CHAPTER II

REVIEW OF RELATED LITERATURE AND
FORMULATION OF HYPOTHESES
In recent years awareness has been growing of the influence exerted on the behaviour and development of human beings by the group to which they belong. Research on children's peer relationships has accelerated rapidly within the past several years, and a dominant theme within the area has been the development of social competence and the relevance of social competence in the peer group.

The renewed interest in children's peer relations among developmental psychologists (Hartup, 1970, 1983) has been accompanied by a parallel interest among child-clinical psychologists to develop intervention programs to promote peer relations (Combs and Slaby, 1977; Furman, 1980). In large part, these empirical efforts are guided by the view that childhood peer relationships serve a vital role in social development and later adult adjustment. The research literature indicates that peer adjustment problems in childhood are predictive of both concurrent and later maladjustment. Evidence from follow-up studies of children (Gronlund and Holmlund, 1958; Mednick and Schulsinger, 1969; Roff, Sells, and Golden, 1972; Cowen, Pederson, Babigian, Izzo, and Trost, 1973; Jones, 1974); follow-back studies of disturbed adults (Bower, Shellhammer, and Daily, 1960; Roff, 1961; Pitt and Hage, 1964; Watt, 1972); and concurrent studies of the psycho-social characteristics of disturbed children
(Roff, 1972; King and Young, 1981) demonstrate that children with peer adjustment problems are "at risk" for mental health problems. Various studies have linked problematic peer relations in childhood with military records of severe misconduct (Roff, 1961), history of adult schizophrenia and manic depressive disorder (Kohn and Clausen, 1955; Pitt and Hage, 1964), mental health problems (Cowen, Pederson, Babigian, Izzo, and Trost, 1973), and juvenile delinquency (Roff, Sells, and Golden, 1972).

Concurrent problems associated with rejected status include hyperactivity (King and Young, 1981), antisocial behaviour (Hartup, 1983), and academic disabilities (Bryan, 1976). Rejected children in naturalistic and analogue settings exhibit comparatively high levels of aggression (Dodge, Coie, and Brakke, 1982; Dodge, 1983), task inappropriate behaviour (Dodge, Coie, and Brakke, 1982; Coie and Kupersmidt, 1983), and solitary activity (Ladd, 1983). Longitudinal research suggests that these children continue to be rejected by peers over time (Coie and Dodge, 1983) and are at risk for a variety of adolescent and adult adjustment problems (Hartup, 1979).

A very different behavioural profile emerges for neglected children. They are labelled as shy by peers (Coie, Dodge, and Coppotelli, 1982), observed to display less aggression (Coie and Kupersmidt, 1983), and engage in more solitary play than other children (Dodge, 1983). Neglected children also show less status continuity than rejected children and are more likely to improve their status over
time (Cole and Dodge, 1983). Furthermore, there is little evidence that these children are at risk for later disorders.

In the historical perspective, it can be noted that a wide range of practical and theoretical interests have found expression in the study of small groups. As several comprehensive reviews (Smith and Krueger, 1933; Jenkins, 1947; Stogdill, 1948; Gibb, 1950, 1954; Cartwright and Zander, 1953, 1960; Rosenborough, 1953; Bass, 1954; Borgatta, 1954; Hare, Borgatta, and Bales, 1955; Hare, 1972; McGrath, 1957; Stradtbeck and Hare, 1957; Mann, 1959; Van Bergen and Koekebakker, 1959; Campbell, 1964; Lott and Lott, 1965; Lorber, 1969; Hartup, 1970; Sharma, 1975; Downey and Duffy, 1978; Lammlein and Borman, 1979; Green and Forehand, 1980; Asher and Hymel, 1981; Grunebaum and Solomon, 1982) amply attest, small group research has proceeded along numerous independent lines. One interest, however, has been dominant for more than 50 years. While phrased in various ways, the relationship between the personality characteristics of the individual and his status in the group has remained a central concern. There has been a consistent interest among psychologists, educationists, and sociologists to identify and understand the factors that make children acceptable to one another.

The fact that some young children are more sociometrically popular than others suggests that the more popular children may be functioning in some manner which results in the elicitation of positive preference for their partnership in a particular social-interactional situation. The existing literature,
however, has only begun to identify the particular patterns of social behaviour, skill, and cognitive ability which are associated with the development of social status in peer groups of young children (Asher, Oden, and Gottman, 1977).

Exploration of the behavioural and personality characteristics of children who exhibit difficulty with peer relationships has emerged as a research priority. The present review is by no means complete or exhaustive; it is an attempt to indicate the main trends in research and theory which have a direct or indirect bearing on the present problem. The studies which meet the following five criteria have been included in this review:

1. the sample was drawn from a population of school age;
2. the groups studied were face to face groups;
3. some assessment was made of individual's behaviour or status in the group;
4. some assessment was made of individual's intelligence, motives, and personality; and
5. the results were either in correlational form or made use of control group.

The studies dealing with friendship formation (pairs of friends) have not been reviewed since the present study is concerned with sociometric status of each individual. Moreover, the studies concerning intervention programs to promote peer relations are also not discussed in detail.

Placing in the historical perspective, it can be seen that there can be few subjects whose origins are as well defined as are those of sociometry. The story of the
incentive to win. Furfey (1927) studied friendship choices of boys, and Thrasher (1927) recognised high levels of "group cohesiveness" and the existence of "common codes" among peers. During the 1930s, significant contributions to the methodology of peer research were made by Dorothy Thomas and J.L. Moreno. Thomas, Loomis, and Arrington (1933) perfected observation techniques, and Moreno (1934) devised sociometric procedures to measure peer group membership.

A considerable literature attests to the fruitfulness of studies in this specific area of research. The studies clearly reveal that the field of usefulness of sociometry is wide and it has become well established as a technique which can be easily applied and which gives a great deal of information about individuals and groups in demonstrable form. There can be no doubt about its value, not only to those interested in theories, but also to any teacher in any school.

In view of the utility of sociometric status for understanding one's behaviour, numerous studies have been conducted to find out the correlates of 'popularity among members of a group'. Young and Cooper (1944) used sociometric technique to obtain popularity scores for each of 418 children in grades five to eight. Each child was asked to select the three other pupils in the class he would like most to (a) live with him in his room for a few days, (b) sit next to him in class, and (c) attend a party with. The number of times each child was chosen by his classmates provided a measure of his popularity in the group. Credit was given for having received
a choice regardless whether it was first, second, or third choice. The investigation found that the most striking differences between the highest and lowest on popularity was in facial attractiveness. This was true for all the grades. Kuhlen and Lee (1943) obtained similar results with slightly older boys and girls. Vaughn and Langlois (1983) found that sociometric data may be influenced by variables such as physical attractiveness that are not necessarily related to social competence. Weisfeld, Bloch, and Ivers (1983) concluded in their investigation of possible determinants of social dominance among adolescents that boys seem to strive for social success mainly through competence in athletics, and girls through cultivating an attractive appearance. There can be little doubt that an attractive appearance is a great aid at least to initial popularity. Whether it will outweight other disadvantages after longer acquaintance is open to question and may depend on the standards of the particular group. Moreover, the criterion of attractive appearance may also differ from person to person and it would be subjective.

**Intelligence and Sociometric Status**

Sociometric status has frequently been considered in relation to intelligence. Some investigators have reported a tendency for these two variables to be positively correlated, but in most cases the correlations have been low.

A large number of studies concerned with intelligence and sociometric status have been reviewed by Mann(1959). He concluded that the data on popularity support a positive relationship with intelligence. The earliest study combining
intelligence and sociometric status is that of Almack (1922). He reported positive correlations between the I.Q's. of children and the I.Q's. of the children they chose as their friends.

The earliest study correlating intelligence and choice status directly for a grade school sample is that of Hardy (1937). The main aim of the investigation was to locate the factors associated with social recognition at the elementary school age. The pupils included in the study were not an unselected group but presented a representative sample of the school population from the standpoint of intelligence, nationality, and socio-economic conditions.

Two methods were employed for evaluating social recognition. These were: reports and ratings by the teachers with respect to the attitude of the class towards the pupil; and the expressed "companion preferences" of the pupils recorded annually during individual interviews with the psychologist.

Social recognition in the classroom was rated by the teachers on a five point scale in terms of the pupil's popularity with his group. A pupil's score was the average of the total ratings given by all the teachers through the period of investigation. During informal conversation with the psychologist the pupils were asked to name the children they liked best. This interview material provided data for a study of the child's attitude towards his associates and of their attitude towards him.

The extent of social recognition was determined by tallying the number of times each
the yearly preference lists. These frequencies ranged from 0 to 23 with the median at 4 for the same year of investigation. The study revealed a correlation of .37 between social recognition scores and intelligence. Moreover, the correlation of social recognition with environmental conditions (home and neighbourhood ratings combined) yielded a coefficient of .46. Bonney (1942), too, found a low but positive correlation between sociometric status and intelligence.

Later studies essentially similar to this one commonly obtained correlational values of this magnitude (Williams, 1923; Warner, 1923; Wellman, 1926; Furfey, 1927; Jenkins, 1931; Partridge, 1933; Burks, 1937; Dimock, 1937; Pintner, Fariano, and Freedman, 1937; McGahan, 1940; Bonney, 1942, 1943, 1944, 1946; Wechsler, 1944; Mayman, 1946; French and Mensh, 1948; Cronbach, 1950; Johnson, 1950; Taylor, 1952; Bass, Wurster, Doll, and Clair, 1953; Bonney, Hoblit, and Dreyer, 1953; Borgatta, 1953; Davis, 1953; 1954; Harvey, 1953; Mill, 1953; Riggs, 1953; Shapiro, 1953; Barbe, 1954; Brown, 1954; Brown, 1954; Slater, 1955a; Kelly, 1957; Gallagher, 1958; Gronlund, 1959; Thakar, 1961; Sharma, 1965; Tiwari and Gautam, 1966; Yamamoto, Lembright, Merlene, and Corrigan, 1966; Glick, 1969; Kakkar, 1970; Gautam, 1971; Kalanidhi, 1971; Malhotra, 1971; Badami and Tripathi, 1973; Vasudeva and Verma, 1974; Sharma, 1975; Baron, 1978; Chen, 1980; Kundu and Naiti, 1985). On the other hand, Jennings (1943), in a study of adolescent girls in a training school, found a correlation of only .04 between intelligence and choices
received. This result is not typical of those obtained with unselected public samples. Heber (1956) reported a study in which the investigator compared the intelligence and social status of 97 junior school children studying in third, fourth, and fifth grades. Kuhlman-Anderson Scale and Cunningham Social Distance Scale were used to obtain measures of intelligence and social status, respectively. For computing social status, the choices were weighted on a continuum ranging from 5 to 1. The group was divided into three sub-groups according to intelligence scores. The study revealed that the children of high intelligence were on the average markedly higher in sociometric status than the children of low intelligence. The investigator also found that children of low intelligence were farther below average in sociometric status than those of high intelligence were above. The investigator suggested that intelligence is important up to a point in determining sociometric status and that the relationship between intelligence and social status is likely to be exponential rather than rectilinear. A rank difference correlation of .55 was found between sociometric status and intelligence.

A few studies have gone beyond this gross correlational approach. One of these, by Grossman and Wrighter (1948), employing a sample of four sixth grade classes in a university community, compared the relationships between intelligence and sociometric status, using a three-interval breakdown of intelligence levels. It was concluded that "intelligence did make a difference up to a certain point - normal intelligence - but
beyond that it did not materially affect the selection - rejection score*. This study is somewhat unsatisfactory, since the middle intelligence group was defined so broadly as to leave few cases for the upper and lower groups. It is of interest, since an hypothesis of a differential relation between intelligence and sociometric status is stated.

The second of these studies by Porterfield and Schlichting (1961), compared reading achievement scores with various pupil characteristics, including sociometric scores. The sample was drawn from sixth grade pupils drawn about equally from schools of high, middle, and low socio-economic status. As would be expected from the studies of intelligence, they found a firm relationship between this achievement test and sociometric status. When results by socio-economic levels were examined, a significant relationship between achievement scores and social acceptability status in the high and middle group was found, but the relation between test scores and social acceptability was not significant in low socio-economic status schools, although it was in the expected direction. This is similar to the Grossman and Wrighter (1948) study in suggesting that the relationship between an intellectual variable and sociometric status is different at various levels, but data are opposing in the reported level at which the difference occurred.

Another study (Roff and Sells, 1965) was conducted as part of a larger research programme which has its major objective the systematic exploration of both short-term and long-term correlations among potentially relevant variables
and peer status during childhood, on a very large sample of children. This project grew out of an earlier set of studies comparing factors operating during childhood with adult outcome (Roff, 1956, 1957, 1960, 1961, 1963).

The sample was a part of the total project sample of around 37,000 pupils of both sexes in the third, fourth, fifth, and sixth grades from cities in Texas and Minnesota. This sample included fourth grade children of both sexes from all schools in one city (2,800 cases). The fourth grade in this city was employed because these children had been given the Lorge - Thorndike Intelligence Test during the school year, and because this city was the largest one in the study for which results were available for the entire city.

Sociometric information was obtained using pre-printed mark-sense cards. Within each class, choices were made separately of boys by boys and of girls by girls. This was done in the belief that at this age level the same-sex peer group is of major importance. Rosters on which each name on the list was numbered were prepared and furnished to each child at the time of the administration. The pupils nominated four individuals, by number, two whom they liked most, and two whom they liked least, and blacked in the appropriate spaces on the mark-sense cards. The student choices were converted to standard scores. Separate standard scores were computed for like-most, like-least, and a combination of the two (Like-most minus like-least) for each child.
At each of the four SES levels, the group of "high" girls and 'high' boys were defined as consisting of all those with standard scores 1 S.D. or more above the mean on the like-most minus like-least composite. A corresponding group of 'low' girls and 'low' boys were defined as consisting of those with a like-most minus like-least standard scores 1 S.D. below the mean. The results showed clearly that the popular children were brighter than the unpopular children when the social class was held constant. The mean difference in I.Q. between popular and unpopular children varied from twelve to twenty points.

Another attempt was made by Davis (1957) to investigate the correlates of sociometric status among peers. For a sample of eighth grade public school males (N=100), a number of variables were tested for relationship with a measure of acceptance among school peers. The measure of sociometric status or acceptance among peers was a 5-point rating scale. This measure consisted of a series of 5-step rating scales requiring each subject to rate all other members of his group on a variety of traits (criteria). The rating scale, patterned after those used by Cunningham was carefully pilot tested, refined and then administered. The study revealed a low but significant relationship (r = .37) between sociometric rating and intelligence.

Mohan and Mohan (1965) studied determinants of social relationship patterns in students. Subjects were 25 male students of ninth grade, who were administered the questionnaire in a classroom situation. The questions asked were:
1) Name three boys with whom you would like to go for a picnic;
2) With whom would you like to study?
3) Whom would you like to invite for tea at your place?
4) With whom would you like to play most?
5) To whom would you relate your happiest or saddest experience first of all?
6) Whom do you consider as : best boy of your class;
7) Your best friend.

The main determinants of choices were academic achievement, sports capability, outstanding participation in co-curricular activities and age. Caste, religion, and language turned out to be insignificant determinants of choice. Father's income and occupation, rural-urban background were found to have slight influence on the sociometric choice.

Another study (Mohan and Mohan, 1970) examined the effect of examination results on sociometric choice. 28 students of a post-graduate class responded to the social preference questionnaire. The questions asked were:

1) With whom would you like to study? and
2) With whom would you like to go for a picnic party, tour, or entertainment programme?

Effect of results of M.A. Part I examination and the experience of studying together for one session on sociometric choices of 28 students were analysed. Out of the four best scorers, getting first class in the Part I examination, only one boy improved his choice status and the three girls underwent a loss in their social preferability in comparison to what they
scored before examination. The examination results appeared to have little effect on sociometric status.

Badami and Tripathi (1973) studied group acceptance - rejection as a function of intelligence and scholastic achievement. Three groups of pupils - accepted, neglected, and rejected - of both the sexes were drawn from the primary section of the four secondary schools in the city of Ahmedabad (India). For selecting pupils to these groups, sociometric test suitable to the group was administered in twelve classes, Bhatt Group Test of Intelligence was administered. The information regarding scholastic achievement of each pupil was collected from the school records. Group acceptance - rejection was found highly associated with the level of intelligence and scholastic achievement. Comparatively, the intelligence level of the accepted was higher than that of the neglected or of the rejected pupils. It was quite low in the case of neglected pupils.

Work on similar lines continued. Sharma (1975) conducted a study to investigate the correlates of popularity and isolation. The study was conducted on seventh class of three higher secondary schools - one boys, one girls, and one co-educational, situated in the same locality of Delhi (India). All the three schools had similar reputation in public regarding their educational standards, achievement, tone, discipline, etc., and attracted pupils from homes of the same level of socio-economic status.

The sociometric technique employed three criteria and
three choices for each criterion. The sociometric criteria were: (1) suppose you were to move to another classroom, which three students from this classroom would you like to take with you?, (2) which three students of this classroom would you like best to play with you during recess?, (3) what do you like to do best in school? ...... Write the names of three students in this classroom you would like best to do it with you?. For the purpose of scoring, each choice was given a score of one, irrespective of the choice level. 32 populars and 27 isolates were identified from the eight groups on a three criteria - three choice sociometric questionnaire. The isolates and populars were administered Raven's Progressive Matrices test. The mean intelligence scores of populars and isolates were 33.54 and 26.48, respectively. The difference between these means was significant at .01 level of significance. The populars were found to be superior in intelligence as measured by Raven's Progressive Matrices Test.

Chatterjee (1979) studied some psychological correlates of social acceptance among primary school children. The sample consisted of 603 subjects drawn from three grades I, II, and V, using four intervening variables (intelligence, social maturity, moral development, and social acceptance). The size of the total sample comprised 301 children drawn from the 15 urban schools of Varanasi (India) and 302 children drawn from the 16 rural schools of Varanasi district. The nature of the correlation between social acceptance on one hand, and the remaining three intervening variables on the other hand has been probed. The more intelligent and the high achievers in language and mathematics were more socially accepted than their duller counterparts.
Personality and Sociometric Status

Personality has been understood to be deeply linked with the sociometric status of the individuals concerned. There have been major attempts to investigate and quantify the relationship.

The role of anxiety/neuroticism as a variable in human behaviour has long attracted the attention of the psychologists and psychiatrists. Since 1937 there have been several studies dealing with the relationship between adjustment and sociometric status in child populations (Hardy, 1937; Bonney, 1942; Northway, 1944; Young and Cooper, 1944; Bonney, 1947; Kuhlen and Bretsch, 1947; Northway and Wigdor, 1947; Grossman and Wrighter, 1948; Greenblatt, 1950; Baron, 1951).

Bonney (1943) found that strong positive personality traits are more important than negative virtues, so far as one's sociometric status is concerned. A friendly attitude, too, is important in winning friends. Bonney reported significant differences between fourth grade pupils with high and low sociometric status on a number of behaviour characteristics. Pupils with high sociometric status were found to be significantly superior on both personal and social behaviour descriptions. They were characterised most frequently by their peers as being tidy, good-lookings, happy, friendly, and cheerful in their social relations. They were described as being enthusiastic, daring, active in recitations, at ease with adults, welcomed by other class members, and as exhibiting leadership qualities in groups. Thus, the pupils who were highly chosen on the
sociometric test were perceived by their classmates as possessing socially admired qualities which contribute to effective social interaction. Kuhlen and Lee (1943) conducted a study similar to Bonney's at the sixth, ninth, and twelfth grade levels and reported similar results. Although there was some change in characteristics from one grade level to another, those pupils with high sociometric status were characterized more frequently as being good-looking, happy, friendly, cheerful, and enthusiastic.

During the same period, Northway (1944) made an intensive study of the personality traits of the low sociometric status group (lower quartile). In a sociometric study of 80 fifth and sixth grade pupils, she selected the twenty least chosen members for clinical study concerning their personality make-up. Three sociometric criteria were used for deriving sociometric status of pupils. The investigator found that the low sociometric status group fall into three distinct personality patterns: the listless, recessive children; the quiet and retiring, socially uninterested children; and the noisy, rebellious, socially ineffective children. Another study (Young and Cooper, 1944) was conducted to identify the personality correlates of popularity among children in grades V to VIII. Three criteria and three choices per criterion were used for obtaining an index of popularity. Credit was given for having received a choice regardless of whether it was a first, second, or third choice. The study revealed that the more extraverted children were more popular than others, and that popularity was linked with a stronger feeling of belonging to the group, the expression of more acceptable social standards and superior
In another study concerning the relationship of personal problems to sociometric status, Kuhlen and Bretsch (1947) employed 692 ninth-graders (326 boys and 366 girls) with a mean age of 14.6 years, and a standard deviation of 8 months, as subjects. Sociometric status was determined for each of these youngsters by asking each to record on a specially prepared questionnaire, the names of others in his own classroom whom he would choose as first or second choices for various activities that ninth-graders might be expected to engage in. Six activities (including attendance at movies, going for a walk, making things as model airplanes, dresses, etc., playing outdoor and indoor games, and studying school work) were listed, and thus, each child could make up to 12 choices. The number of times each child was mentioned by his classmates was tabulated and reduced to a score comparable to scores from other classrooms by dividing by the number of children in the room at the time of testing. Personal problems were identified by means of a modified version of the Mooney's Problem Checklist.

In general, it was found that those who were least accepted by their grade-mates (roughly the bottom quartile) had reliably more personal problems pressing enough to be checked as "often" present than did the top quartile in acceptability. However, there was little difference between the accepted and unaccepted children with respect to the total number of problems checked on occurring "sometimes". Practically all of the item differences on "often" responses show
predominate checking by the unaccepted group, with the items showing greater concern with social skills, unhappiness and lack of status, family problems, and dislike of school. On items checked as "sometimes" problems, the accepted group checked more items relating to social activities, moral concerns (for the girls) presumably growing out of broader heterosexual activities, concern over the future education and job. The unaccepted group checked such items as those involving health factors and revealing unhappiness and a sense of lack of status. Those students classified as "unacceptable" on the sociometric test were found to be much more characterised than were well-accepted students by such problems as lacking necessary social skills, not having close friends, having serious family conflicts, and being unhappy in school.

All the studies have provided at least some support for the hypothesis of a moderate positive relationship between adjustment and sociometric status in child ("better adjusted" children were more popular), although Northway and Wigdor (1947) find some evidence of a curvilinear relationship. A review of sociometric validity (Mouton, Blake, and Fruchter, 1955) summarised a number of studies of adults that also lend support to this hypothesis. Lorber (1969), on the basis of review of studies concerning concomitants of social acceptance, indicated that (1) children of high social acceptance level tend to possess positive and desirable personality characteristics, while those of low social acceptance tend to lack them; (2) children of high social acceptance tend to cooperate, conform, and actively involve themselves in activities with their peers, while those with low social acceptance do not; and
of low social acceptance tend to display the greatest relative indices of undesirable personal and behavioural traits, e.g., attention seeking, restlessness, annoying others, nervousness, and emotional instability.

In the child field, these findings have been supported by Thorpe's (1955) research with the British school children. Subjects were 980 children in 34 classes, with a mean chronological age 12-8 years. A scale which has been shown to possess some validity and adopted from Eysenck was used. This scale includes seven different 'scales' which, grouped, are used to define "neuroticism". Thorpe obtained a pooled r of -.152, standard error .034, between neuroticism and sociometric status.

Another study (McCandless, Castaneda, and Palermo, 1956) administered one-question sociometric instrument to 369 children (194 boys and 175 girls) selected from fourth, fifth, and sixth grade populations. The choice of a one-question, rank and rate sociometric method was due to the authors' quest for a very simple instrument which could be administered by teachers. Children's Manifest Anxiety Scale was also administered for testing the hypothesis that there would be a negative relationship between anxiety and social acceptability in 4th, 5th, and 6th grade children. The authors found negative correlations between anxiety and sociometric status among fourth and fifth graders such that the more anxious children tended to be less popular. The significant correlations obtained ranged from -.28 to -.75. Sixth graders in their sample showed no significant relationship between the two variables. The resulting average correlation between anxiety and sociometric status was -.32, statistically significant.
However, the authors emphasised that looking at the correlations by grade and sex provided a more meaningful way of regarding the data than does concentration on the average r. Subsequently, Trent (1957) reported similar findings among teenage delinquent boys, indicating a correlation in the neighbourhood of -.29. He listed seven supporting bibliographical references indicating general corroboration in sociometric research using other indices of anxiety. During the same period, Horowitz (1962) studied the relationship of anxiety, self-concept, and sociometric status among fourth, fifth, and sixth grade children. The Children's Manifest Anxiety Scale, the Children's Self-concept Scale, and a ranking sociometric task were administered to 40 fourth-graders, 51 fifth-graders, and 20 sixth-graders. In the sociometric task, girls ranked female classmates and boys ranked male classmates. Each subject received a sociometric score which was arrived at by averaging all the ranks given to him by the other children of his/her own sex. The correlations between anxiety and sociometric status were found to be -.44, -.18, and -.44 for fourth, fifth, and sixth grade children. All correlations were significant. The results indicated that more anxious children tended to be less popular than less anxious children. The results are consistent with previous research, both, in direction as well as magnitude of relationship.

Another study of personality correlates of sociometric popularity in elementary school children was conducted by Guinouard and Rychlak (1962). Two classrooms each from grades six, seven, and eight were randomly selected for study. A total of 80 girls and 86 boys made up the sample. Acceptance or non-acceptance was determined by the percentage of classmates
who chose a specific student on two sociometric questions. Each subject was given a dittoed sheet on which he gave identifying data and on which he was asked to select the classmates of either sex with whom he would "like best to play any of the games that we know" and those classmates whom he would "like best to work or make something with - any of the work we do". Only the first three choices were numbered and utilised in determining the play and work choices. In addition to a choice percentage for each of the sociometric questions, a total sociometric percentage which combined play and work group choices were determined for each subject. The High School Personality Questionnaire was used for measuring personality traits.

Unpopular children were less self-confident, less cheerful, less enthusiastic, less acceptant of group standards, less conventional, and less concerned with social approval than popular children. Girls were found to be more warm and sociable, more enthusiastic and happy-go-lucky, more aesthetically sensitive, more insecure, and more tense and excitable than boys. Boys were found to be significantly more mature and calm, more individualistic, more aggressive, more adventurous, and more self-sufficient than girls.

The results obtained by the test authors (Cattell and Beloff, 1962) on 12 years old children concluded that popular children as compared to unpopular were more warm, intelligent, enthusiastic, happy-go-lucky, conscientious, persistent; while unpopular children as compared to popular were more aesthetically sensitive, guilt prone, insecure, tense, and excitable.
In a study of relationship of anxiety to sociometric choice of students, Varma (1964) used Taylor's Manifest Anxiety Scale on 138 students of tenth and eleventh grades. The investigator concluded that acceptable leaders are comparatively free from anxiety and the person getting high anxiety scores are rarely chosen as leaders by their classmates. Another study (Sharma, 1967) concluded that above 34 per cent of the skills and activities of the populars and rejectees were common. Popular boys did not significantly differ from the neglected and rejected boys in any skill or activity.

Manocha and Jain (1968) explored the effects of anxiety on the sociometric choice of the students. Subjects were 75 boys of seventh and eighth grades of government high school, Chandigarh (India). On the basis of their scores on the Indian adaptation of Sarason's General Anxiety Scale for children, they were categorized into three different anxiety groups. Students' preferences as well as rejections with respect to the choice of bench mates were used as the criterion of social acceptance. Students were instructed to write the names of three classmates in order of preference with whom they would like to sit. Further, they were asked to write three names in order of rejection with whom they would not like to sit. The choices were weighted by giving a score of 3, 2, and 1 to first, second, and third choice respectively. The results of the study showed that sociometric choice was significantly affected by the anxiety level of the subjects. Students from the 'low anxious' group were preferred more and rejected less, whereas, students from the 'high anxious' group were rejected more and preferred less. Students from the 'middle anxiety' group were neither
Guardo (1969) studied sociometric status and self-concept in children. The hypotheses of the study were: (1) a positive linear relation would be obtained between self-concept scores and peer nominations as 'most popular' (positive sociometric status), (2) a negative linear relation would be obtained between self-concept and peer nominations as 'least popular' (negative sociometric status), (3) a positive linear relation would be obtained between self-concept and peer nominations for 'like the most', and (4) a negative linear relation would be obtained between self-concept and peer nominations for 'dislike the most'. The 114 subjects (56 girls and 58 boys) comprised four classes of sixth graders in a sub-urban public school. Different groups of subjects were not found to differ in mean self-concept score, average age, mean intelligence, or socioeconomic status. The average age of all subjects was 11-7 years. Almost all subjects came from middle-class or working class families. A peer-nomination type of sociometric measure was used. Subjects were asked to list three names of same-sex classmates for each of the following designations - most popular, least popular, like the most, and dislike the most. In general, a positive linear relationship was obtained and the specific hypotheses of the study were upheld. All the hypothesized relations were significantly supported by data from the girls, but only one was significantly upheld by data from the boys.

Another investigation (Golightly, 1972) studied sociometric status in relation to adjustment of hospitalised disturbed
children. The population consisted of 13 girls and 25 boys living at the Children's Psychiatric Hospital in November, 1968. The age range at the time of the study was 7 to 16 years with a mean of 12 years 3 months. These children had been diagnosed as having severe behaviour disorders, psychotics, or neurotics. Sociometric information was obtained using an open-ended format. In individual sessions, each child was asked to name the children in the building he would take on an imaginary bus trip. A tally of how many times each child was included in another child's list was employed as a sociometric measure of social status. The third of the group with the most friends was designated "popular", the third with the fewest friends was designated "unpopular". Staff ratings were obtained as a measure of adjustment. Sociometric status was not related to age, intelligence, diagnosis, aggressiveness, or popularity with adult staff members. These data suggest that at least some degree of relationship exists between adjustment and social status, even when the adjustment range is limited to maladjusted children.

During the same period, Pathak (1972) compared populars, isolates, and rejectees on different areas of adjustment. Subjects were 200 boys and 200 girls of ninth grade. Three common criteria for both acceptance and rejection were used. The subjects were asked to give three choices in order of preference. Five areas of adjustment (home, health, social, emotional, and school) were evaluated for each child. Popular boys and girls were found to be definitely superior to the rejectees in all the five areas of adjustment. Pathak (1972a)
ascertained the various personality dimensions of four sociometric groups: populars, neglectees, rejectees, and isolates. Populars were those who received maximum of likings from their peers while neglectees were those who were sometimes liked and sometimes disliked only by a few of their peers and others felt reluctant about them. Isolates were those who were neither liked nor disliked by their peers, while rejectees were those who were usually disliked by their peers. The study revealed that the close contact teachers perceived populars as better on personality dimensions when compared to the rest of the groups, while the other groups exhibited similar and comparable trend with respect to various personality traits.

Working in the area of personality correlates of sociometric popularity, Mehrotra (1972) employed a sample of 450 students of seventh grade selected from three higher secondary schools of New Delhi (India). Acceptance or non-acceptance was determined by the percentage of classmates who chose a specific student on two sociometric questions. Each subject was asked to select three classmates with whom he would "like best to work any of the work we do" and three classmates with whom he would "like best to play any of the games that we know". All the three choices were utilized in determining the play and work choices and hence a total sociometric percentage which combined play and work group choices was determined for each subject. The Indian version of High School Personality Questionnaire adapted and standardized (Mehrotra, 1967) was used to measure personality. Sociometric and personality measurement revealed that popular
children were intelligent, happy-go-lucky, enthusiastic, conscientious, persistent, adventurous, self-sufficient, and resourceful. The study also indicated that unpopular children were aesthetically sensitive, self-critical, fastidious, individualistic, and excitable.

Rao and Banerjee (1973) conducted an investigation to study sociometric structure of fifth grade classrooms and the personality differences among high choice receiving and low choice receiving children. A total of 1426 fifth grade students from 44 Delhi (India) schools participated in the study. These schools were catering to students of similar culture and socio-economic background. To study the sociometric structure of these classrooms, each of the students from these classrooms was asked to name three of his best friends from his class in rank order. The number of choices as well as the percentage of choices received by each student were calculated. Pre-adolescent adjustment scale, pre-adolescent class-trust scale, and pre-adolescent initiative questionnaire (Pareek, Rao, Ramalingaswamy, and Sharma, 1970) were used to measure adjustment, class-trust, initiative, and activity levels of students. Group intelligence test (Mehta, 1962) was also used. The comparison of high choice receiving and no choice receiving students revealed that students receiving more choices tended to have better personality structure than those receiving no choices.

Pathak (1974) conducted another study to investigate the adjustment level of sociometrically selected groups of peers. The sample consisted of 500 boys and 500 girls of
ninth grade. Out of the total sample, purposive sample of 40 boys and 40 girls was selected as populars; 40 boys and 40 girls as neglectees; 40 boys and 40 girls as rejectees, and 10 boys and 10 girls as isolates. For the identification of populars, neglectees, rejectees, and isolates, the sociometric questionnaires were administered individually. A weightage of 3 for first preference, 2 for second preference, and 1 for third choice was given. On the lines of Bronfenbrenner's Fixed Frame of reference (Bronfenbrenner, 1944), pupils scoring 15 and more choices were regarded as populars, 3 choices as neglectees, 15 and less as rejectees, and those securing no choice at all in either of the direction as isolates.

These four categories of samples were administered Saxena's Vyaktitva-Farahk Prashnavali for an enquiry into the five areas of adjustment. Populars were found to be superior to neglectees, rejectees, and isolates in each area of adjustment. These results were in conformity with earlier sociometric studies by the author (Pathak, 1971, 1971a, 1971b, 1972, 1972a, 1972b). Social acceptance, thus, seems to be of pertinent significance in determining pupils' adjustment. Neglectees, rejectees, and isolates were found to be comparable and similar in each area of adjustment.

During the same period, Upmanyu (1974) investigated the relationship between sociometric status and different components of anxiety. 71 students of tenth and eleventh grades participated in the study. Their age ranged from 15-17 years with a mean and standard deviation of 15.7 and
1.9 respectively. Out of these 71 students, 40 were males and 31 females. Different areas were selected in which the subjects could have an opportunity for associating with each other. Each subject was asked to select three other subjects in the group with whom he would like to (a) sit next to him in class, (b) attend a party with, and (c) participate in a project. Each individual was asked to select three other individuals from the group he would not like to associate in the above mentioned activities.

The number of times each individual was accepted or rejected by his classmates provided a measure of his or her sociometric status in the group. Credit was given for having received a choice regardless of whether it was a first, second, or third choice. Keeping in view the sociometric status score of each individual, three groups of individuals were selected to form populars, isolates, and rejectees. The three groups were compared in relation to their scores on different components of IPAT anxiety scale questionnaire. The study on the whole suggested that the less anxious subjects were popular. Ego weakness was an important factor for the isolation and rejection of the subjects. In addition, the feelings of unworthiness, depression, and guilt were more in the case of those subjects who were rejected by other members of the group.

During the same period, Vasudeva and Verma (1974) made an attempt to study the relationship of sociometric status with intelligence, achievement, and anxiety. The sample consisted of 100 girls of ninth grade studying in a government higher secondary school at Chandigarh. Hindi
version of 'test anxiety scale for children' (Nijhawan, 1972) and Raven's Progressive Matrices Test were administered for anxiety and intelligence measures, respectively. Assessment of sociometric status was done by sociometric technique. Each subject was asked to write down the names of three classfellows with whom she would prefer to study. Likewise, the choices were asked for the second sociometric criterion (to play with). Sociometric status scores (separately for studies and games) were obtained by assigning scores of three, two, and one to first, second, and third preferences, respectively. It was found that sociometric status in studies and games was positively and significantly related with achievement. Regarding intelligence, the correlation was positive and significant with sociometric status in studies, and negative but insignificant for games. Anxiety was found to be positively related with sociometric status, irrespective of the social-interactional situation.

Another study (Arora, 1975) investigated the relationship between sociometric status and neuroticism. 107 students of tenth and eleventh grades participated in the study. Their age ranged from 15-17 years with a mean and standard deviation of 15.7 years and 1.9 years, respectively. Each subject was asked to select three other subjects in the group he would like (a) to sit next to him in class, (b) to attend a party with, and (c) to participate in a project with. Each subject was asked to select three other subjects from the group he would not like to associate in the above mentioned activities. Different weightage was given to different choices: for example, the first choice was given a score of 3, the second choice was given a score of 2, and third choice was given a
score of 1. In case of rejection, the first, second, and third choices were given weightage of -3, -2, and -1 respectively. Two groups of individuals were selected to form populars and rejectees. The individuals falling above third quartile were termed as populars and those falling below first quartile were termed as rejectees. Neuroticism Scale Questionnaire (Scheier and Cattell, 1961) was used for the purpose of determining neuroticism score. Rejectees as compared to populars were more restless, irritable, tense, emotionally immature, and unstable.

Carter, DeFine, Spero, and Benson (1975) evaluated peer acceptance and school related variables in an integrated public junior high school. The sample consisted of 322 seventh and eighth grade students. The racial composition in grades 7 and 8 was about two-thirds white, one-third black. The remainder of the school was essentially white. Acceptance score for each subject was determined by computing the mean of the ratings received from his classmates. For each student 10 acceptance scores were calculated from the following acceptance sub-groups: (a) academic - black male, (b) academic - white male, (c) academic - white female, (d) academic - black female, (e) academic-acceptance total, (f) social - black male, (g) social - white male, (h) social-black female, (i) social - white female, (j) social-acceptance total. Analysis of variance results showed that white subjects slightly preferred whites for the satisfaction of their academic and social needs. However, with stepwise multiple regression analysis, race was not a significant
predictor variable for academic or social acceptance by white subjects. GPA and sex were the most prominent predictors of acceptance. Black subjects accepted both black peers and white peers equally for academic interaction but preferred black peers for social interaction. Race was a significant predictor variable for academic and social acceptance by black subjects. However, race was secondary to GPA and/or sex for academic acceptance by black females and black males.

Singleton and Asher (1977) attempted to assess the social interaction among black and white third grade children in nine classrooms. One third-grade classroom was randomly selected from each of the 9 elementary schools. There were 95 white males, 84 white females; 19 black males and 29 black females. The black children in each classroom were observed, along with an equal number of randomly selected white children matched for sex. No more than 10 students were observed in any one classroom. For the sociometric portion of the study, two 5-point rating scales were used, each accompanied by an alphabetical roster including the names of all class members. The question, 'How much do you like to play with this person at school?', was typed on the first scale along with five faces ranging from frowning to smiling, to depict the meaning of the numbers on the scale. The question on the second scale was "How much do you like to work with this person at school?". Both race and sex were found to be significant determinants of sociometric ratings for play and work.
In another study, Singleton and Asher (1979) examined cross-race acceptance on a rating-scale measure which assessed liking rather than "best friendship". Children were asked to indicate how much they liked to play and work with each of their classmates. 38 black and 116 white children were tested in the third grade in 1973 and again in 1976 when they were in the sixth grade. To assess possible cohort differences, an additional sample of 52 black and 153 white third-grade children were tested in 1976. Children in both samples had experienced integrated education from kindergarten onward. In May, 1973 the sociometric test was administered. Children were first instructed in the use and meaning of the five-point scale. Then children were asked to rate each of their classmates first for play (How much do you like to play with this person at school ?); and then for work (How much do you like to work with this person at school ?). Children were given examples of play and work situations, and the distinction between play and work was discussed. Results indicated that children gave rather positive ratings to cross-race classmates and that race accounted for much less of the variance in children's ratings than did sex. Data from the longitudinal sample indicated greater own race preference among older children, particularly among black children. Overall, the authors concluded that the results provide a more positive picture of cross-race acceptance then obtained in previous research.

Sushma and Upmanyu (1979) evaluated psychological
Factors associated with the sociometric status. Three groups consisting of 40, 40, and 45 girl students of tenth grade, comprised the sample. Most of them belonged to middle and upper middle economic groups. The Hindi version of Cattell's Junior-Senior High School Personality Questionnaire Form 'A' (Kapoor and Mehrotra, 1967), was used to assess personality, and Culture Fair Intelligence Test, Scale 2, Form A and B was used to assess intelligence. Three 5-point rating scales concerning three sociometric criteria (sitting in the classroom, to play with, and to work with) were used.

Pupils were asked to rate each of the pupils from the group on the five points of the scale in relation to three sociometric criteria separately. The scale ranged from:

(a) I would always like to sit next to her in the classroom,
(b) I would sometimes like to sit next to her in the classroom,
(c) My sitting with her makes no difference, (d) I do not like to sit next to her, and (e) I do not like at all to sit next to her. Similar scales were constructed for the other two sociometric criteria. The choices of the pupils were scored on a continuum ranging from 5 to 1. Sociometric status scores of the pupils were obtained for all the three sociometric criteria separately. The study on the whole suggested that strong positive personality traits are more important than negative virtues for making a person popular. The more extraverted and intelligent children were more popular than others. Different basis existed for choices to the sociometric criterion of sitting in the classroom in comparison to the other two sociometric criteria of playing and working.
together, where essentially the same basis existed for choices.

Young and Avdzej (1979) studied the effects of obedience/disobedience and obese/non-obese body type on social acceptance by peers. One hundred eight males and females of third, fourth, and fifth-grades viewed video-tapes of obese and average weight boys who were obedient or disobedient to a female adult. Afterwards the subjects assigned adjectives to the boys they had seen in the tapes and indicated which one they would prefer as a playmate. Disobedient boys were less preferred than the obedient boys, and obese boys were less preferred than average weight boys. These results are consistent with the notion that obesity is viewed as an undesirable characteristic. However, an obedient boy was always more preferred than a disobedient boy regardless of appearance. Thus, behaviour as well as appearance, seems to be a salient factor in acceptance.

Kundu and Maiti (1980) conducted a study to evaluate the ego strength of children and determine its relationship with the sociometric status. It was hypothesised that the children of high sociometric status will have higher ego strength than the children of average and low sociometric status. 60 boys in the age range of 9-11 years, acted as subjects. A sociometric questionnaire (3 criteria and 3 preferences), a 5-point rating scale and Indian version of Children’s Apperception Test were used to collect data. The findings indicated that the ego strength of a child has an effect on his social acceptance. The children of high sociometric status were found to have higher ego strength than children of low/average sociometric status.
In an investigation by Coie, Dodge, and Coppotelli (1982), children's sociometric status was conceptualized in terms of independent dimensions of social preference and social impact. All of the children in the third and fifth grades of a Durham Country, North Carolina school, and all of the children in three eight-grade classrooms served as subjects in the study. In all, 311 children, that is, 94 third-graders (Mean age = 8.9 years), 112 fifth-graders (Mean age = 11.0 years) and 105 eighth-graders (Mean age = 14.0 years), participated, both as nominators and as nominees. Each child was asked to name, from the grade level roster placed in front of him, three classmates whom he or she liked most, and then three whom he or she liked least. Following this, each child was asked to name three children who best fit each of 24 standardized behaviour descriptions.

In Experiment-I, peer perceptual correlates of social preference and social impact were investigated with children in grades III, V, and VIII. Social preference was highly, positively related to cooperativeness, supportiveness, and physical attractiveness and negatively related to disruptiveness and aggression. Social impact was related to active, salient behaviours of both positive and negative valence. Whereas, the correlates were found to be similar at each grade level, greater proportions of the variance in these dimensions could be predicted at the younger ages than at the older ages. In Experiment-II, these dimensions were used to select children into five sociometric status groups called popular, rejected, neglected, controversial, and average. Peer perceptions of the behavioural correlates of these groups were solicited and
found to reveal distinct profiles. A previously unidentified group of controversial children was perceived as disruptive and aggressive (like the rejected group), but also as social leaders (like popular children).

Recently, Vosk, Forehand, Parker, and Rickard (1982) conducted a multimethod comparison of popular and unpopular children. The study compared popular and unpopular children in a multi-method comparison procedure to identify differences between these two populations. Children were chosen from all third and fourth-graders (N=101) attending a public school in rural Georgia. All the children completed two sociometric questionnaires — a positive nomination scale and a peer rating scale. For the former each child received a list of all children in his or her classroom and circled the names of his or her three best friends. For the peer rating scale, each child rated each of his or her classmates on a 5-point Likert type scale, where a lower score corresponded to a more positive rating. A rating was obtained for each child by summing the other children's ratings of him or her and dividing by the total number of children. Based on this score and the number of positive nominations received, two groups of children, for whom informed consent to participate was obtained, were designated as follows: A "popular" group consisted of 16 children (8 males and 8 females) who received at least three positive nominations (range = 3-7) and who received the lowest mean rating scores (M = 1.38) from all the peers. An "unpopular" group consisted of 12 children (8 males and 4 females) who received zero or one positive nomination and who received the highest mean rating scores (M = 2.72) from all the peers.
All the subjects then participated in the following three phases of the experimental procedure: classroom behaviour observations, administration of achievement test, depression inventory, and individual interview; and rating of behaviour in a role play situation. In addition, experimenters conducted interviews in which knowledge of social skills, responses to hypothetical situations, and a depression self-report measure were conducted.

Unpopular children were perceived as being more unpopular, depressed, and deviant by teachers than were popular children. Classroom observations indicated that unpopular children spent significantly less time on task than popular children and engaged in significantly more negative interactions. There was a trend for popular children to perform at a higher academic level than unpopular children, and the latter children were more depressed than children in the former group. No differences were found on measures of knowledge of socially appropriate behaviour or in ability to respond appropriately to hypothetical social situations for both the groups. Similarly, there were no differences in the responses of the two groups in the role-play situations.

Another recent study (Asarnow, 1983) compared the behaviour of fourth and sixth grade boys with positive (P) and negative (N) peer status in a naturalistic school setting. Four fourth-grade and four sixth-grade classrooms participated in the study. Class sizes ranged from 25-34 children.

Children were asked to pretend that they were directors of a hypothetical class play and to nominate one or more
classmates to play a series of 20 roles. These roles consisted of 10 positive roles (such as, true friend, class president) and 10 negative roles (such as, a bully, somebody who is often afraid). Four negative aggressive roles (e.g., a mean, cruel, boss) were included within the negative category. The class play percentage negative measure (number of nominations for negative roles divided by total number of nominations) was used to select three positively evaluated (P) boys and 3 negatively evaluated (N) boys from each classroom. Observations were sampled from the following three types of settings: (a) six samples from lecture periods, (b) six samples from periods during which the child worked at his seat, and (c) 8 samples from unstructured settings composed of four, two, and two samples, respectively, from recess, gym, and transitional periods (e.g., between activities, before the morning bell).

Results demonstrated that N boys differed more from P boys in the older sample than in the younger sample. N boys also showed an excess of playful aggressive behaviour, suggesting a deficit in aggression socialisation. Paradoxically, N boys showed a greater tendency to respond in a friendly positive manner after receiving neutral peer contacts than P boys.

Another study in this specific area of research was conducted by Asher, Hymel, and Renshaw (1984) who studied loneliness in children. 522 children from third through sixth grades initially participated in the study. Of these 522 children in the original sample, 16 children had incomplete loneliness data, leaving a total of 506 children (243 females
and 263 males) in the final sample. The children came from 20 classrooms in two schools in a moderate-size midwestern city in the United States.

A 24-item questionnaire was developed to assess children's feelings of loneliness and social dissatisfaction. Two different sociometric measures were used: (1) a positive nomination measure in which children were asked to name their three best friends in the classroom; and (2) a rating scale measure on which children rated each classmate on a 5-point scale according to how much they liked to play with that person at school. Sociometric scores were computed and analyzed on the basis of nominations and ratings received from same-sex classmates. More than 10% of children reported feelings of loneliness and social dissatisfaction, and children's feelings of loneliness were significantly related to their sociometric status. Indeed, the children whose sociometric status was lowest, reported more loneliness and social dissatisfaction.

Most recently, Asher and Wheeler (1985) assessed feelings of loneliness of two sub-groups of unpopular children, those who were sociometrically rejected versus those who were sociometrically neglected. Participants in the study were 203 children from third through sixth grades. The data for three subjects were incomplete, thus, leaving a final sample of 200 children. Out of the 200 children, there were 30 female and 35 male third graders, 18 female and 22 male fourth-graders, 19 female and 30 male fifth-graders, and 22 female and 24 male sixth-graders. Three sociometric measures were administered in regular class. The first measure was the rating-scale measure used extensively in previous research. Children rated
each of their classmates on a one to five scale in terms of how much they liked to play with the child in school. The second and third measures were the positive and negative nomination measures, also used widely in previous research. For the positive nomination measure, children were asked to circle the names of three children whom they liked most. For the negative nomination measure, they were asked to circle the names of three children they liked least. Approximately one week after sociometric testing, loneliness questionnaire was administered in class by a male graduate student. The questionnaire consisted of 16 primary items focussing on children's feelings of loneliness. Results indicated that rejected children were the most lonely group, and that this group differed significantly from other status groups. Neglected children did not differ from higher status peers. Overall, the results provided added evidence of the utility distinction between neglected versus rejected status and provided support for earlier conclusions that rejected children are more 'at risk' than are other status group.

French and Waas (1985) studied the behaviour problems of peer-neglected and peer-rejected among elementary school children by giving due emphasis to parent and teacher perspectives. A total of 401 second-grade (M=8.2), and 469 fifth-grade (M=11.2) children were recruited from 14 rural elementary schools. Same-sex sociometric nomination scores were used to classify 46 second-grade (11%; 25M, 21F), and 45 fifth-grade (10%; 23M, 22F) students as popular; 26 second-grade (6%; 13M, 13F) and 14 fifth-grade (3%; 8M, 6F) students as
neglected; 56 second-grade (14%; 30M, 26F), and 60 fifth-grade (13%; 34M, 26F) students as rejected; and 15 second-grade (4%; 9M, 6F) and 8 fifth-grade (2%; 5M, 3F), children as controversial. Children not meeting the criteria for inclusion into one of these four groups were identified as average. This group consisted of 258 second-grade (64%; 129M, 144F) and 342 fifth-grade (73%; 177M, 177F) students.

Sociometric nomination measures were obtained by presenting children with a list of same-sex classmates and asking them to write the names of three classmates with whom they most liked to play. Students were then asked to write the names of three classmates with whom they least liked to play. Each score was converted to a proportion to enable comparison across classrooms. A peer rating scale (Asher and Hymel, 1981) was also administered to all students. Children were provided with a grid consisting of a list of all same-sex classmates along the side, and drawn faces (smiling to frowning) representing a 5-point Likert-type scale across the top. Children checked the box that indicated the extent to which they liked to play with each child on the list.

Each teacher was asked to complete the School Behaviour Checklist (SBC) for three children randomly selected from the popular, average, and rejected groups. Parents of randomly selected children from the popular, average, neglected, and rejected groups were sent the Child Behaviour Checklist (CBC) to complete. On both scales, rejected children were found to exhibit more behaviour problems than neglected, popular, or average children. Neglected children did not exhibit more
behaviour problems than children of average status.

Landau and Milich (1985) conducted a study of social status of aggressive and aggressive/withdrawn boys. Subjects were 238 third through sixth-grade boys enrolled in regular class programming. These boys were rated by all male classmates on an item-by-peer sociometric matrix to elicit nominations of popularity, rejection, and various peer perceptions of aggressive and withdrawn behaviour. Additionally, teacher behaviour ratings of hyperactivity and aggression were collected for each boy. Consistent with the earlier kindergarten study (Milich and Landau, 1984), the investigation revealed that for the third-graders through sixth-graders, aggressive/withdrawn boys were both highly rejected and unpopular.

Here, it is worth mentioning that although it is not scientific to compare the results of different investigations in this specific area of research using different operations and methodology, because the differences in 'methodology' and 'operationalisation' of any phenomenon may be the source of discrepancy in results, yet the studies have been compared with a view to assess the trend revealed by earlier investigators.

Keeping in view, what has been stated in the preceding paragraphs, the following conclusions can be safely drawn:

1) The literature concerning peer relations, that has accumulated during the past sixty years, contains much information which is of both theoretical and practical
significance. There is adequate information already in existence upon which future studies can be built;

(2) In the several decades since Moreno (1934) developed a sociometric measure, numerous investigations have examined the importance of peer relations. However, popularity and specific friendship selection should be carefully distinguished. 'Popularity' refers to the general degree of liking by the peer group, whereas, friendship selection refers to liking by a specific peer. Thus, it is possible to have a low popularity score but still be selected a specific friend by another peer (or by a small number of peers);

(3) One problem in this literature has been the inconsistency with which 'popularity' or 'acceptance' among peers is operationally defined. Sometimes it is defined simply by social acceptance (the number of peer nominations to the question, "Whom do you like most?") and sometimes the acceptance score is combined with a measure of social rejection (defined by many nominations to the question, "Whom do you like least?"). Since these two dimensions - acceptance and rejection - are only slightly negatively correlated, the kinds of social status distinctions that can be drawn from sociometric data vary greatly depending on whether acceptance and rejection scores are used together to define types of status or whether acceptance alone is used as the index of status. For example, when negative status is defined solely in terms of the small number of liking nominations received from peers, the
result is a confounding of two types of negative status that can be seen when the combined use of acceptance and rejection scores is undertaken (Northway, 1944; Gronlund and Anderson, 1957; and Asher and Hymel, 1981). Under this latter condition a distinction must be made at the negative status end of the acceptance dimension between children who are also actively disliked by their peers and children who are simply not nominated by their peers as liked or disliked. The latter children are sometimes referred to as 'isolates' and sometimes as 'neglected children'. Recently, Gottman (1977) and Hymel and Asher (1977) have demonstrated that both positive and negative nominations must be used to avoid confounding rejected and neglected status groups. Peery (1979) recently demonstrated the importance of using both positive and negative dimensions in predicting pre-schoolers' social comprehension skills;

(4) For assessing sociometric status, a vast majority of investigators have made use of pooled information on different sociometric criteria. It is just possible that a person who is a desirable companion in one social-interactional situation may not be desirable in the other. By pooling information of different social-interactional situations (sociometric criteria), differentiation of social status is lost (Moreno, 1960);

(5) There is little research that involves study of the same problem with groups that vary widely in age. Age trends are fairly well documented in the area of peer conformity,
but the factors that influence sociometric status have not been studied intensively in groups of children other than preadolescents. More specifically, the major problem with the literature on sociometric choices has been the lack of studies of developmental changes in the basis for sociometric choices. Are the reasons for choosing a peer as liked or disliked the same among preadolescents and adolescents?

(6) The results pertaining to the relationship of sociometric status with intelligence and personality characteristics are not conclusive;

(7) No systematic research has been made to study sociometric status in relation to motives;

(8) The phenomenon of peer relations is very complex. It must take into account the child's previous socialisation history, aspects of his ability and personality, the characteristics of the children with whom he is interacting, and the social-interactional situation in which peer interaction takes place. In this context, it is important to emphasise that both research and application in this area must be multivariate, rather than univariate, in character. The investigator knows of no systematic researches that have been conducted in this specific area of research which is multivariate in nature; and

(9) Sex differences have been revealed in the correlates of sociometric status.

Some of the main points which have emerged from the above review may be restated here so that some of the inadequacies of
the earlier studies which have been reviewed may be avoided in designing the present investigation:

(1) All the antecedents and the relevant conditions which are likely to influence the results of ultimate interest have been planned to be held constant. For example, only females of more or less the same socio-economic status will be included in the study and the investigator himself as the data collector will remain the same in the two phases of the study. Moreover, the students newly admitted to the classes would be excluded from the study because they have a chance of being rejected or ignored by the established group simply because they would happen to be strangers to the already existing group;

(2) In the several decades since Moreno (1934) developed a sociometric measure, numerous investigations have examined the importance of peer relations. In this study only sociometric status will be considered since popularity or rejection in terms of sociometric status is different from specific friendship selection;

(3) Little systematic research has been done on the question of using positive and negative choices. In the present study, however, both positive and negative dimensions would be included for measuring sociometric status;

(4) A wide variety of criteria have been employed by different investigators. In the light of numerous criteria used by earlier investigators, it becomes difficult to choose the criterion. Thus, only those sociometric criteria would be included in which subjects have or could have real
opportunity to interact with each other in school;

(5) Since the phenomenon of peer-relations is a complex process, the future research must be multivariate in nature. In this context, the present study will be multivariate in character;

(6) There is little research that involves study of the sociometric status of groups that vary widely in age. More specifically, the major problem with the literature on sociometric choice has been the lack of studies of developmental changes in the basis for sociometric choices. The present study has been planned to find out correlates of sociometric status at preadolescent and adolescent stages of development.

The above mentioned discussion provided the guidelines for the formulation of the following hypotheses of the present investigation:

(1) The measures of sociometric status derived from different sociometric criteria are not identical;

(2) All the fourteen personality characteristics, ten motives, and intelligence would be found relevant for sociometric status;

(3) The relevance of intellectual, personality, and motivational variables for sociometric status will undergo significant changes for different sociometric criteria. More precisely speaking, intellectual, personality, and motivational correlates of sociometric status will be different for different sociometric criteria.
These hypotheses derived their rationale from a vast majority of investigations which have made use of pooled information on different sociometric criteria. It is just possible that a person who is a desirable companion in one social-interactional situation may not be desirable in the other social-interactional situation. By pooling information on different social-interactional situations (sociometric criteria), differentiation of sociometric status is lost (Moreno, 1960).

(4) The relevance of intelligence, personality, and motives for sociometric status will undergo significant changes from preadolescent to adolescent age levels.

So far as this hypothesis regarding changes in the relevance of intelligence, personality, and motives for sociometric status at various stages of development, is concerned, the following observations seem to be in order:

(1) Horrocks (1955) remarked that adolescence is both a way of life and a span of time in the physical and psychological development of an individual. It represents a period of growth and change in nearly all the aspects of the child's physical, mental, social, and emotional life. It is a time of new experiences, new responsibilities, and new relationships with adults as well as peers;

(2) Speaking in the same vein, Hurlock (1967, P.2) professes that studies of adolescents have revealed that there is a marked difference in the behaviour patterns of the young and the older adolescent; and
(3) Taylor (1952) emphasized that different factors might underlie sociometric status of an individual at different stages of life.