liking of the teachers and the characteristic of the students – Method of Study.

\[ EX = 158 \]
\[ EY = 160 \]
\[ EX^2 = 584 \]
\[ EY^2 = 587 \]
\[ EXY = 580 \]

\[ r = \frac{45 \times 580 - 158 \times 160}{\sqrt{(45 \times 584 - 158 \times 158)(45 \times 587 - 160 \times 160)}} \]
\[ = \frac{820}{\sqrt{1316}} \]
\[ r = .7917^* \]

* Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlations between personal liking of the teachers and the characteristic of the students - Conduct.

\[ \sum X = 158 \]
\[ \sum Y = 183 \]
\[ \sum X^2 = 584 \]
\[ \sum Y^2 = 775 \]
\[ \sum XY = 659 \]

\[ r = \frac{45 \times 659 - 158 \times 183}{\sqrt{(45 \times 584 - 158 \times 158)} \times \sqrt{(45 \times 775 - 183 \times 183)}} \]

\[ r = \frac{741}{\sqrt{(1316)(1386)}} \]

\[ r \neq 0.548^* \]

* Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlations between personal liking of the teachers and the students characteristic- 'Quality of thinking'.

\[
\begin{align*}
\bar{X} & = 158 \\
\bar{Y} & = 162 \\
\bar{X}^2 & = 584 \\
\bar{Y}^2 & = 614 \\
\bar{X}\bar{Y} & = 588 \\
\end{align*}
\]

\[
\begin{align*}
r & = \frac{45 \times 588 - 158 \times 162}{\sqrt{[(45 \times 584)-(58 \times 158)][(45 \times 614 - 162 \times 162)]}} \\
& = \frac{864}{\sqrt{1316 \times 1386}} \\
& = 0.639^* \\
\end{align*}
\]

* Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlations between teachers' personal liking and students' characteristic- "Social adjustment with Peers".

\[ EX = 158 \]
\[ EY = 172 \]
\[ EX^2 = 584 \]
\[ EY^2 = 690 \]
\[ EXY = 617 \]

\[ r = \frac{45 \times 617 - 158 \times 172}{\sqrt{1316 \times (45 \times 690 - 172 \times 172)}} \]

\[ r = \frac{589}{\sqrt{1316 \times 1466}} \]

\[ r = \frac{589}{1385.97} = .424^* \]

* Significant at 1% level.
**CALCULATIONS**

Showing Product moment co-efficient of correlation between teachers' personal liking and student's characteristic- "Social adjustment with adults."

\[
\begin{align*}
\sum X &= 158 \\
\sum Y &= 172 \\
\sum X^2 &= 584 \\
\sum Y^2 &= 690 \\
\sum XY &= 618 \\
\end{align*}
\]

\[
\begin{align*}
 r &= \frac{45 \times 618 - 158 \times 172}{\sqrt{(45 \times 584 - 158 \times 158)(45 \times 690 \times 172 \times 172)}} \\
&= 0.456^* \\
\end{align*}
\]

* Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlations between teacher's personal liking and student's characteristic- "Emotionally balance".

\[ r = \frac{\sum xy - \frac{\left(\sum x\right)\left(\sum y\right)}{n}}{\sqrt{\frac{\sum x^2 - \frac{\left(\sum x\right)^2}{n}}{n} \cdot \frac{\sum y^2 - \frac{\left(\sum y\right)^2}{n}}{n}}} \]

\[ r = \frac{45\times837 - 158\times191}{\sqrt{1316\left(45\times837 - 191\times191\right)}} \]

\[ r = \frac{377}{\sqrt{1316\times1184}} \]

\[ = \frac{377}{1248.256} = 0.302^* \]

* Significant at 1% level.
CALCULATIONS

Showing Product moment co-efficient of correlation between teacher's personal liking and student's characteristic - Knowledge and academic career.

\[\begin{align*}
\sum x &= 158 \\
\sum y &= 151 \\
\sum x^2 &= 584 \\
\sum y^2 &= 551 \\
\sum xy &= 545 \\
\\
\frac{\sum xy}{\frac{1}{2} \sum x \sum y} &= \frac{545}{\frac{1}{2} \times 158 \times 151} \\
r &= \frac{45 \times 545 - 158 \times 151}{1316 (45 \times 551 - 151^2)} \\
\end{align*}\]

\[r = \frac{667}{\sqrt{1316 \times 1994}}\]

\[= \frac{667}{1619.9}\]

\[= .411^*\]

* Significant at 1% level.
CALCULATIONS OF RELIABILITY OF THE TEST

Teacher's Form:

\[ x^2 = 941.195 \]
\[ y^2 = 575.187 \]
\[ xy = 718.917 \]

\[ r = \frac{\varepsilon_{xy}}{\sqrt{\varepsilon x^2 \cdot \varepsilon y^2}} = \frac{718.917}{735.7739} = 0.9770895 \]

\[ r_{tt} = 2 (r)^{\frac{1}{2}} \]
\[ 1 + r^{\frac{1}{2}} \]

\[ r_{tt} = 0.988412 \]

Pupil's Form:

\[ r = \frac{\varepsilon_{xy}}{\sqrt{\varepsilon x^2 \cdot \varepsilon y^2}} \]
\[ r = \frac{329.68}{\sqrt{493.09 \times 229.825}} \]

\[ r = 0.979 \]

\[ r_{tt} = \frac{0.9793 \times 2}{1 + 0.9793} \]

\[ r_{tt} = 0.9895 \]
APPENDIX - C

NULL HYPOTHESIS AND CALCULATIONS
Hypothesis:

There is no significant difference between the amount of knowledge of the teachers of the public school (A) and the teachers of non public school (C).

## CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>( f )</td>
<td>49</td>
<td>63</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>( n_1 = 185 )</td>
<td>( cf )</td>
<td>( .2648 )</td>
<td>( .6053 )</td>
<td>( .8871 )</td>
<td>( .9681 )</td>
</tr>
<tr>
<td>Non public School</td>
<td>( y )</td>
<td>213</td>
<td>34</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>( n_2 = 273 )</td>
<td>( cf )</td>
<td>( .7802 )</td>
<td>( .9047 )</td>
<td>( .9926 )</td>
<td>( .9929 )</td>
</tr>
</tbody>
</table>

\[
D = -0.515 - 0.2994 - 0.1055 - 0.0248 = 0
\]

Maximum value of \( D = 0.515 \)

\[
D^2 = 0.2652
\]

\[
\chi^2 = 4 \cdot D^2 \cdot \frac{n_1 \cdot n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times 0.2652 \times 110.272
\]

\[
\chi^2 = 441.088 \times 0.2652
\]

\[
\chi^2 = 116.976
\]

Significant

Average ratings (Public School) = 3.72
Average Ratings (Private School) = 4.67
FAIRNESS IN GRADING

Hypothesis:
There is no significant difference between the fairness of grading of the teachers of public schools (A) and the teachers of non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>69</td>
<td>57</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>n = 185</td>
<td>cf</td>
<td>.372</td>
<td>.680</td>
<td>.94</td>
<td>.995</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td>229</td>
<td>16</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>n = 273</td>
<td>cf</td>
<td>.838</td>
<td>.866</td>
<td>.966</td>
<td>.955</td>
</tr>
<tr>
<td>D</td>
<td>-.466</td>
<td>-.186</td>
<td>-.052</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D = .466

\[
D^2 = 0.217
\]

\[
\chi^2 = 4D^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 441.088 \times 0.217
\]

\[
\chi^2 = 95.716 \text{ Significant}
\]

Average Ratings (Public School) = 3.96
Average Ratings (Non Public) = 4.69
PERSONAL LIKING

Hypothesis:
There is no significant difference between the personal liking of the students for their teachers in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>45</td>
<td>51</td>
<td>69</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>n = 185</td>
<td>cf</td>
<td>.243</td>
<td>.518</td>
<td>.891</td>
<td>.967</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td>76</td>
<td>43</td>
<td>145</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>n = 273</td>
<td>cf</td>
<td>.278</td>
<td>.435</td>
<td>.966</td>
<td>.988</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\[
D = 0.035 \quad 0.083 \quad 0.075 \quad 0.021 \quad 0
\]

Maximum Value of \( D \) = 0.083

\[
D^2 = 0.0068
\]

\[
\chi^2 = 4D^2 \times \frac{n_1 \cdot n_2}{n_1 + n_2}
\]

\[
\chi^2 = 441.088 \times 0.0068
\]

\[
\chi^2 = 2.999 \quad \text{Insignificant}
\]

Average Ratings (Public Schools) = 3.62
Average Ratings (Non Public Schools) = 3.67
LEARNING

Hypothesis:
There is no significant difference between the amount of learning of the students from the teachers in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>f</td>
<td>26</td>
<td>59</td>
<td>66</td>
<td>26</td>
</tr>
<tr>
<td>n = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.140</td>
<td>.459</td>
<td>.816</td>
<td>.956</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public School</td>
<td>f</td>
<td>77</td>
<td>43</td>
<td>145</td>
<td>6</td>
</tr>
<tr>
<td>n = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.282</td>
<td>.439</td>
<td>.970</td>
<td>.992</td>
<td>1.00</td>
</tr>
<tr>
<td>D</td>
<td>0.142</td>
<td>.02</td>
<td>0.154</td>
<td>0.036</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D

$D^2 = 0.0237$

$\chi^2 = 4D^2 \times \frac{n_1 \cdot n_2}{n_1 + n_2}$

$\chi^2 = 0.0237 \times 441.088$

$\chi^2 = 10.453$ Significant

Average Ratings (Public School) = 3.372
Average Ratings (Non Public) = 3.68
PERSONAL APPEARANCE

Hypothesis:
There is no significant difference of the teacher's characteristics personal appearance in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>110</td>
<td>42</td>
<td>25</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>n = 185</td>
<td>cf</td>
<td>.594</td>
<td>.821</td>
<td>.956</td>
<td>.978</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td>212</td>
<td>43</td>
<td>13</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>n = 273</td>
<td>cf</td>
<td>.776</td>
<td>.934</td>
<td>.981</td>
<td>.992</td>
<td>1.00</td>
</tr>
<tr>
<td>D</td>
<td>.182</td>
<td>.113</td>
<td>.025</td>
<td>.014</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Maximum Value of D = .182

\[ D^2 = 0.0331 \]

\[ \chi^2 = 4D^2 \times \frac{n_1 n_2}{n_1 + n_2} \]

\[ \chi^2 = 4 \times 0.0331 \times \frac{185 \times 273}{185 + 273} \]

Average Rating of (PUB) = 4.35

Average Rating of (Non-PUB) = 4.68
**DISCIPLINE**

**Hypothesis:**
There is no significant difference in the classroom discipline in public schools (A) and non public schools (C).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public School</strong></td>
<td>f</td>
<td>24</td>
<td>60</td>
<td>68</td>
<td>22</td>
</tr>
<tr>
<td>n = 185</td>
<td>cf</td>
<td>.129</td>
<td>.453</td>
<td>.820</td>
<td>.939</td>
</tr>
<tr>
<td><strong>Non Public School</strong></td>
<td>f</td>
<td>70</td>
<td>56</td>
<td>118</td>
<td>15</td>
</tr>
<tr>
<td>n = 273</td>
<td>cf</td>
<td>.256</td>
<td>.461</td>
<td>.893</td>
<td>.948</td>
</tr>
<tr>
<td>D</td>
<td>.127</td>
<td>.008</td>
<td>.073</td>
<td>.008</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D = .127, \( D^2 = 0.016 \)

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 7.0574 \quad \text{Insignificant}
\]

Average Ratings (Public Schools) = 3.34

Average Ratings (Non-Public Schools) = 3.56
SYMPATHY

Hypothesis:
There is no difference in the sympathetic attitude of teacher towards their pupils in public schools (A) and non public schools (C).

CALCULATIONS

| Schools | | | | | | |
|---------|---|---|---|---|---|
| Public Schools | | | | | |
| f   | 48 | 79 | 45 | 11 | 2 |
| n = 185 | cf | .259 | .686 | .929 | .989 | 1.00 |
| Non Public Schools | | | | | |
| f   | 155 | 99 | 10 | 7 | 2 |
| n = 273 | cf | .567 | .930 | .967 | .992 | 1.00 |
| D   | .308 | .244 | .038 | .003 | 0 |

Maximum Value of D = .308

\[ D^2 = 0.0948 \]

\[ \chi^2 = 4D^2 \times \frac{n_1 n_2}{n_1 + n_2} \]

\[ \chi^2 = 0.0948 \times 441.088 \]

\[ \chi^2 = 41.815 \text{ Significant} \]

Average Ratings (Public Schools) = 3.86
Average Ratings (Private Schools) = 4.45
SUBJECT INTEREST

Hypothesis:
There is no significant difference between the subject interest of the pupils in public school (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>35</td>
<td>62</td>
<td>66</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>n = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.189</td>
<td>.524</td>
<td>.880</td>
<td>.972</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>80</td>
<td>150</td>
<td>39</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>n = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.293</td>
<td>.842</td>
<td>.985</td>
<td>.995</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\[
D = 0.318
\]

\[
D^2 = 0.101
\]

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 441.088 \times 0.101
\]

\[
\chi^2 = 44.54 \text{ Significant}
\]

Average Ratings (Public Schools) = 3.56
Average Ratings (Non-Public Schools) = 4.11
STUDENT'S DECISION ABOUT TEACHER'S USEFULNESS

Hypothesis:
There is no significant difference between the student's decision about teacher's usefulness in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>38</td>
<td>71</td>
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<td>18</td>
</tr>
<tr>
<td>n = 185</td>
<td>cf</td>
<td>.205</td>
<td>.589</td>
<td>.886</td>
<td>.983</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td>142</td>
<td>83</td>
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<td>.824</td>
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<td>.985</td>
</tr>
<tr>
<td>D</td>
<td>.315</td>
<td>.235</td>
<td>.07</td>
<td>.002</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D = .315

\[
D^2 = 0.0992
\]

\[
\chi^2 = 4D^2 \times \frac{\frac{1}{n_1} \times \frac{2}{n_2}}{n_1 + n_2}
\]

\[
\chi^2 = 0.0992 \times 441.088
\]

\[
\chi^2 = 43.755 \text{ Significant}
\]

Average Ratings (Public Schools) = 3.66

Average Ratings (Non Public Schools) = 4.28
CLEAR EXPLANATION

Hypothesis:

There is no significant difference between the ability of teacher to explain things clearly in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td>3</td>
<td>7</td>
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<td></td>
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</tr>
<tr>
<td>cf</td>
<td>.335</td>
<td>.945</td>
<td>.691</td>
<td>.983</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>10</td>
<td>18</td>
<td>75</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td>n = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.597</td>
<td>.937</td>
<td>.871</td>
<td>.974</td>
<td>1.00</td>
</tr>
<tr>
<td>D</td>
<td>.262</td>
<td>.008</td>
<td>.18</td>
<td>.009</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D = .262

\[ D^2 = .0686 \]

\[ \chi^2 = 4D^2 \times \frac{n_1}{n_1 + n_2} \]

\[ \chi^2 = 4 \times .0686 \times \frac{185 \times 273}{185 + 273} \]

\[ \chi^2 = .0686 \times 441.088 \]

\[ \chi^2 = 30.258 \text{ Significant} \]

Average Ratings (PUB) = 3.95

Average Ratings (Non-PUB) = 4.38
FAIRNESS IN DECISION

Hypothesis:

There is no significant difference between the fairness of decision of the teachers for the students in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>55</td>
<td>57</td>
<td>59</td>
<td>10</td>
</tr>
<tr>
<td>n = 185</td>
<td>cf</td>
<td>.297</td>
<td>.605</td>
<td>.924</td>
<td>.978</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td>162</td>
<td>83</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>n = 273</td>
<td>cf</td>
<td>.593</td>
<td>.897</td>
<td>.952</td>
<td>.992</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>.296</td>
<td>.292</td>
<td>.028</td>
<td>.014</td>
</tr>
</tbody>
</table>

Maximum Value of D = .296

\[ D^2 = 0.0876 \]

\[ x^2 = 4D^2 \times \frac{n_1 n_2}{n_1 + n_2} \]

\[ x^2 = 4 \times .0876 \times \frac{185 \times 273}{185 + 273} \]

\[ x^2 = 441.088 \times .0876 \]

\[ x^2 = 38.64 \text{ Significant} \]

Average Ratings (PUB) = 3.805

Average Ratings (Non-PUB) = 4.43
Hypothesis:
There is no significant difference between the ability to assist students in planning and organizing classroom work in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.167</td>
<td>.632</td>
<td>.935</td>
<td>.994</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.417</td>
<td>.692</td>
<td>.941</td>
<td>.978</td>
<td>1.00</td>
</tr>
</tbody>
</table>

D = .25, .06, .006, .016, 0

Maximum Value of D = .25

\[ d^2 = 0.0625 \]

\[ \chi^2 = 4d^2 \times \frac{n_1 n_2}{n_1 + n_2} \]

\[ \chi^2 = 4 \times .0625 \times \frac{185 \times 273}{185 + 273} \]

\[ \chi^2 = 0.0625 \times 441.088 \]

\[ \chi = 27.568 \text{ Significant} \]

Average Ratings (PUB) = 3.73
Average Ratings (Non-PUB) = 4.02
**ALL ROUND ABILITY**

Hypothesis:

There is no significant difference between the all round ability of teachers of public schools (A) and non public schools (C).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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<tbody>
<tr>
<td>Public</td>
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<td>cf</td>
<td>232</td>
<td>562</td>
<td>978</td>
<td>994</td>
<td>1.00</td>
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<tr>
<td>Non Public</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Schools</td>
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<td></td>
</tr>
<tr>
<td>n = 273</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>721</td>
<td>864</td>
<td>974</td>
<td>989</td>
<td>1.00</td>
</tr>
</tbody>
</table>

D  = 0.489

\[ D^2 = 0.239 \]

\[ \chi^2 = 4D^2 \times \frac{n_1 n_2}{n_1 + n_2} \]

\[ \chi^2 = 4 \times 0.239 \times \frac{185 \times 273}{185 + 273} \]

\[ \chi^2 = 441.088 \times 0.239 \]

\[ \chi^2 = 105.420 \text{ Significant} \]

Average Ratings (PUB) = 3.767

Average Ratings (Non-PUB) = 4.549
SHARE DECISION

Hypothesis:

There is no significant difference between the sharing decision of the teacher with their pupils in public schools (A) and non public schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tr>
<tr>
<td>n = 185</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.270</td>
<td>.567</td>
<td>.837</td>
<td>.934</td>
<td>1.00</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf</td>
<td>.523</td>
<td>.670</td>
<td>.875</td>
<td>.945</td>
<td>1.00</td>
</tr>
<tr>
<td>D</td>
<td>.253</td>
<td>.103</td>
<td>.038</td>
<td>.011</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of $D = \frac{.253}{1.00} = .253$

$D^2 = .064$

$\chi^2 = 4D^2 \times \frac{n_1 \times n_2}{n_1 + n_2}$

$\chi^2 = 4 \times .064 \times \frac{185 \times 273}{185 + 273}$

$\chi^2 = 441.088 \times .064$

$\chi^2 = 28.23$ Significant

Average Ratings (PUB) = 3.61

Average Ratings (Non-PUB) = 4.01
**FREEDOM OF WORK**

**Hypothesis:**

There is no significant difference between the "freedom of work" in public schools (A) and non public schools (C).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>n = 185</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>38</td>
<td>64</td>
<td>36</td>
<td>42</td>
<td>5</td>
</tr>
<tr>
<td>cf</td>
<td>.205</td>
<td>.551</td>
<td>.745</td>
<td>.972</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Non Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>106</td>
<td>48</td>
<td>22</td>
<td>65</td>
<td>32</td>
</tr>
<tr>
<td>cf</td>
<td>.388</td>
<td>.564</td>
<td>.644</td>
<td>.882</td>
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</tr>
<tr>
<td>D</td>
<td>.183</td>
<td>.013</td>
<td>.101</td>
<td>.090</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of $D$ = .183

$D^2 = .0334$

$\chi^2 = 4D^2 \times \frac{n_1 n_2}{n_1 + n_2}$

$\chi^2 = 4 \times .0334 \times \frac{185 \times 273}{185 + 273}$

$\chi^2 = 441.088 \times .0334$

$\chi^2 = 14.73$ Significant

**Av. Ratings (PUB)** = 3.475

**Av. Ratings (Non-PUB)** = 3.471
**TEACHER'S CONCERN**

**Hypothesis:**
There is no significant difference in teacher's concern about their pupils' problem in public schools (A) and non public schools (C).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>50</td>
<td>64</td>
<td>45</td>
<td>20</td>
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<td>n = 185</td>
<td>cf</td>
<td>.270</td>
<td>.616</td>
<td>.859</td>
<td>.967</td>
</tr>
<tr>
<td>Non Public Schools</td>
<td>f</td>
<td>211</td>
<td>25</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>n = 273</td>
<td>cf</td>
<td>.772</td>
<td>.864</td>
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<td>.974</td>
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<tr>
<td>D</td>
<td>0.502</td>
<td>0.248</td>
<td>0.067</td>
<td>0.08</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.502

\[
D^2 = 0.252
\]

\[
\chi^2 = 4D^2 \times \frac{n_1 \cdot n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times 0.252 \times \frac{185 \times 273}{185 + 273}
\]

\[
\chi^2 = 441.08 \times 0.252
\]

\[
\chi^2 = 111.153 \text{ Significant}
\]

Average Ratings (PUB) = 3.713

Average Ratings (Non-PUB) = 4.538
Hypothesis:

There is no significant difference between the personal liking of students for their teachers in public schools (A) and non public schools (C).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
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<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>16</td>
<td>49</td>
<td>108</td>
<td>10</td>
<td>2</td>
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<tr>
<td>cf</td>
<td>.086</td>
<td>.351</td>
<td>.934</td>
<td>.988</td>
<td>1.00</td>
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<tr>
<td>n = 273</td>
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<tr>
<td>f</td>
<td>28</td>
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<td>cf</td>
<td>.102</td>
<td>.164</td>
<td>.985</td>
<td>.992</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\[
D = .016 \quad .187 \quad .051 \quad .004 \quad 0
\]

Maximum Value of \(D\) = .187

\[
D^2 = .0349
\]

\[
\chi^2 = 4D^2 \times \frac{n_1 \times n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times .0349 \times \frac{185 \times 273}{185 + 273}
\]

\[
\chi^2 = 441.088 \times .0349
\]

\[
\chi^2 = 15.393 \quad \text{Significant}
\]
Hypothesis:

There is no significant difference between the effort of students rated by the teachers of public schools (A) and non public single sexed schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>Non-Public Schools (Single-Sexed)</th>
<th>Public Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>f</td>
<td>64</td>
<td>22</td>
</tr>
<tr>
<td>n^f = 273</td>
<td>c_f .234</td>
<td>c_f .118</td>
</tr>
<tr>
<td>f</td>
<td>94</td>
<td>66</td>
</tr>
<tr>
<td>n^f = 273</td>
<td>c_f .578</td>
<td>c_f .474</td>
</tr>
<tr>
<td>f</td>
<td>95</td>
<td>79</td>
</tr>
<tr>
<td>n^f = 273</td>
<td>c_f .926</td>
<td>c_f .898</td>
</tr>
<tr>
<td>f</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>n^f = 273</td>
<td>c_f .996</td>
<td>c_f .984</td>
</tr>
<tr>
<td>f</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>n^f = 185</td>
<td>c_f 1.00</td>
<td>D .116</td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.116

\[
D^2 = 0.01345
\]

\[
\chi^2 = 4D^2 \times \frac{n_1 \times n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times 0.01345 \times \frac{273 \times 185}{273 + 185}
\]

\[
\chi^2 = 4 \times 110.272 \times 0.01345
\]

\[
\chi^2 = 5.910 \text{ Insignificant}
\]

Average Ratings (Non-PUB) = 3.736

Average Ratings (PUB) = 3.48
METHOD

Hypothesis:

There is no significant difference between the study method of the students of public schools (A) and non public single sexed school (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public Schools</td>
<td>f</td>
<td>41</td>
<td>130</td>
<td>89</td>
<td>12</td>
</tr>
<tr>
<td>( N_1 ) = 273</td>
<td>c_0</td>
<td>0.150</td>
<td>0.626</td>
<td>0.952</td>
<td>0.995</td>
</tr>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>26</td>
<td>50</td>
<td>95</td>
<td>12</td>
</tr>
<tr>
<td>( n_2 ) = 185</td>
<td>c_0</td>
<td>0.139</td>
<td>0.409</td>
<td>0.919</td>
<td>0.983</td>
</tr>
</tbody>
</table>

\[
D = 0.27
\]

\[
\chi^2 = 0.072
\]

\[
\chi^2 = 4D^2 \times \frac{n_1}{n_1 + n_2}
\]

\[
\chi^2 = 110.272 \times 4 \times 0.072
\]

\[
\chi^2 = 441.088 \times 0.072
\]

\[
\chi^2 = 31.75 \text{ Significant}
\]

Average Ratings (Non-PUB) = 3.72

Average Ratings (PUB) = 3.46
CONDUCT

Hypothesis:
There is no significant difference between the conduct of students of the public schools (A) and non public single sexed schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public Schools (Single-Sexed)</td>
<td>f</td>
<td>79</td>
<td>151</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>n₁ = 273</td>
<td>cᵢ</td>
<td>.289</td>
<td>.842</td>
<td>.981</td>
<td>1.00</td>
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<tr>
<td>Public Schools</td>
<td>f</td>
<td>86</td>
<td>52</td>
<td>37</td>
<td>9</td>
</tr>
<tr>
<td>n₂ = 185</td>
<td>cᵢ</td>
<td>.462</td>
<td>.743</td>
<td>.941</td>
<td>.989</td>
</tr>
<tr>
<td>D = -0.173</td>
<td>.099</td>
<td>.040</td>
<td>.011</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.173
D² = 0.029
χ² = 4D² x \( \frac{n₁}{n₁ + n₂} \)
χ² = 441.088 x 0.029
χ² = 12.79 Significant

Average Ratings (PUB) = 4.11
Average Ratings (PUB) = 4.15
Thinking

Hypothesis:
There is no significant difference between the quality of thinking of students in public schools (A) and non public single sexed schools (C).

Calculations

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public Schools</td>
<td>f</td>
<td>42</td>
<td>121</td>
<td>61</td>
<td>43</td>
</tr>
<tr>
<td>n₁ = 273</td>
<td></td>
<td>c f</td>
<td>0.150</td>
<td>0.595</td>
<td>0.819</td>
</tr>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>21</td>
<td>70</td>
<td>77</td>
<td>12</td>
</tr>
<tr>
<td>n₂ = 185</td>
<td></td>
<td>c f</td>
<td>0.113</td>
<td>0.491</td>
<td>0.907</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>0.040</td>
<td>0.104</td>
<td>-0.088</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.104

D² = 0.0108

χ² = 441.088 x 0.0108

χ² = 4.763 Insignificant

Average Ratings (Non-Public) = 3.55

Average Ratings (PUB) = 3.48
**LIKING**

**Hypothesis:**
There is no significant difference between the personal liking of teachers for their students in public schools (A) and non-public single sexed schools (C).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>94</td>
<td>74</td>
<td>99</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>( n_1 )</td>
<td>273</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( c_f )</td>
<td>0.344</td>
<td>0.615</td>
<td>0.977</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>53</td>
<td>45</td>
<td>77</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>( n_2 )</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( c_f )</td>
<td>0.284</td>
<td>0.531</td>
<td>0.945</td>
<td>0.953</td>
<td>1.00</td>
</tr>
<tr>
<td>( D )</td>
<td>0.06</td>
<td>0.084</td>
<td>0.032</td>
<td>0.007</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of \( D \) = 0.084

\( D^2 \) = 0.007

\( \chi^2 \) = 441.088 \times 0.007

\( \chi^2 \) = 3.087 Insignificant

Average Ratings (Non Public) = 3.93

Average Ratings (Public) = 3.75
**Social Adjustment (Peers)**

**Hypothesis:**
There is no significant difference between the social adjustment of pupils with peers in public schools (A) and non-public single sexed schools (C).

**Calculations**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Single-sexed)</td>
<td>f</td>
<td>73</td>
<td>179</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>$n_1 = 273$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$c_f$</td>
<td></td>
<td>0.267</td>
<td>.922</td>
<td>.965</td>
<td>.9915</td>
</tr>
<tr>
<td>Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$n_2 = 185$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$c_f$</td>
<td></td>
<td>.178</td>
<td>.642</td>
<td>.836</td>
<td>.988</td>
</tr>
<tr>
<td>$D = 0.0893$</td>
<td></td>
<td>0.28</td>
<td>0.129</td>
<td>0.003</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Maximum Value of $D = 0.28$

$D^2 = 0.0784$

$\chi^2 = 441.088 \times 0.0784$

$\chi^2 = 34.58$ Significant

Average Ratings (Non-Public) = 4.15

Average Ratings (Public) = 3.64
SOCIAL ADJUSTMENT (ADULT)

Hypothesis:
There is no significant difference between the social adjustment of the pupils with adults in public schools (A) and non-public single sexed schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public</td>
<td>f</td>
<td>71</td>
<td>181</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>n₁ = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cᵢ</td>
<td>.2600</td>
<td>.923</td>
<td>.963</td>
<td>.992</td>
</tr>
<tr>
<td>Public</td>
<td>f</td>
<td>26</td>
<td>92</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>n₂ = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cᵢ</td>
<td>.140</td>
<td>.637</td>
<td>.82</td>
<td>.976</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>.12</td>
<td>0.286</td>
<td>0.143</td>
<td>.016</td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.286

D² = 0.0817

x² = 441.088 x 0.0817

x² = 36.036 Significant

Average Rating (Non-Public) = 4.139

Average Rating (Public) = 3.578
EMOTIONAL STABILITY

Hypothesis:

There is no significant difference between the characteristics like emotional stability in public schools (A) and non-Public single sexed schools (C).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public Schools</td>
<td>f</td>
<td>130</td>
<td>100</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>n₁ = 273</td>
<td>cₓ</td>
<td>.476</td>
<td>.8423</td>
<td>.992</td>
<td>1.00</td>
</tr>
<tr>
<td>Public-Schools</td>
<td>f</td>
<td>94</td>
<td>43</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td>n₂ = 185</td>
<td>cₓ</td>
<td>.508</td>
<td>.740</td>
<td>.972</td>
<td>.994</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>-0.0321</td>
<td>.1018</td>
<td>0.0195</td>
<td>0.0055</td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.1018

D² = 0.01036

χ² = 441.088 x 0.01036

χ² = 4.5690.

Average Ratings (Non-Public) = 4.31

Average Ratings (Public) = 4.20
Hypothesis:

There is no significant difference between the knowledge and career of the students of public schools (A) and non-public single sexed schools (C).

**CALCULATIONS.**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Public</td>
<td>f</td>
<td>57</td>
<td>133</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>Schools</td>
<td>c_f</td>
<td>0.208</td>
<td>0.695</td>
<td>0.841</td>
<td>0.972</td>
</tr>
<tr>
<td>n_1 = 273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>f</td>
<td>24</td>
<td>58</td>
<td>87</td>
<td>12</td>
</tr>
<tr>
<td>Schools</td>
<td>c_f</td>
<td>0.129</td>
<td>0.44</td>
<td>0.91</td>
<td>0.974</td>
</tr>
<tr>
<td>n_2 = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maximum Value of D = 0.255
\[ D^2 = 0.0573 \]
\[ \chi^2 = 441 \times 0.088 \times 0.0573 \]
\[ \chi^2 = 25.274 \] Significant
Average Ratings (Non-Public) = 3.72
Average Ratings (Public) = 3.46
AMOUNT OF KNOWLEDGE

Hypothesis:

There is no significant difference between the amount of knowledge of the teachers of public schools (A) and the teachers of co-educational schools (B).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>49</td>
<td>63</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>( n_1 = 185 )</td>
<td>( f )</td>
<td>( .2648 )</td>
<td>( .6053 )</td>
<td>( .8871 )</td>
<td>( .9681 )</td>
</tr>
<tr>
<td>(Co-Education)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Public Schools</td>
<td>f</td>
<td>184</td>
<td>15</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>( n_2 = 225 )</td>
<td>( c_f )</td>
<td>( .8177 )</td>
<td>( .884 )</td>
<td>( .973 )</td>
<td>( .995 )</td>
</tr>
</tbody>
</table>

\[
D = \frac{\sum (f_i \times c_f)}{185 + 225} = 0.5529
\]

\[
D^2 = 0.3056
\]

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
= \frac{0.3056 \times 4 \times 225 \times 185}{225 + 185} = 124.101 \quad \text{Significant}
\]

Average Ratings (PUB) = 3.72
Average Ratings (COED.) = 4.67
**FAIRNESS IN GRADING**

**Hypothesis:**
There is no significant difference between the fairness of grading of the teachers of public schools (A) and the teachers of co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Schools</strong></td>
<td>f</td>
<td>69</td>
<td>57</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>n₁ = 185</td>
<td>cᵢ</td>
<td>.372</td>
<td>.680</td>
<td>.914</td>
<td>.995</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Co-Education) Non-Public Schools</th>
<th>f</th>
<th>185</th>
<th>14</th>
<th>20</th>
<th>4</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>n₂ = 225</td>
<td>cᵢ</td>
<td>.822</td>
<td>.884</td>
<td>.973</td>
<td>.990</td>
<td>1.00</td>
</tr>
</tbody>
</table>

| D   | .45| .204| .059| .005| 0 |

Maximum Value of D

\[
\begin{align*}
D^2 &= .45 \\
\chi^2 &= 4D^2 \frac{n_1 n_2}{n_1 + n_2} \\
\chi^2 &= 4\times .45 \times \frac{185 \times 225}{185 + 225} \\
\chi^2 &= 406.09
\end{align*}
\]

Average Ratings (PUB)  = 3.96
Average Ratings (COED)  = 4.67
Hypothesis:
There is no significant difference between the personal liking of students for their teachers in public schools (A) and co-educational schools (B).

## CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n&lt;sub&gt;1&lt;/sub&gt; = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>45</td>
<td>51</td>
<td>69</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>c&lt;sub&gt;f&lt;/sub&gt;</td>
<td>.243</td>
<td>.518</td>
<td>.891</td>
<td>.967</td>
<td>1.00</td>
</tr>
<tr>
<td>(Co-Education)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n&lt;sub&gt;2&lt;/sub&gt; = 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>67</td>
<td>28</td>
<td>125</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>c&lt;sub&gt;f&lt;/sub&gt;</td>
<td>.297</td>
<td>.422</td>
<td>.977</td>
<td>.99</td>
<td>1.00</td>
</tr>
</tbody>
</table>

| D | .044 | .096 | .086 | .023 | 0 |

Maximum Value of D = .096

D<sup>2</sup> = .0092

χ<sup>2</sup> = 4D<sup>2</sup> x \( \frac{n_1 n_2}{n_1 + n_2} \)

χ<sup>2</sup> = 406.09 x .0092

χ<sup>2</sup> = 3.736 Insignificant

Average Ratings (PUB) = 3.62

Average Ratings (COED.) = 3.68
**LEARNING**

**Hypothesis:**

There is no significant difference between the amount of learning of the students from their teachers in public schools (A) and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( n_1 ) = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>26</td>
<td>59</td>
<td>66</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>( c_f )</td>
<td>0.140</td>
<td>0.459</td>
<td>0.816</td>
<td>0.956</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Non-Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(Co-Education)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( n_2 ) = 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>44</td>
<td>48</td>
<td>113</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>( c_f )</td>
<td>0.195</td>
<td>0.408</td>
<td>0.911</td>
<td>0.968</td>
<td>1.00</td>
</tr>
<tr>
<td>( D )</td>
<td>0.055</td>
<td>0.051</td>
<td>0.095</td>
<td>0.012</td>
<td>0</td>
</tr>
</tbody>
</table>

**Maximum Value of D**

\[
D^2 = \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4D^2 \cdot \chi^2 = 406.09 \times 0.00902 = 3.662 \text{ Insufficient}
\]

**Average Ratings (PUB)** = 3.37

**Average Ratings (COED.)** = 3.48
Hypothesis:

There is no significant difference of the teachers' characteristics personal appearance in public schools (A) and co-educational schools (B).

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>110</td>
<td>42</td>
<td>25</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>( n_1 ) = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( c_f )</td>
<td>.594</td>
<td>.821</td>
<td>.956</td>
<td>.978</td>
<td>1.00</td>
</tr>
<tr>
<td>(Co-Education) Non-Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>180</td>
<td>32</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>( n_2 ) = 225</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( c_f )</td>
<td>.80</td>
<td>.942</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>( D )</td>
<td>.206</td>
<td>.121</td>
<td>.044</td>
<td>.022</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of \( D \) = .206

\[
D^2 = .0424
\]

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times .0424 \frac{185 \times 225}{185 + 225}
\]

\[
\chi^2 = 406.09 \times .0424
\]

\[
\chi^2 = 17.218 \text{ Significant}
\]

Average Ratings (PUB) = 4.35

Average Ratings (COED) = 4.74
DISCIPLINE

Hypothesis:

There is no significant difference in classroom discipline in public schools (A) and co-educational schools (B).

CALCULATIONS

<table>
<thead>
<tr>
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<th>5</th>
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<tbody>
<tr>
<td>Public Schools</td>
<td>f</td>
<td>24</td>
<td>60</td>
<td>68</td>
<td>22</td>
</tr>
<tr>
<td>n₁ = 185</td>
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<td>75</td>
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<tr>
<td>(Co-Education)</td>
<td>cᵢ</td>
<td>.129</td>
<td>.453</td>
<td>.820</td>
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<tr>
<td>Non-Public Schools</td>
<td>cᵢ</td>
<td>.333</td>
<td>.484</td>
<td>.884</td>
<td>.919</td>
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<tr>
<td>D</td>
<td>.204</td>
<td>.031</td>
<td>.064</td>
<td>.020</td>
<td>0</td>
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</table>

Maximum Value of D = .204

D² = .0416

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 406.09 \times .0416
\]

\[
\chi^2 = 16.893 \text{ Significant}
\]

Average Ratings (PUB) = 3.34

Average Ratings (COED) = 3.62
**SUBJECT INTEREST**

**Hypothesis:**

There is no significant difference between the subject interest of pupils in public schools students (A) and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
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<td>( f )</td>
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<td>.880</td>
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<tr>
<td>( n_2 ) = 225</td>
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</tr>
<tr>
<td>( f )</td>
<td></td>
<td></td>
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<tr>
<td>( c_f )</td>
<td>.368</td>
<td>.848</td>
<td>.973</td>
<td>.995</td>
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</tbody>
</table>

\[
D = \frac{X^2}{n_1 + n_2} = 4 \times .1049 \times \frac{185 \times 225}{185 + 225} = 406.09 \times .1049 = 42.598 \text{ Significant}
\]

Average Ratings (PUB\$) = 3.56
Average Ratings (COED.) = 4.18
**Hypothesis:**

There is no significant difference between the sympathetic attitude of teachers of public schools (A) and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
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<tr>
<td>f</td>
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<td>79</td>
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<td>$n_1 = 185$</td>
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<td>.929</td>
<td>.989</td>
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<td>f</td>
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<tr>
<td>$c_f$</td>
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<td>.928</td>
<td>.973</td>
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<td>1.00</td>
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<tr>
<td>D</td>
<td>.349</td>
<td>.242</td>
<td>.044</td>
<td>.011</td>
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</table>

Maximum Value of $D = .349$

$D^2 = .1218$

$\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}$

$\chi^2 = 4 \times .1218 \times \frac{185 \times 225}{185 + 225}$

$\chi^2 = 406.09 \times .1218$

$\chi^2 = 49.46 \text{ Significant}$

Average Ratings (PUB) = 3.86

Average Ratings (COED) = 4.51
STUDENT'S DECISION ABOUT USEFULNESS

Hypothesis:
There is no significant difference between classroom decision taken by the teachers of public schools (A) and co-educational schools (B).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
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<th>3</th>
<th>2</th>
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<td><strong>Public Schools</strong></td>
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<td></td>
</tr>
<tr>
<td>( f )</td>
<td>38</td>
<td>71</td>
<td>55</td>
<td>18</td>
<td>3</td>
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<tr>
<td>( c_f )</td>
<td>.205</td>
<td>.589</td>
<td>.886</td>
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<td></td>
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<tr>
<td>( f )</td>
<td>106</td>
<td>55</td>
<td>47</td>
<td>10</td>
<td>7</td>
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<tr>
<td>( n_2 ) = 225</td>
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<td></td>
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<tr>
<td>( c_f )</td>
<td>.471</td>
<td>.715</td>
<td>.924</td>
<td>.968</td>
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<tr>
<td><strong>D</strong></td>
<td>.266</td>
<td>.126</td>
<td>.038</td>
<td>.015</td>
<td>0</td>
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</table>

Maximum Value of \( D \) = .266

\[
D^2 = .0707
\]

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times .0707 \times \frac{225 \times 185}{225 + 185}
\]

\[
\chi^2 = 406.09 \times .0707
\]

\[
\chi^2 = 28.7105 \text{ Significant}
\]

Average Ratings (PUB) = 3.66
Average Ratings (COED.) = 4.08
Hypothesis:

There is no significant difference between the ability to assist students in planning and organizing classroom work in public schools (A) and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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<tbody>
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<td><strong>Public Schools</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>31</td>
<td>86</td>
<td>56</td>
<td>11</td>
<td>1</td>
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<tr>
<td>$c_f$</td>
<td>.167</td>
<td>.632</td>
<td>.935</td>
<td>.994</td>
<td>1.00</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(Co-Education) Non-Public Schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>83</td>
<td>55</td>
<td>64</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>$c_f$</td>
<td>.366</td>
<td>.611</td>
<td>.897</td>
<td>.964</td>
<td>1.00</td>
</tr>
<tr>
<td>$n_2 = 225$</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

$$D = 0.199 \cdot 0.021 \cdot 0.038 \cdot 0.030 \cdot 0$$

Maximum Value of $D = 0.199$

$$D^2 = 0.0396$$

$$\chi^2 = 4D^2 \frac{n_1 \cdot n_2}{n_1 + n_2}$$

$$\chi^2 = 4 \times 0.0396 \times \frac{185 \times 225}{185 + 225}$$

$$\chi^2 = 406.09 \times 0.0396$$

$$\chi^2 = 16.0811 \text{ Significant}$$

Average Ratings (PUB) = 3.73

Average Ratings (COED.) = 3.84
CLEAR EXPLANATION

Hypothesis:
There is no significant difference between the ability of teacher to explain things clearly in public schools (A) and co-educational schools (B).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th></th>
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<tbody>
<tr>
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<td>f</td>
<td>62</td>
<td>66</td>
<td>47</td>
<td>7</td>
</tr>
<tr>
<td>n₁ = 185</td>
<td>cf</td>
<td>.335</td>
<td>.691</td>
<td>.945</td>
<td>.983</td>
</tr>
<tr>
<td>(Co-Education)</td>
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<td></td>
</tr>
<tr>
<td>Non-Public Schools</td>
<td>f</td>
<td>123</td>
<td>49</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>n₂ = 225</td>
<td>cf</td>
<td>.546</td>
<td>.764</td>
<td>.897</td>
<td>.973</td>
</tr>
</tbody>
</table>

Maximum Value of $D^2 = .211$

$D^2 = .0445$

$\chi^2 = 4D^2 \frac{n₁n₂}{n₁+n₂}$

$\chi^2 = 4 \times .0445 \times \frac{185 \times 225}{185 + 225}$

$\chi^2 = 406.09 \times .0445$

$\chi^2 = 18.071$ Significant

Average Ratings (PUB) = 3.95

Average Ratings (COED.) = 4.18
FAIRNESS IN DECISION

Hypothesis:

There is no significant difference between teacher's fairness in decision in public schools (A) and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
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<td>f</td>
<td>55</td>
<td>57</td>
<td>59</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>( c_f )</td>
<td>0.297</td>
<td>0.605</td>
<td>0.924</td>
<td>0.978</td>
</tr>
<tr>
<td>( n_1 ) = 185</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>(Co-Education)</td>
<td>f</td>
<td>98</td>
<td>107</td>
<td>14</td>
<td>3</td>
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<tr>
<td>Non-Public Schools</td>
<td>( c_f )</td>
<td>0.435</td>
<td>0.911</td>
<td>0.973</td>
<td>0.986</td>
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<tr>
<td>( n_2 ) = 225</td>
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<td></td>
</tr>
</tbody>
</table>

Maximum Value of \( D \) = 0.306

\[
D^2 = 0.0936
\]

\[
\chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}
\]

\[
\chi^2 = 4 \times 0.0936 \times \frac{185 \times 225}{185 + 225}
\]

\[
\chi^2 = 406.09 \times 0.0936
\]

\[
\chi^2 = 38.01 \text{ Significant}
\]

Average Ratings (PUB) = 3.805

Average Ratings (COED) = 4.30
ALL ROUND ABILITY

Hypothesis:
There is no significant difference between the all round ability of the teachers of public schools (A) and co-educational schools (B).

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
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<td>.562</td>
<td>.978</td>
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<td>.6932</td>
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<tr>
<td>D</td>
<td>.283</td>
<td>.131</td>
<td>.005</td>
<td>.017</td>
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</table>

Maximum Value of D = .283

\[ D^2 = .080 \]

\[ \chi^2 = 4D^2 \frac{n_1 \cdot n_2}{n_1 + n_2} \]

\[ \chi^2 = 4 \times .080 \times \frac{185 \times 225}{185 + 225} \]

\[ \chi^2 = 406.09 \times .08 \]

\[ \chi^2 = 32.487 \text{ Significant} \]

Average Ratings (PUB) = 3.767

Average Ratings (COED) = 4.16
SHARE DECISION:

Hypothesis:

There is no significant difference in classroom share decisions with the teachers of public schools (A) and co-educational schools (B) with their pupils.

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
<th>1</th>
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<th>4</th>
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<tr>
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<td></td>
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<tr>
<td>n_2 = 225</td>
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<td>c_f</td>
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<td>.915</td>
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Maximum Value of D = 0.307

D^2 = 0.0942

x^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2}

x^2 = 4 \times 0.0942 \times \frac{185 \times 225}{185 + 225}

x^2 = 406.09 \times 0.0942

x^2 = 38.253 Significant

Average Ratings (PUB) = 3.61

Average Ratings (COED) = 4.06
**FREEDOM OF WORK**

**Hypothesis:**

There is no significant difference between the freedom of work of public schools and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
<th>5</th>
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<td>42</td>
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<td>cₖ</td>
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<td>.551</td>
<td>.745</td>
<td>.972</td>
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<tr>
<td>(Co-Education)</td>
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<tr>
<td>Non-Public Schools</td>
<td>f</td>
<td>78</td>
<td>36</td>
<td>47</td>
<td>30</td>
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<tr>
<td>n₂ = 225</td>
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<tr>
<td>D</td>
<td>.141</td>
<td>.045</td>
<td>.030</td>
<td>.124</td>
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</table>

Maximum Value of D = .141

\[
D^2 = .0198
\]

\[
\chi^2 = 4D^2 \frac{n₁ \cdot n₂}{n₁ + n₂}
\]

\[
\chi^2 = 4 \times .0198 \times \frac{185 \times 225}{185 + 225}
\]

\[
\chi^2 = 406.09 \times .0198
\]

\[
\chi^2 = 8.0405 \text{ Insignificant}
\]

Average Ratings (PUB) = 3.47

Average Ratings (COED.) = 3.417
TEACHER'S CONCERN

Hypothesis:
There is no significant difference in teachers of public schools (A) and co-educational schools (B), to understand their pupils and concerned about pupils problems.

CALCULATIONS

<table>
<thead>
<tr>
<th>Schools</th>
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<th>2</th>
<th>3</th>
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<td></td>
</tr>
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<td>( n_1 = 185 )</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>64</td>
<td>45</td>
<td>20</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>( c_f )</td>
<td>.616</td>
<td>.859</td>
<td>.967</td>
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</tr>
<tr>
<td>(Co-Education)</td>
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<td></td>
</tr>
<tr>
<td>Non-Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( n_2 = 225 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( f )</td>
<td>30</td>
<td>30</td>
<td>9</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>( c_f )</td>
<td>.791</td>
<td>.924</td>
<td>.964</td>
<td>1.00</td>
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</tbody>
</table>

\[ D = \begin{cases} .387 & \text{for Public Schools} \\ .175 & \text{for Co-Education} \\ .065 & \text{for Public Schools} \\ .003 & \text{for Co-Education} \end{cases} \]

Maximum Value of \( D \) = .387

\[ D^2 = 0.1497 \]

\[ \chi^2 = 4D^2 \frac{n_1 n_2}{n_1 + n_2} \]

\[ \chi^2 = 4 \times 0.1497 \times \frac{185 \times 225}{185 + 225} \]

\[ \chi^2 = 406.09 \times 0.1497 \]

\[ \chi^2 = 60.791 \text{ Significant} \]

Average Ratings (PUB) = 3.713

Average Ratings (COED.) = 4.33
Hypothesis:
There is no significant difference between the personal liking of teachers toward their students in public schools (A) and co-educational schools (B).

**CALCULATIONS**

<table>
<thead>
<tr>
<th>Schools</th>
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<th>3</th>
<th>2</th>
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<tr>
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<td>16</td>
<td>49</td>
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<tr>
<td>n₁ = 185</td>
<td></td>
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</tr>
<tr>
<td>cᵢ</td>
<td>.086</td>
<td>.351</td>
<td>.934</td>
<td>.988</td>
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<tr>
<td>(Co-Education)</td>
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<td>f</td>
<td>13</td>
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<td>205</td>
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<td>1</td>
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<tr>
<td>n₂ = 225</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>cᵢ</td>
<td>.057</td>
<td>.079</td>
<td>.991</td>
<td>.995</td>
<td>1.00</td>
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<tr>
<td>D</td>
<td>.029</td>
<td>.272</td>
<td>.057</td>
<td>.007</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum Value of D = .272

\[ D^2 = 0.07398 \]

\[ \chi^2 = 4D^2 \frac{n₁ \cdot n₂}{n₁ + n₂} \]

\[ \chi^2 = 4 \times 0.07398 \times \frac{185 \times 225}{185 + 225} \]

\[ \chi^2 = 406.09 \times 0.07398 \]

\[ \chi^2 = 30.0425 \text{ Significant} \]

Average Ratings (PUB) = 3.36

Average Ratings (COED) = 3.125
**Hypothesis:**

There is no significant difference between the effort of students rated by the teachers of public schools (A) and non-public co-educational schools (B).

<table>
<thead>
<tr>
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<td>N = 125</td>
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<tr>
<td>cf</td>
<td>.133</td>
<td>.546</td>
<td>.937</td>
<td>1.00</td>
<td>1.00</td>
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<td></td>
<td></td>
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<td>f</td>
<td>22</td>
<td>66</td>
<td>79</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>N = 185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>cf</td>
<td>.118</td>
<td>.474</td>
<td>.898</td>
<td>.984</td>
<td>1.00</td>
</tr>
</tbody>
</table>

| D^2                      | .015 | 0.072 | 0.039 | 0.016 | 0 |

Maximum value of D = 0.072

\[
D^2 = \frac{.00518}{n1 \cdot n2}
\]

\[
X^2 = 4 \times D^2 \cdot \frac{n1 \cdot n2}{n1 + n2}
\]

\[
= 4 \times 0.00518 \times \frac{225 \times 185}{(225+185)}
\]

\[
= 4 \times 0.00518 \times \frac{41625}{410}
\]

\[
= 4 \times 101.52 \times 0.00518
\]

\[
= 406.097 \times 0.00518
\]

\[
X^2 = 2.1035
\]

AV.RATINGS (COED) = 3.61

AV.RATINGS (PUB) = 3.48
**Hypothesis:**

There is no significant difference between the study method of the students of public school (A) and non-public co-educational school (B).

<table>
<thead>
<tr>
<th>Schools</th>
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<th>4</th>
<th>3</th>
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<tr>
<td>CO-EDUCATIONAL</td>
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<td>Private Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>f</td>
<td>26</td>
<td>83</td>
<td>104</td>
<td>12</td>
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<tr>
<td></td>
<td>cf</td>
<td>.015</td>
<td>.483</td>
<td>.945</td>
<td>1.00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>c</td>
<td>26</td>
<td>50</td>
<td>95</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>.139</td>
<td>.409</td>
<td>.919</td>
<td>.9835</td>
</tr>
<tr>
<td>D</td>
<td>-0.024</td>
<td>0.074</td>
<td>0.026</td>
<td>0.017</td>
<td>0</td>
</tr>
</tbody>
</table>

Maximum value of $D = 0.074$

$D^2 = 0.0054$

$x^2 = 406.97 \times 0.0054$

$= 2.034$

AV. RATING (COED) = 354

AV. RATING (PUB) = 3.46
Hypothesis:
There is no significant difference between the quality of thinking of students in public schools (A) and non-public co-educational schools (B).

<table>
<thead>
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<td>17</td>
<td>95</td>
<td>76</td>
<td>37</td>
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<tr>
<td></td>
<td>cf</td>
<td>.075</td>
<td>.497</td>
<td>.834</td>
<td>1.00</td>
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<td>f</td>
<td>21</td>
<td>70</td>
<td>77</td>
<td>12</td>
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<tr>
<td></td>
<td>cf</td>
<td>.113</td>
<td>.491</td>
<td>.907</td>
<td>.971</td>
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<td>D</td>
<td>-.038</td>
<td>.006</td>
<td>-.073</td>
<td>.029</td>
<td>0</td>
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</table>

Maximum value of D = 0.073

\[ D^2 = 0.0053 \]

\[ x^2 = 406.097 \times 0.0053 \]

\[ = 2.1523 \]

AV. RATING (COED) = 3.40

AV. RATINGS(PUB) = 3.48
Hypothesis:

There is no significant difference between the conduct of students of the public schools (A) and nonpublic co-educational schools (B).

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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>c</td>
<td>73</td>
<td>121</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>.324</td>
<td>.861</td>
<td>.954</td>
<td>1.00</td>
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<tr>
<td>Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>c</td>
<td>86</td>
<td>52</td>
<td>37</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>.462</td>
<td>.743</td>
<td>.941</td>
<td>.989</td>
</tr>
</tbody>
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\[
D = -0.138, 0.118, 0.013, 0.011, 0
\]

Maximum value of \(D\) = 0.138

\[
D^2 = 0.019
\]

\[
X^2 = 406.097 \times 0.019 = 7.715
\]

AV. RATINGS (COED) = 4.14

AV. RATINGS (PUB) = 4.15
**Hypothesis:**

There is no significant difference between the personal liking of teachers for their students in public schools (A) and non-public co-educational schools (B).

<table>
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<td></td>
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<tr>
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<td>f</td>
<td>20</td>
<td>31</td>
<td>171</td>
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<td>cf</td>
<td>.088</td>
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<td></td>
</tr>
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<td>f</td>
<td>53</td>
<td>45</td>
<td>77</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>.284</td>
<td>.531</td>
<td>.945</td>
<td>.993</td>
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<td></td>
<td>185</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>d^2</strong></td>
<td>-.196</td>
<td>0.306</td>
<td>.05</td>
<td>0.007</td>
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Maximum value of D = .306

d^2 = 0.0936

<p>| | |</p>
<table>
<thead>
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</table>
| \( x^2 \) & 406.097 \times 0.0936 \\
  | 38,0106 |

AV. RATINGS (COED) = 3.30

AV. RATINGS (PUB) = 3.75
**Social Adjustment (Peers)**

**Hypothesis:**

There is no significant difference between the social adjustment of pupils with peers in public schools (A) and non-public co-educational schools (B).

<table>
<thead>
<tr>
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<td>164</td>
<td>9</td>
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<td>225</td>
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<td>.1022</td>
<td>.831</td>
<td>.871</td>
<td>.9687</td>
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<td>f</td>
<td>33</td>
<td>86</td>
<td>36</td>
<td>28</td>
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<td>cf</td>
<td>.178</td>
<td>.642</td>
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<td>.988</td>
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<tr>
<td>D</td>
<td>-.075</td>
<td>.189</td>
<td>.035</td>
<td>-.0193</td>
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Maximum value of D = .189

\[ D^2 = 0.0357 \]

\[ \chi^2 = 406.097 \times 0.035 \]

\[ = 14.213 \]

AV. RATINGS (COED) = 3.76

AV. RATINGS (PUB) = 3.64
SOCIAL ADJUSTMENT (ADULT)

Hypothesis:
There is no significant difference between the social adjustment of the pupils with adults in public schools (A) and non-public co-educational schools (B).

<table>
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<td>164</td>
<td>9</td>
<td>22</td>
<td>7</td>
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<td></td>
<td>cf</td>
<td>0.097</td>
<td>.825</td>
<td>.865</td>
<td>0.963</td>
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<td></td>
<td>26</td>
<td>92</td>
<td>34</td>
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<tr>
<td></td>
<td>cf</td>
<td>.140</td>
<td>.637</td>
<td>0.82</td>
<td>0.976</td>
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<tr>
<td>D</td>
<td></td>
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</tr>
<tr>
<td>Maximum value of D</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>-0.043</td>
<td>.188</td>
<td>0.045</td>
<td>-.013</td>
<td>0</td>
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</table>

\[
D^2 = 0.0353 \\
X^2 = 406.097 \times 0.0353 = 14.335 \\
AV. RATINGS (COED) = 3.76 \\
AV. RATINGS (PUB) = 3.578
EMOTIONAL STABILITY

Hypothesis:

There is no significant difference between the characteristics like emotional stability in public schools (A) and non-public co-educational schools (B).

<table>
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<td>1.00</td>
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<td>cf</td>
<td>.5081</td>
<td>.7405</td>
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<tr>
<td>D</td>
<td>.0289</td>
<td>.0895</td>
<td>-0.0279</td>
<td>.0055</td>
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</table>

Maximum value of D = 0.0895

\[ D^2 = 0.00796 \]

\[ X^2 = 406.097 \times 0.00796 \]

= 3.2325

AV. RATINGS (COED.) = 4.31

AV. RATINGS (PUB) = 4.20
**KNOWLEDGE AND CAREER**

**Hypothesis:**
There is no significant difference between the knowledge and career of the students of public schools (A) and co-educational schools (B).

<table>
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<td>84</td>
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<td>N = 218</td>
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<td>.066</td>
<td>.403</td>
<td>.776</td>
<td>.9363</td>
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<td>f</td>
<td>24</td>
<td>58</td>
<td>87</td>
<td>12</td>
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<tr>
<td>cf</td>
<td>.129</td>
<td>.44</td>
<td>.91</td>
<td>.9748</td>
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</table>

\[
D \quad N = 185 \quad -0.063 \quad -0.037 \quad -0.134 \quad -0.0385 \quad 0
\]

Maximum value of D = 0.134

\[
D^2 = 0.0179
\]

\[
x^2 = 406.097 \times 0.0179
\]

\[
= 7.2691
\]

AV. RATINGS (COED) = 3.186

AV. RATINGS (PUB) = 3.46
BIBLIOGRAPHY


<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
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<tbody>
<tr>
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<td>&quot;Pupil behaviour as indicator of teacher success&quot;.</td>
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<td>Curtis, L.D.,</td>
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<td>DENT, H.C.,</td>
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<tr>
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<td>Fletcher, J.W.,</td>
<td>&quot;A study of the relationship between teacher and parent value positions and child achievement&quot;.</td>
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<tr>
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<td>Gowda, D.A.C.</td>
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<tr>
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