STATUS IN THE CLASSROOM AND ITS RELATIONSHIP TO TEACHER APPROVAL AND DISAPPROVAL - A STUDY OF CHILDREN'S PERCEPTIONS

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ABSTRACT

STATUS IN THE CLASSROOM AND ITS
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A sample of 334 fourth, fifth and sixth grade students (12 classrooms, 4 at each grade level) was used in a study of the relationships between status in the peer group and teacher approval and disapproval. Data was obtained using a combination sociometric and "guess who" instrument devised for this purpose. The status variables measured were peer acceptance, academic competence and power. Since the instrumentation measured children's perceptions rather than actual behavior, relationships between the status and teacher approval and disapproval variables represented the degree to which a child of a given status was perceived as receiving teacher approval and teacher disapproval.

The major findings of the study were:

1. Teacher approval showed a moderate correlation with peer acceptance for both boys and girls. There was no sex difference in the magnitude of the relationship.

2. Teacher disapproval did not show a significant relationship with acceptance for either girls or boys.

3. Teacher approval showed a high positive correlation ($r>0.80$) with competence for both sexes.

4. Teacher approval was more highly related to power for girls than boys.

5. A significant correlation was obtained between teacher disapproval and status for boys, but not for girls.

The findings were interpreted in light of previous studies which have indicated the extent to which peer group values can influence the attainment of educational objectives. It was suggested that this study underscores the irrelevance of the values fostered by the schools in the awarding of status in the peer group. When such a situation exists, often the teacher and classroom group work at cross-purposes. The author advocated the use of democratic procedures in classroom management. It was suggested that the use of such procedures would bring both the power of the peer group and the teacher to bear on classroom behavior problems. It was further suggested that the use of older children to serve as models for appropriate behavior in the school would be helpful in socializing the young child to the educational environment.

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CHAPTER I - INTRODUCTION

Educators and psychologists have long been concerned with the role of the school in promoting the normal development of the child. Some have argued that next to the home the school has the greatest impact of any institution on development. However, this impact is not limited to the cognitive domain, but is felt in the child's social and personality development as well (Withall and Lewis, 1964).

From the time a child reaches school age and for a number of years thereafter, the school provides him with a large share of his interpersonal experiences with his age mates. For nine months of the year a child spends a major portion of his waking hours in school--much of this time being spent in group activities. By exposure to the in-school peer group the child comes into contact with a great diversity of viewpoints, religions, racial and ethnic groups and socioeconomic levels. For some children--such as children living in isolated or rural areas--the school may provide the only opportunity to interact with children of the same age (Gronlund, 1959).

A number of theorists and mental health workers have long advocated the importance of peer relations in personality development. According to Harry Stack Sullivan, the peer group serves a dual role:

1. It provides an environment in which the child learns the necessary social skills.

2. More importantly, by exposure to the wide range of backgrounds and skills possessed by other members of the peer group the child learns many of his strengths and weaknesses vis-a-vis other individuals.

The end result of this process is that the child attains a more realistic picture of himself. A consequence of failure to experience normal peer relations, according to Sullivan, is severe social and emotional maladjustment in adulthood.

Those in the field of mental health have considered peer acceptance an index of a child's current state of adjustment and a powerful predictor of future adjustment. They have attempted through the use of sociometric devices and teacher ratings to identify those children who were experiencing difficulties in peer relations. Such a child was considered to have a high potential for unfavorable adult mental health. Attempts have been made to use some form of intervention to aid the child in improving peer relations. Often the intervention strategy involved enlisting the aid of the teacher (Northway, 1944).

Is there any evidence to support the notion that peer relations are important to mental health? Kohlberg, 1970, in a recent review article on predictors of adult mental health status from childhood behavior, points out that acceptance by the peer group is one of the best predictors of future adjustment available. The evidence indicates that children's sociometric ratings of one another are more predictive than the rating of adults using clinical judgment and mental health criteria. Not only have the clinicians been shown to be inaccurate in their perceptions of peer relations, but teachers also are notoriously lacking in sensitivity to peer group structure. Such insensitivity has been demonstrated both through their comments regarding an individual's interpersonal relations in cumulative folders and also by comparisons of teacher ratings of peer status with sociometric tests (Warnken and

how achievement could take place in a classroom where anarchy reigns. Thus, the school can be said to stand for a set of values--values which are often bound to educational objectives.

A number of studies have indicated that peer values are related to the overall academic effort exerted in a particular educational setting--even to the extent of influencing the specific subject matter which the group will learn (Coleman, 1961; Bushnell, 1962; Hughes, Becker and Greer, 1962).

Coleman et al. (1966) in the now famous Coleman Report found that by grade 6 the characteristics of a student body (in terms of background and educational aspirations) accounted for as much variance in achievement as did the characteristics of the school itself. Further, for minority group children these attributes accounted for more variance in achievement than did either school characteristics or faculty characteristics (p. 302).

In short, peer group values and characteristics are a potent predictor of educational outcomes. Where peer group values are supportive of educational objectives, educational outcomes tend to be favorable. Where the peer group does not reward academic effort, educational outcomes tend to be poor, or at best, mediocre.

To what extent are peer group values consonant with those of educational institutions? One way of answering such a question might be to examine the relationships between peer group status and educational values--as reflected in the behaviors for which students are typically rewarded or punished. The notion here is that if educational and peer group values are consonant, there should be a high relationship between

the incidence of those behaviors reflecting educational values and peer status. If they are not consonant, however, a high relationship between the two would not be expected.

Status may be defined as one's rank or position in a group. In research on classroom social structure, one's status is generally inferred from a score on a rating scale (either peer or teacher ratings) or through systematic observation of group interaction.

Evidence indicates that status is not unidimensional, but rather there are several status systems or components to the structure of any group (Polansky, 1954; Gold, 1958; Gronlund, 1959). These components can be separated conceptually, but in reality they seem to be interrelated (Glidewell et al., 1966). It has been suggested that studies of classroom social structure must take into account three components: acceptance, competence and power. Although a large body of research suggests that both teachers and pupils make distinctions among individuals along these three dimensions (Shoobs, 1947; Gronlund, 1955a; Evans, 1962; Glidewell et al., 1966) the overwhelming majority of studies have been concerned only with acceptance (Glidewell et al., 1966).

Competence, when it has been studied, has generally been defined in terms of academic achievement, as measured by standardized achievement tests (Northway, 1944; Bonney, 1944; Grossman and Wrighter, 1948). Very few studies have dealt with children's perceptions of their peers' competence and its relation to acceptance. Likewise, power has not been studied to any great degree. Most of the studies which have considered power have used a method for deriving a power score from sociometric tests which was developed by Moreno (1934). The underlying assumption of this method is that acceptance is the base of power--an assumption

which seems unwarranted (Gardner, 1956; Evans, 1962). As with competence, very little is known about the relationship between power and acceptance (Glidewell et al., 1966).

In addition to the general failure to consider components of the classroom social structure other than acceptance, there is some question about the validity of generalizations drawn from these studies due to the samples used. Many of these studies have used the laboratory schools of major universities or have used public schools located in university towns. The result has been an overabundance of studies drawn from upper middle class or professional segments of the population. A study by Pope (1953) indicates, for example, that while direct and open expression of aggression is negatively related to acceptance for middle class boys, such is not the case with boys of the lower class. The working classes apparently are much more tolerant of and expect a certain amount of open aggression in boys. This suggests that the bases of status and the relationships among classroom status systems may show differences by SES of the Ss.

A further weakness of most studies on classroom group structure is that rarely if ever are data presented separately for boys and girls. There is sufficient evidence to indicate the bases for peer acceptance show sex differences (Pope, 1953). Kagan and Moss (as quoted by Honzik, 1965) pointed out the necessity of considering data in personality studies separately for boys and girls before assuming that the data from each sex may be pooled. Again, it is probable that the relationships among classroom status systems vary for boys and girls.

As was previously indicated, a child's peer group status is a good

predictor of future mental health status. If a strong relationship were established between teacher approval and status, it would suggest that the status of an isolate might be influenced in a positive direction by a shift of teacher approval in the direction of the child. Conversely, if teacher disapproval were shown to be related to low status, this too would have obvious implications for action on the teacher's part.

It was also stated above that the degree to which peer values are consonant with educational values can influence educational outcomes for the better or worse. It was suggested that one way of approaching this question is by examining the relationship between peer status and those behaviors which are related to academic achievement and the educational process. If a low relationship between the two were found, it would suggest a "generation gap"--i.e. that the peer group and educators are working at cross purposes. It would suggest that educators must take into account the peer group when formulating educational objectives.

As with status, evidence exists that patterns of teacher approval and disapproval show sex differences. A study by Meyers and Thompson (1956) indicated that boys are perceived by their classmates as receiving a significantly larger share of teacher disapproval than girls. There was no difference in the amount of approval received by boys and girls.

The purpose of the present study is to attempt to clarify some of the unresolved issues pertaining to the social structure of the classroom.

1. This study has attempted to use a sample which will be more representative of the general population than those used in most previous studies.

2. This study represents an attempt to explore differences in the

relationships among status systems between boys and girls.

3. An attempt was made to examine differences in the relationships among status systems by social class.

4. An attempt was made to clarify the relationships between teacher approval, teacher disapproval and status, considering the effects of both sex and social class on these relationships.

The variables which were considered in this study are children's perceptions of acceptance, competence, power, and patterns of the distribution of teacher approval and disapproval in their respective classrooms. It should be noted that the decision to use children's perceptions of classroom status and teacher approval and disapproval as opposed to observational techniques, teacher ratings, etc. was based on the following:

1. The previously cited evidence pertaining to the use of a sociometric measure of acceptance as a predictor of future mental health status;

2. The fact that what seems to be is often more important than what is. It is a child's perceptions of a peer which guide his behavior towards this peer. Although his perceptions may be to some degree based on objective criteria, the extent to which this is true is irrelevant. If a child perceives another as being highly competent or powerful, he will act in an appropriate manner. Evidence of the relationship between children's perceptions of their peers and their behavior is illustrated by the so called ripple effect (Glidewell et al., 1966).

The hypotheses which were tested in this study are broken into four categories:

1. Differences in mean scores between boys and girls on each variable

2. Differences in mean scores between high and low SES Ss on each variable

3. Relationships among status systems, and

4. Relationships among teacher approval, disapproval and status.

Differences due to Sex

1. Girls are perceived as significantly more competent than boys.

2. Boys are perceived as significantly more powerful than girls.

3. There is no significant difference in perceived teacher approval

4. Boys are perceived as receiving a significantly higher amount of disapproval than girls.

Differences due to Socioeconomic Status

1. Both high SES boys and girls are perceived as significantly more competent than their lower SES counterparts.

2. Boys and girls of higher SES are perceived as receiving significantly less disapproval than their lower class counterparts.

3. Boys and girls of higher SES are perceived as receiving significantly more approval than their lower class counterparts.

Relationships among Status Systems

1. The relationships between acceptance and competence, acceptance and power, and competence and power are significantly higher for girls than for boys.

2. The relationship between acceptance and competence is significantly higher for high SES boys than for low SES boys.

3. The relationship between power and competence is significantly higher for high SES girls than for low SES girls.

Relationships between Teacher Approval, Disapproval and Status

1. The absolute (unsigned) values of the correlations between

teacher disapproval and acceptance and teacher disapproval and competence are significantly higher for girls than for boys.

2. The relationship between teacher disapproval and power is significantly higher for boys than for girls.

3. There is no significant difference in the relationship between teacher approval and acceptance for boys and girls.

4. Teacher approval is more highly related to power for girls than for boys.

5. The relationship between teacher approval and acceptance is significantly higher for high SES boys than low SES boys.

CHAPTER II - REVIEW OF THE LITERATURE

Definitions of Status Systems

As was noted in Chapter I, both teachers and students make judgments along three dimensions of classroom social structure--acceptance, competence, and power. The first part of this Chapter will be devoted to looking at previous definitions of these terms. Then the definitions of these terms as used in this study will be given.

1. Acceptance - Acceptance may be viewed as the degree to which an individual is liked by or is attractive to others. Most studies of classroom acceptance have made use of sociometric tests. With such a test the S is asked to choose the members of the class group which he would prefer as fellow participants or companions in some activity. Most such studies have restricted the range of activities to those found in a school setting--i.e. acceptance in terms of a workmate, playmate, or someone to sit next to. A few studies have included sociometric criteria dealing with out-of-school activities--i.e. companion for a movie or someone to invite to a party, etc. (Gronlund, 1959).

It should be apparent at this point that when talking about acceptance, one must specify the activity or situation. It has been shown, for example, that an individual's choices for seating companion, workmate, and playmate vary considerably with the lowest correlations obtained between workmate and playmate (Gronlund, 1955a; Shears, as quoted in Evans, 1962, p. 60).

For the purposes of this paper, acceptance will be defined in terms of acceptance as a seating companion, as a workmate and as a playmate on the playground.

2. Competence - Competence refers to the ability component of group structure--to how well an individual does something in relation to other group members and in relation to an external standard (French and Raven, 1955). Although a number of definitions of competence have been used, most studies have not differentiated between interpersonal, work and play competencies. (Glidewell et al., 1966). Thus, the specific area of competence must be spelled out for a study dealing with this component of social structure to have meaning.

Competence has been operationally defined in a number of ways when studied in the classroom. Some studies have defined it in terms of academic achievement as measured by standardized achievement tests (Northway, 1944; Bonney, 1944; Grossman and Wrighter, 1948). Other studies have used sociometric criteria ranging from the very general (i.e. Who is good at doing what you do in the classroom?) to more specific ones (i.e. Who is good at athletics?); from the interpersonal domain (Who is good at getting along with others?) to specific academic competencies (Who is good at arithmetic?) (Gronlund, 1959). Competence items of the "guess who" format have also been used.

In this study, competence will mean classroom work competencies as opposed to interpersonal and play competencies.

3. Power - Social power has generally been defined as the potential ability to influence another or to get another to behave in a certain way (Moreno, 1934; Gold, 1958; Lippitt and Gold, 1959). Obviously, however, there are a number of ways in which one can induce another to do something. Thus, it seems meaningful to distinguish the base of power. The specific base of power could have a great effect upon the relationship between power and another component of group structure. For example, it

would seem likely that power based upon coercion would have a lower correlation with acceptance than would power based on one's ability to act as a social reinforcer.

Moreno (1934) assumed that acceptance was the underlying base of power. He inferred the degree of power possessed by an individual from sociometric data by determining the extent to which this individual was chosen by high status individuals. According to this definition, the most popular child in the class would be the most influential. Such an assumption seems unwarranted (Gardner, 1956; Evans, 1962).

A potentially more useful scheme is that provided by French and Raven (1955). They defined five types of social power with different bases:

a. Reward power--power based on one's ability to mediate rewards or lessen punishment for another;

b. Coercive power--based on the ability to mediate punishments for another;

c. Legitimate power--based on office;

d. Referent power--power which has as its base the identification of one individual with another, manifested in a desire to be like or imitate another; and

e. Expert power--a derivative of the perception that another possesses a high degree of expertise in a given area in relation to one's own abilities in that area, and in relation to external standards.

Originally, an attempt was made to use all five of the above types of power as defined by French and Raven in this study. However, a number of difficulties were encountered:

a. Legitimate power would seem to be primarily in the hands of the teacher in the classroom.

b. While referent power certainly is encountered in the adolescent group via fads, it was found to be extremely difficult for elementary children to conceptualize.

c. Expert power could not be differentiated from competence by most elementary school children.

Power in this study is thus defined four ways:

a. Power in general--i.e. no base is specified;

b. Power as a function of acceptance after Moreno (1934);

c. Coercive power and

d. Reward power, the last two after French and Raven (1955).

The Sociometric Test

One of the most used devices in studying classroom social structure is the sociometric test and its variants. The sociometric test was designed to measure the individual's perceptions of the status of other individuals in a defined group on some specified dimension or criterion. Since this study deals with children's perceptions of classroom social structure, it behooves the writer to discuss the sociometric test or technique in some detail.

The term "sociometry" is generally considered to refer to a number of techniques devised by Moreno. However some within the field of social psychology, including Moreno himself, have urged the adoption of the term to include all techniques designed to measure social behavior (Lindzey and Borgatta, 1954, p. 405). The following discussion will be limited to a single of Moreno's techniques--the sociometric test--and an allied technique called the "Guess Who?" technique used originally by Hartshorne, May and Maller (1929).

The sociometric test can be considered a rating technique in that each member of a group is asked to rate the other members in terms of their desirability or attractiveness on some criterion--usually involving the choice of a fellow participant or companion in an activity (Lindzey and Borgatta, 1954). However, a number of differences between the standard rating scale and the sociometric test have been noted:

1. No training of raters is required. The criterion upon which other group members are to be rated is specified. The "rater" then uses whatever criteria he has at hand to make his choices.

2. The rater, while he is rating the other N-1 group members is in turn rated by the same N-1 others. Thus, an individual serves as both rater and ratee on the same test.

3. Interrater reliability is not an important issue with the sociometric test. It is assumed a priori that an individual will not be perceived in the same way by each member of the group, and that rater differences on a sociometric test reflect such differences in perception. Rater differences are treated as true differences--i.e. reflective of the true group structure--rather than as error.

Moreno (1934) proposed a number of requirements for sociometric testing:

1. The tester should specify the group being rated. Within that group there should be no restrictions on who can be chosen or rejected.

2. The S should be allowed to choose or reject as many in the group as he wants.

3. The criterion upon which the group members are to be rated should be specified. Further, this criterion should be meaningful to the Ss.

4. The results from sociometric tests should be used to restructure the group.

5. Each individual should be able to make his responses in private with specific choices and rejections never being revealed to the group.

It has been general practice in research to ignore some of the requirements specified above--especially those pertaining to restructuring the group and allowing unlimited choices. The former requires no explanation. In the case of the latter, it has been shown that the reliability of the test is lowered somewhat by restricting the number of choices alllowed (Gronlund, 1959). However, from a more pragmatic viewpoint, with concern for rapport with the Ss, time restrictions, and logistics problems in data analysis, it has become roughly conventional to limit the number of choices per item to three (Lindzey and Borgatta, 1954). One further desiratum is that some time should have passed between the formation of the group and testing (Gronlund, 1959). This allows time for group members to become acquainted, and form a basis for making judgments about their peers. In general, the greater the acquaintance span prior to testing, the finer the discriminations made by the Ss; hence the greater the information about group structure.

The Reliability of Sociometric Tests

One concern in a study of this kind is the degree of stability of the variables being measured. If a child is high or low in status today, will he maintain this position over time? A discussion of the reliability of sociometric tests seems in order.

There is some question as to the applicability of the usual psychometric definitions and methods of determining reliability to sociometric instruments (Pepinsky, 1949; Mouton, Blake and Fruchter, 1955; Gronlund,

1959). In classical measurement theory, reliability is considered to be a property of the test instrument itself. However, reliability coefficients obtained for sociometric instruments using traditional methods are apparently reflecting a property of the behavior being studied, not a property of the instrument (Pepinsky, 1949; Gronlund, 1959).

While the usual psychological test instrument attempts to measure a particular behavior by obtaining responses which are related to that behavior, the sociometric instrument elicits a sample of the actual behavior being studied--i.e. choice behavior (Jennings, 1943). If we accept the notion that a sociometric instrument is measuring the actual behavior being studied, then the problem of reliability becomes one of determining how stable this behavior is. Thus it would seem impossible with a sociometric instrument to separate the question of instrument reliability from that of behavioral stability.

In the absence of the development of special techniques for computing the reliability of sociometric instruments, investigators have turned to the usual ones. Of interest is the fact that the magnitude of the obtained reliability coefficients depends upon whether one considers the stability of the actual choices given by each individual, over time, or the number of choices received by each individual (sociometric status)--independent of who gave them. The coefficients obtained using the former have generally been low. This presumably is because this coefficient reflects in some degree the fluctuations of interpersonal choice patterns within the group. However, sociometric status (number of choices received) seems to reflect a fairly stable individual trait (Gronlund, 1959; Hartup, Glazer and Charlesworth, 1967).

Studies of the stability of the actual choices given have indicated that the degree of stability varies inversely with the number of the choice (i.e. first choice, second choice, etc.) and the length of time between test and retest.

Criswell (1939) in a study of children in the first through sixth grades reported that 38% of the children showed no change in their choices over a six week period. Forty-two percent showed a single change while an additional 20% showed two changes. Sixty-nine percent of the first choices remained unchanged. The test used had a single criterion with two choices allowed. Similar results were obtained by Austin and Thompson (1948) for sixth graders and for fourth and sixth graders over a four month period by Gronlund, 1955.

Horrocks and Thompson (1948) in a sample of sixth through twelfth grade students found that in general, the choices of girls tended to be more stable than those of boys. They used a single criterion with three choices allowed. Seventy percent of the sixth grade girls (versus 50% of the boys) and 80% of the twelfth grade girls (versus 55% of the boys) showed no change in their choices over a two week period.

Singer (1951) reported that 72% of a group of seventh and eighth graders showed no change in their first choice over a period of $1\frac{1}{2}$ years. The second and third choices showed little stability over this period.

A number of factors have been shown to relate to the degree of stability of sociometric status (Mouton, Blake, and Fruchter, 1955). Among these are:

1. The time interval between test and retest;
2. The age of the Ss (the older the Ss, the more stable the results);
3. The amount of time the Ss have known each other;

4. The relevancy of the criteria to the activity of the group;

5. The number of choices allowed (the larger the number, the greater the stability);

6. The size of the group; and

7. The more extreme the score (i.e. stars and isolates), the greater the stability.

Thompson and Powell (1951) reported five week test-retest coefficients ranging from 0.85-0.92 for different classrooms of sixth graders. Sociometric status was determined by summing the number of choices received on four criteria--three choices allowed on each. Similar results were reported by Witryol and Thompson (1953), using sixth grade classes, the same test-retest interval, and sociometric test.

Lower coefficients were obtained by Bronfenbrenner (1945) using classrooms from nursery school to sixth grade, and a test-retest interval of either seven months (nursery school) or five months. Sociometric status among the nursery school children was considerably less stable than that among fifth and sixth graders ($r = 0.27$ versus 0.59).

Hartup, Glazer and Charlesworth (1967) reported a test-retest reliability coefficient for acceptance. Their sample consisted of 32 nursery school children. The test-retest interval was five months.

Wertheimer (1957) reported a test-retest coefficient of 0.56 using high school students as Ss and a $1\frac{1}{2}$ year test-retest interval. A correlation coefficient of 0.72 was reported between the initial test and one given at the end of the first school year (a nine month test-retest interval).

It is interesting to note that the year-to-year stability of sociometric status appears to be as great as the stability of IQ (Bonney, 1943;

Taylor, 1952) and achievement. Bonney reported one year stability coefficients of 0.67-0.84 for sociometric status, 0.75-0.86 for IQ and 0.60 to 0.83 for achievement (as measured on standardized achievement tests). The Ss used in this study were followed longitudinally from second to fifth grade.

Strengths of the Sociometric Technique

The sociometric technique has a number of strengths which commend it to the investigator of peer relations. Some of these strengths have been mentioned earlier, but it would seem in order to mention them again.

1. Ease of construction - Unlike questionnaires, rating scales, observational schemes, etc. sociometric tests are relatively easy to construct. Basically there are two requirements:

a. The criteria used should be relevant to the activities of the group being tested.

b. The limits of the group to be rated must be specified. Further contributing to the ease of construct are a number of how-to-do-it books such as Gronlund (1959).

2. Training of raters - Unlike other techniques used for the study of peer relations, the sociometric technique requires no training of raters. In addition, unlike the other techniques, interrater reliability is not a consideration.

3. Ease of administration - The sociometric test can generally be given to an entire classroom in less than one-half hour. In addition, it has been stressed in the literature that almost all children find the experience of taking a sociometric test an enjoyable one (Gronlund, 1959). The writer observed this first hand while collecting data for the present study.

4. Reliability of the instrument - As was pointed out in the previous section of this chapter, the sociometric test is a fairly reliable instrument in terms of test-retest reliability--this in spite of the relative simplicity of the instrument.

5. Validity of the sociometric test - In Chapter I, the use of sociometric status as a predictor of adult mental health status was discussed. In this context there is no question but what the sociometric test has a substantial degree of validity.

6. Number of raters used - The sociometric test uses a large number of raters, each of whom has had experience with the criterion--i.e. acceptance or competence or power, etc. of peers. For any given individual, the number of raters on a sociometric test is equal to N-1, where N equals the size of the group.

7. Sociometric test as an unobtrusive measure - The sociometric test can be considered an unobtrusive measure, a fact which contributes to its validity. Firstly, on many tests it is possible to gauge the social desirability of particular responses, or to attempt to answer questions in the manner in which one believes the examiner desires. It is difficult to see how such factors could be operative on a sociometric test. Secondly, with many tests involving achievement or output, the individuals taking the test frequently try harder and score above their typical performance. Again, it is difficult to see how such would be the case with a sociometric measure. Finally, many tests provoke anxiety in those who take them. Since the results of a sociometric

test are not known to any but the individual(s) giving and scoring it; and since it would be difficult for children to get together and construct sociometric patterns by comparing responses, it would seem there is little for the subject to fear.

To summarize, the sociometric test is a reliable, valid instrument which has many qualities to commend it both to the classroom teacher and individuals studying classroom social structure--this in spite of its seeming simplicity.

Limitations of the Sociometric Technique

As with any technique the sociometric test has a number of limitations. One can divide these limitations into those inherent in the test itself and those involving the interpretation of sociometric data (Lindzey and Borgatta, 1954; Gronlund, 1959).

1. Limitations inherent in the sociometric test - It is true that the sociometric test yields much data about the structure of a group. It does not, however, reveal the reasons why that particular group structure came into being. Similarly, it gives information concerning the status of individuals within the group, but no information as to why some group members are highly chosen and some receive few or no choices. It should be further noted that the data obtained from a particular sociometric test is based on a particular criterion or a set of criteria. This places some limitations on the degree to which one can generalize a child's sociometric status from one group situation to another. While one's status might be high in one kind of activity, it might be considerably lower in another. Hence one should either use fairly general criteria or several

criteria in order to provide a basis for generalization. Although choice status is relatively stable, the particular choice patterns observed in a group will fluctuate considerably over a time. Thus any inferences based on specific choices given and received should be used with extreme caution. In some a sociometric test has limitations due to the fact that a particular group is being rated at a particular time on a particular set of criteria.

2. Limitations on the interpretation of data - Frequently it has been the practice to consider a star--that is, an individual who receives a large number of choices on a sociometric test--a leader and a person who is well adjusted. Conversely, an individual who receives few or no choices or is highly rejected by his peers often has been considered socially maladjusted or of undesirable character. Although a sociometric test may provide a clue as to whom the socially successful and unsuccessful children in the classroom are, it does not provide information as to why a child is a star or an isolate. Frequently, one may find that an isolate is relatively new to the group and thus is not well-known by the other children. Sometimes an individual may have interests which do not coincide with those of the group. Further, there are individuals who just don't feel the need for the close peer relations which are encouraged in this society. In the case of the openly rejected individual, the basis of his rejection may be for some factor totally extraneous to personality factors. Thus, in cases where inferences are going to be made about the state of a child's adjustment, supplementary data is definitely needed.

Sociometric data, because it is based on individuals' perceptions of others may or may not reflect what is objectively so. Part of the reason

for possible variance from objective reality would be the halo effect. If a person is perceived as possessing one good quality, it is likely that he will be perceived as possessing others. The extent to which the halo effect is operant on sociometric tests has not, to the writer's knowledge, been investigated.

The "Guess Who" Test

A technique which is related to the sociometric test is the "guess who" technique. This technique was originally used in conjunction with a reputation test by Hartshorne, May and Maller (1929). It has since been used in major studies of the personality traits associated with status (Tryon, 1939; Pope, 1953) and studies of children's perceptions of the distribution of teacher approval and disapproval among members of classroom groups (deGroat and Thompson, 1949; Mayer and Thompson, 1956).

Essentially this technique involves the presentation of a series of descriptions and having group members identify the individual(s) who is best described by each (Gronlund, 1959). Items measuring both positive and negative characteristics are used. The usual practice is to weight each mention on a positive characteristic as a plus one and each negative mention a minus one. The algebraic sum of the positive and negative mentions constitutes a "reputation" score. Studies, in which both sociometric status and guess who reputation scores were obtained, have indicated that there is a high correlation between the results obtained with the two (Gronlund, 1959). In the previously cited studies on teacher approval and disapproval, the usual procedure of weighting items positively and negatively was not followed, but rather separate scores for approval and disapproval were obtained by simply taking the sum of the mentions received on each kind of item.

Stability coefficients obtained for guess who instruments have been of the same magnitude as those reported for sociometric tests for both the original reputation test (Tryon, 1939; Pope, 1953) and the teacher approval-disapproval variant (deGroat and Thompson, 1949). The restrictions as to item content, number of choices allowed for each item and privacy of choices, which were noted for sociometric tests, also apply to guess who tests (Gronlund, 1959).

Factors Related to Sociometric Status

In this section research dealing with a number of factors relating to sociometric status will be discussed. Before proceeding further, however, it might be helpful to make some comments about sociometric research in general.

The sociometric test was designed originally not so much for the purpose of research as to serve as an aid in uncovering patterns of friendship, and structuring groups accordingly. During the early history of sociometric research, the main vehicle for presentation of studies was the journal Sociometry--founded by Moreno. When one reads the early issues of this journal one immediately gets the impression that its purpose during this period was to spread the gospel of sociometry--not present acceptable studies. Thus one can find numerous articles by school teachers, principals and administrators all extolling the values of the use of the sociometric test in the classroom. Equal in number were articles by those in the mental health field praising the use of sociometry in helping them to identify the isolated, withdrawn, socially maladjusted child.

These articles were long on praise, but short on facts. There apparently was no standard format for articles. It is not unusual to find an article which fails to specify anything about the sample other than the

fact that it was a group of elementary school children--no grade level, no number of Ss, no number of classrooms used, etc. Further, rarely if ever was there an acceptable presentation of procedures or statistical analyses. This period lasted until the middle to late 1940's. From this time until the middle 1950's a number of good studies were done, mostly by researchers interested in group dynamics. Their interest was shifted to the dynamics of the small group in business and industry during the late 1950's. During the 1960's there were a small number of studies of sociometric nature. Most of these were of reasonable quality.

The writer has attempted, in the following discussion, to be selective as to the studies presented. An attempt was made to use the most-often-cited studies. Even these were screened to see if they met reasonable standards of scientific rigor; and if they did not, they were omitted. Where possible, a recent study(ies) was included. The writer feels that what remains represents the "best possible data" that we have at the present time.

1. IQ and academic achievement - A number of studies have attempted to assess the relationship between IQ and acceptance. Bonney (1944) used a sample of third, fourth and fifth grade children. He found a moderate correlation (.40) between IQ and sociometric status. This finding was replicated by Northway (1944) and Shoobs (1947). Both used samples of elementary school children. However, neither specified the grade level or SES of the children. According to Grossman and Wrighter (1948) and Heber (1956) the relationship between IQ and sociometric status is not linear. In general, children with lower IQ's tend to receive low scores on sociometric tests of acceptance and those with high IQ's tend to score

high. However, beyond a certain value (IQ of 115) an increase in IQ does not yield a corresponding increase in sociometric status.

Roff and Sells (1965) compared the relationships between intelligence and sociometric status in groups of different sociometric backgrounds. They reported that the difference between groups with high sociometric status and those with low status differed on IQ from 11.5 to 22.1 IQ points. These findings were consistent with all socioeconomic levels and for both sexes. The results obtained for academic achievement are similar to those reported for IQ. Academic achievement shows low to moderate correlations with acceptance. However, the reported coefficients are lower than those obtained between IQ and acceptance (Northway, 1944; Bonney, 1946; Shoobs, 1947). Unlike IQ, however, there is a difference in the relationship between academic achievement and status across social classes. Pope (1953) reported that among lower class boys high achievement is predictive of low acceptance rather than high acceptance as is the case for middle class boys.

2. Social class - Socioeconomic status has been reported to correlate moderately with acceptance. Lower class children tend to receive lower acceptance scores than middle class children (Grossman and Wrighter, 1948; Neugarten, 1952). The greatest choice tendency is for children to choose others of the same social class, and then a tendency to select children of a higher class. Rarely are children of a lower class chosen. However, if the discrepancy between classes is too great (i.e. upper-upper and lower-lower) the tendency is to reject one another (Neugarten, 1952). Other studies have not supported this relationship between SES and acceptance (Young and Cooper, 1944; Davis and also Dalke as quoted in Gronlund, 1959,

p. 209). Gronlund (1959) suggests that the degree of relationship between SES and acceptance may be a function of the degree of social stratification of the community.

3. Specific skills, physical and personality traits - A number of studies have reported a significant relationship between athletic skill and acceptance for boys (Bretsch, 1952; Feinberg, 1953) and in at least one study, for girls (Polansky, Lippitt and Redl, 1950). Other "skill" factors which seem to contribute to acceptance are "good at doing things" (Polansky, Lippitt and Redl, 1950) and frequency of participation in sports and extra-curricular activities (Feinberg, 1953).

Young and Cooper (1944) found no relationship between acceptance and body proportion, height and weight. However, they did report that children with high acceptance scores tended to have nicer facial features (as rated blind by both students and teachers). Physical attractiveness as manifested by descriptions such as "neat", "good looking" etc. is consistently attributed to children high on acceptance (Tryon, 1939; Austin and Thompson, 1948; Pope, 1953)

Characteristics of those with High Status

A number of studies have attempted to define those personality characteristics which are typical of those who are high in status in the classroom.

1. Personality characteristics attributed to those with high acceptance - The major attributes of those with high acceptance seem to be associated primarily with social skills. High acceptance children have been reported to be more extroverted and self-confident (Young and Cooper, 1944). In addition, the high acceptance child is one who "knows how to

have fun" and "has a good sense of humor" (Tryon, 1939 and Gold, 1958). Pope (1953) reported that highly accepted middle class boys are perceived by their classmates as being friendly, personable, studious and conforming. Lower class boys who were more accepted by their peers, however, tended to be aggressive, belligerent and domineering. Little difference between characteristics of highly accepted middle class and lower class girls were reported. Highly accepted girls of both classes tended to be friendly, neat in their appearance, good-looking, outgoing and good students. Kohlberg (1970) reported that highly accepted children are more mature in their moral development than their less popular age mates. In contrast, those who are isolates or neglectees have been reported to be socially uninterested, socially ineffective or withdrawn, lacking in vitality, careless in appearance and lacking interest in people, activities or the outside world (Northway, 1944). Pope (1953) reported that direct expressions of aggression by girls regardless of social class and by middle class boys were related to low acceptance.

2. Correlates of competence - As yet, there is a very limited store of knowledge concerning the correlates of classroom competence as measured by sociometric or near sociometric techniques. As one might expect, middle class children are perceived as being more competent in classroom affairs than lower class children. Further, boys are perceived to be more competent in arithmetic and games than girls (Pope, 1953). Those with high IQ's are generally perceived to be more able in classroom work (Zander and VanEgmond, 1958). In addition, they reported that boys who are viewed as being more competent in general (i.e. not only on school work) tend to be more powerful. This was not the case for girls.

Interpersonal skills show low positive correlations with competence for both boys and girls. More competent children are generally viewed as more friendly, personable and attractive (Pope, 1953) and are more likely to be imaginative and to have good ideas about how to have fun (Tryon, 1939).

3. Correlates of power - Correlates of power in the classroom have been studied in some detail by Pope (1953), Zander and VanEgmond (1958) and Gold (1958). In each of the three studies, high power children were viewed as more skilled in interpersonal relations--being perceived as more attractive, more considerate and more friendly than less powerful children. However, this relationship apparently holds only for middle class children. Lower class children perceived as high on power are also perceived as being belligerent, domineering, bullies and trouble-makers. Powerful lower class girls are viewed as being tomboys, rowdy, attention-seeking, and aggressive (Pope, 1953)

Zander and VanEgmond (1958) reported that high power girls were perceived as possessing high ability on schoolwork. Only high power boys who were of high intelligence were viewed as being more competent in schoolwork.

Gold (1958) found that high power boys were reported to be strong and were able to fight. Both boys and girls high in power were perceived as "having things you'd like to have", "doing things for you", "good at making things", and as "having good ideas about how to have fun". The items with the highest relationship to power were those involving the interpersonal skills mentioned above.

Relationships between Acceptance, Competence and Power

As mentioned earlier in this paper, acceptance, competence and power are interrelated. Glidewell et al. (1966) present average correlations between these three factors. The correlations represent an average based on a summary of all available findings concerning these relationships. The resultant correlation coefficient were: between acceptance and competence 0.40; between competence and power 0.30; and between acceptance and power 0.60. Some view these correlations as indicative of a halo effect--the highly accepted child being perceived as high on most traits (Lindzey and Borgatta, 1954). Others interpret these findings as suggesting a "g" factor for group relations much as Spearman's g for intelligence (Gronlund, 1959). It should be pointed out that if the measure of power were based on Moreno's power-based-on-acceptance measure, the correlation between power and acceptance reported by Glidewell is possibly inflated. Essentially, one is using different subsets of the same set of data to obtain both measures. In addition, as was pointed out previously, it seems untenable to assume acceptance is the sole base or even primary base of power in the classroom. Pope (1953) found that among lower class children, power and acceptance were only slightly related. In general, those factors which made for low acceptance among middle class children (i.e. high aggressiveness, fighting, etc.) made for high power among lower class children.

The Role of Teacher-Student Interaction on Status

Implicit in many of the writings on social interaction in the classroom is the notion that patterns of student-teacher interaction are related to a pupil's status. (Withall and Lewis, 1964; Glidewell et al. 1966). In spite of the seeming importance of such a relationship, if it

does indeed exist, relatively little research has been devoted to this topic. Polansky (1954) studied the relationship between the mental health climate in the classroom and the teacher's supportiveness of group status systems as measured by a sociometric test. Supportiveness of group status systems was defined as the extent to which teachers had more learner-centered contacts with high status children than with low status children. An observation scheme developed by Withall was used to obtain measures of the above. This scheme defines teacher-pupil contacts as learner-centered, teacher-centered and neutral. It further breaks down into categories such as praise, blame, etc. It was found that in classrooms with "good" mental health climates teachers had more learner-centered contacts with high status children than in classrooms with a "poor" climate. There was no difference observed in teacher-centered and neutral contacts between good and poor classrooms. However, no data was presented to show the magnitude of differences in learner-centered contacts between high and low status children. Further Polansky dealt with observations of teacher-student interaction rather than the students' perceptions of these interactions.

Flanders and Havumaki (1960) reported that teacher praise directed toward particular students will enhance their sociometric status. Thirty-three groups of ten high school students each were led to believe that they had been selected as potential participants on a radio quiz show. Each group met with a teacher-trainer or coach who was to guide each group towards the selection of five persons who would "actually" participate in the show. The number of friendships and acquaintanceships within the groups was low.

Under the experimental condition the students sitting in certain chairs were praised continuously by the teacher and allowed to make comments and suggestions freely. The students in the other chairs were not praised and not even allowed to talk. At the end of the session, each student was asked to choose five persons who would be good participants on the program. Significantly more choices went to the praised group than the other group.

Given a situation in which persons:

1. Are put into a group of strangers;

2. Have an attractive goal held up to them;

3. Observe an authority figure praising some of the members of this group; and

4. Observe this same authority figure allow only certain members to talk;

it seems unlikely that results other than those reported in this study would be observed. Nature abhors a vacuum. In the absence of any other data about the individuals in the group, it seems reasonable that those who were singled out by the teacher, allowed to talk and were praised would be viewed as better potential program participants or better anything--simply because the group had only this basis for making a judgment about them.

In contrast to this experiment, the social structure of the classroom evolves over time. It is the result of days, weeks, months and perhaps even years of interaction among students and teachers. It is based on multiple sources of information gleaned by the children and based on their perceptions of classroom activities and social interaction. One source of such information may well be teacher-pupil interaction. However, it

seems doubtful that due to the artificiality of the above experiment such a relationship has been demonstrated. As was previously noted in a study pertaining to children's perceptions of the distribution of teacher approval and disapproval, Meyer and Thompson (1956) found that boys received significantly more disapproval than girls. No difference in the amount of approval between the sexes was noted.

If higher disapproval leads to lower peer status, one might expect that boys would show a lower mean acceptance score. Such is not the case. Gronlund (1959) has reported that there is no difference in the acceptance scores obtained by each sex. This calls into question the role of teacher disapproval as a determinant of peer group status in the classroom.

CHAPTER III - MATERIALS AND METHODS

Instrumentation

The instrument used in this study was a 25 item scale which was a combination of three standard sociometric items (the acceptance items) and 22 items using a "Guess Who" format.

The selection and development of items proceeded along several lines. Where possible, items used in previous studies were adopted. Often, some modification was required before they were usable. For example, most of the teacher approval-disapproval items were drawn from a scale developed by deGroat and Thompson (1949). Although a certain number of these items were usable in their original form, some were dated in terms of either wording or content. This necessitated the rewording of some items, the discarding of some, and the writing of new items to take their place. The items chosen for social acceptance represented the standard triad of classroom seating, work group and playground activities (Gronlund, 1959). Items for power and competence were developed from scratch using the definitions cited earlier as their basis. To be more specific, the items for competence dealt only with the concept of classroom competence. The power items included one general measure of power, one item dealing with coercive power and one dealing with reward power.

After a preliminary scale had been developed, four elementary school teachers were asked to review the items. Specifically they were to judge whether an item might present reading difficulty for fourth and fifth grade children. Each item was also rated as to whether its content reflected a situation which might occur in their classrooms.

Some items were revised according to suggestions made by the teachers. The scale was then given to a number of fourth and fifth grade children--again to screen items for difficulty and ambiguity. On the basis of this testing, additional revisions were made. The resultant scale consisted of three items each for social acceptance, competence and power, and eight items each for teacher approval and disapproval (see Appendix A). The items were scrambled such that no two items falling into the same category were together. This was done to minimize response sets on the part of the Ss.

In order to obtain some idea of the basis upon which the Ss made their judgments, an adjective check list was developed. This check list consisted of 20 adjectives or phrases descriptive of qualities which have been reported in the literature as being important to the development of friendships. The items in this check list may be found in Appendix C.

The completed scale was then further tested by administering it to one fourth grade class. This procedure served to eliminate further problems with the items and also served to iron out difficulties in test administration procedures.

Subjects

The Ss were 334 fourth, fifth and sixth grade students in a school system which is located in a suburb of a large midwestern industrial city. Data were collected from 12 classrooms--4 at each grade level. The sample breakdown by grade and sex is given in Table 1.

The area in which the Ss lived could be considered a slice of middle America. Most of the Ss were second or third generation Americans, largely of Italian and Polish ancestry. There were no Negroes living

within the boundaries of the school district. In all but two cases English was the spoken language at home. The area was composed almost entirely of modest single family dwellings. Most of the Ss' fathers were employed in semi-skilled or skilled occupations. However, at one extreme there were a number employed in professional occupations while at the other end there were a few on welfare or in unskilled occupations. To obtain an estimate of a child's socio-economic status the father's occupation was obtained from school records for each child. An occupation rating scale developed by McGuire and White was then used to obtain a rating (Kennedy, 1969). With this scale one can assign a rating from one (professional) to seven (unskilled labor, unemployed, etc.). The criteria for assigning occupational ratings may be found in Appendix B. Table 2 contains a breakdown of the sample by parental occupation rating and sex. Note that the mean occupational ratings for parents of males and females were nearly the same.

TABLE 1

Breakdown of Sample Studied by Grade and Sex

Grades	Male	Female	Total
Grade 4	54	57	111
Grade 5	64	49	113
Grade 6	50	60	110
TOTAL	168	166	334

TABLE 2

Breakdown of Sample Studied by Parental Occupation Rating and Sex

Sex	Occupational Rating						
	1	2	3	4	5	6	7
Male	4	11	34	36	46	27	10
Female	5	9	32	40	46	24	10
TOTAL	9	20	66	76	92	51	20

Mean Occupational Rating Males: 4.37

Mean Occupational Rating Females: 4.36

Mean Occupational Rating Total Sample: 4.36

Additional information such as IQ, achievement test scores, and more detailed information on the Ss' backgrounds might have been desirable. However, there is a growing reluctance on the part of both school administrators and parents to release such information for research purposes. The school system used in this study requires that when detailed social background data is to be collected in a study, permission must be granted by the Ss' parents. There were two reasons for rejecting this option:

1. It was not felt that the additional data would be worth the effort to obtain it.
2. In order to get an accurate picture of the social structure of a classroom one must obtain data from as many of the students in the classroom as possible. Traditionally a certain amount of error has been tolerated in sociometric studies due to absences on the day of data collection. To have had a number

of parents refuse to allow their children to participate in this study would have tended to increase this error, possibly to such an extent that the data would be rendered invalid.

Experimenters

In addition to the writer two female assistants were involved in data collection. The assistants were both certified elementary school teachers with teaching experience. They assisted in the distribution and collection of materials, in monitoring the children as they worked on the scale, and in answering questions raised by the children concerning scale items. Before data collection began, the writer held meetings with these assistants in order to work out a standard procedure. A series of standard exemplars and definitions were developed for those items which might have proved difficult for some of the Ss to understand. For example, two of the teacher approval items had to do with who is typically chosen to be a monitor and who is chosen to run errands for the teacher. Monitor was defined in terms of in-classroom duties such as taking care of blackboards, the aquarium, classroom pets, etc. Running an errand was defined as a duty which would take the child out of the classroom, such as taking some papers to the principal's office, etc.

Procedures

Each child was given a copy of the scale which consisted of the 25 items, the adjective check list and a page of instructions (see Appendix C). A class list was obtained from the teacher and all names were written on the blackboard. The Ss were then asked whether any of them were known by a nickname other than the name which was on the board. Although in most cases such changes were trivial--such as Bob for Robert or Dick for Richard--in a number of instances the nickname was quite

different from the S's given name. In these cases the addition of this practice to the procedures proved worth the effort when it came time to score the data. Attention was then called to the blanks on the top of the instruction page and the Ss were asked to fill in their name, age, grade, and teacher's name. Then the following instructions were given orally:

> In this booklet are twenty-five items. Some questions ask you to name the children with whom you would like to work, play, and sit next to in class. The others are descriptions which probably fit some of the children in this classroom. Below each item are three blank spaces. We will read each item together. Then I want you to choose three children who are best described by the item and write their names in the blank spaces. You must choose children from this room. You may choose children who are absent. Write the first name and the first letter of the last name for each child you choose. You may only choose three children for each item. However, you may choose the same child for more than one item. If you cannot think of three names for an item, write as many as you can. Your choices will not be seen by anyone else, not even your teacher. Remember:
>
> 1. Choose three children for each item.
> 2. If you cannot think of three children for an item, write down as many names as you can.
> 3. The children you choose must be in this class.
> 4. You may choose children who are absent.
> 5. You may choose the same child for more than one item.

The children were then asked if they had any questions regarding procedure. After questions were answered, the experimenter proceeded to read each item allowing sufficient time between each for the Ss to respond. Following completion of the 25 sociometric and guess who items, the children were read the following instructions regarding the adjective check list:

> There are many reasons why you might choose someone to be your friend. Below are some possible reasons. Put a check beside the ones which are most important to you when you choose a friend.

The Ss were then given several minutes in which to complete the list. It was found that most classes were able to finish the questionnaire in 25 to 30 minutes.

CHAPTER IV - RESULTS

Scoring of Data

The items on the basic questionnaire were scored by counting the number of times an individual S was chosen by his peers on each item. The scoring procedures followed were those outlined by Gronlund (1959). First, second and third choices were weighted equally. Gronlund (1955) conducted an extensive study of the use of weighting procedures in the scoring of sociometric data. He concluded that:

1. There is no rational basis for deciding the proper weight to give each choice.

2. There is no evidence that differential weighting of choices adds information over that obtained by giving all choices the same weight.

In addition to the scores obtained from the three power items, an additional power score was derived from the three acceptance items using a method described by Moreno (1934). According to Moreno, power rests upon the potential ability to influence another--ability to influence another being based on acceptance. The basic idea underlying this scoring method is that if an individual is chosen by another person, he is in a position to influence that person. Further, the chooser is in a position to influence those who choose him. Power is equal to the number of persons choosing an individual--i.e. those persons subject to an individual's direct influence--plus the number of persons choosing the choosers--i.e. those persons that the individual can influence indirectly through the ones who chose him.

Total scores for acceptance, competence, power, disapproval and approval were obtained for each individual by summing the scores obtained on each of the appropriate items. The Moreno power score, since it was derived from the acceptance items, was not included in the total power score. It was felt that this score, being based on acceptance would be more related to acceptance than would the other power items. Hence its inclusion would possibly inflate the correlation between acceptance and power.

A. Tests of hypotheses concerning differences due to sex and SES on status and teacher approval/disapproval variables. Seven hypotheses were advanced which dealt with differences between sexes and SES levels on the status and teacher approval/disapproval variables. These hypotheses were:

1. Girls are perceived as significantly more competent than boys.

2. Boys are perceived as significantly more powerful than girls.

3. Neither sex is perceived as receiving a significantly greater share of teacher approval than the other.

4. Boys are perceived as receiving a significantly greater share of teacher disapproval than girls.

5. Higher SES children are perceived as significantly more competent than their lower SES counterparts.

6. Lower SES children are perceived as receiving a significantly greater share of disapproval than higher SES children.

7. High SES children are perceived as receiving significantly more approval than their lower class counterparts.

Because of the few cases in the sample which fell in the extremes of the distribution of social class ratings, it was necessary to combine levels to obtain a sufficient N in the high and low SES groups. The high SES group was obtained by combining levels 1, 2 and 3; the low group by

combining levels 6 and 7. The two remaining levels (levels 4 and 5) became the middle SES group.

Tests of the Hypothesis

The general hypotheses of sex and SES differences were tested with a two-way multivariate analysis of variance. The multivariate package programmed by Finn was used (Finn, 1968). The independent variables were sex and SES. The dependent variables were total acceptance, total competence, total power, total disapproval, and total approval--as described in the last portion of the section on the scoring of data.

The following results were obtained:

1. The multivariate test of the equality of mean vectors between sexes was significant ($F=12.1563$, D.F.=5 and 324, $P<0.001$). The means and standard deviations for each variable for each sex may be found in Table 3.

TABLE 3

Means and Standard Deviations for each Sex on the Five Dependent Variables

	Boys N=168		Girls N=166	
	Mean	S. D.	Mean	S. D.
Acceptance	8.05	6.33	8.61	6.39
Competence	6.61	9.08	8.96	11.10
Power	8.25	9.01	6.76	5.87
Disapproval	33.22	38.86	8.76	16.29
Approval	15.68	16.34	25.17	29.35

2. The multivariate test of significance for the SES effect was not significant ($F=1.1360$; D.F.=10 and 648; $P<0.3323$).

3. The multivariate test of significance for the sex by SES interaction was not significant (F=0.8194; D.F.=10 and 648; P 0.6101).

As can be seen from the above, the data are not consonant with the notion of social class differences. Thus, the three hypotheses concerning social class differences (numbers 5, 6 and 7 above) have not been confirmed. It is apparent, however, that the data support the notion of sex differences.

With the Finn multivariate program, not only the multivariate test of significance is given for each main effect and interaction, but also univariate analyses for each combination of effect and dependent variable. To elucidate the source of the significant multivariate test of the sex effect, the univariate analyses of variance are presented in Table 4.

TABLE 4

Univariate Analyses of Variance - Sex Main Effect

Variable	Between Mean Sq	F	P Less Than
Acceptance	0.0365	0.0009	0.9760
Competence	195.0480	1.7678	0.1846
Power	288.3143	4.9564	0.0267
Disapproval	44466.1135	49.3945	0.0001
Approval	4775.5204	8.5962	0.0031

D.F.=1 and 328

However, as is the case always with multiple dependent tests on a single set of data, caution must be observed in interpreting the results. This is due to one's inability to specify the degree to which the probability

of a Type I error is compounded in such a situation. The general practice in a multiple test situation is to use a more stringent alpha level than would normally be used (alpha divided by K where K equals the number of contrasts). Such a practice does not allow one to specify the exact probability of a Type I error where the contrasts are dependent, but it does decrease this probability (Hayes, 1963, p. 488). In the present case, it would seem to be safe to consider both the sex differences noted for disapproval ($P<0.0001$) and approval ($P<0.0037$) the sources of the significant multivariate test. However, although the P value obtained for power ($P<0.0267$) would be adequate for most purposes, in the context of the present situation it may or may not be safe to interpret this value as reflecting a true difference.

In terms of the specific hypotheses proposed earlier, the following statements can be made:

1. The data tend to support the hypothesis that girls are perceived as being more competent than boys, but because multiple tests were used, this result should be interpreted with caution.

2. The hypothesis that boys are perceived as more powerful than girls is not supported.

3. The hypothesis that there is no sex difference in the amount of approval received is not supported by the data. Clearly, such a difference does exist with girls perceived as receiving a higher share of approval than boys.

4. The data tend to confirm the hypothesis that there is a difference in the share of teacher disapproval received by each sex. Table 3 clearly indicates the direction of this difference--i.e. boys are perceived as receiving a greater share of disapproval than girls.

Before moving to the next set of hypotheses, one further item should be noted in anticipation of the discussion: no difference was found between the mean acceptance scores for boys and girls. The mean values of 8.05 for boys and 8.61 for girls are not significantly different.

B. Hypotheses concerning the relationships among the five major variables. Pearson product-moment correlation coefficients between each variable were computed for boys, girls, and the high and low SES groups for both boys and girls. As was the case in the previous section, the question of the probability of a Type I error had to be considered. However, with correlations, this problem is manifested in two ways:

1. In testing whether a given correlation is significantly greater than zero, and

2. In testing the difference between correlations.

In the case of the data obtained from the entire sample of either sex, the stringent alpha level used posed little problem. A correlation coefficient equal to or greater than 0.25 was significantly greater than zero at the 0.002 level for a two-tailed test.

On the other hand, when testing the hypotheses concerning differences in the relationships among variables between the high and low SES groups of each sex, the effects were seen. For high SES boys and girls a correlation coefficient of 0.45 was the minimum coefficient significantly greater than zero (α=0.002 for a two-tailed test). For low SES boys and girls, the minimum coefficient for significance was 0.50 (α=0.002, two-tailed). Similarly, a large difference between coefficients was necessary in order to obtain a significant difference. In reducing the probability of a Type I error, a price was paid--i.e. the probability of a Type II error was increased. It is possible that significant

correlations between variables, and significant differences in the correlations obtained for the various high and low SES groups do exist which are not considered as such in this study. It was decided to err on the side of a reduction in the probability of a Type I error--reserving the right to point out differences in the predicted direction which might be suggestive of further research.

Relationships Among Status Systems

Sex Differences - It was hypothesized that the relationships between the three status variables--i.e. between acceptance and competence, acceptance and power, and competence and power--would be significantly higher for girls than for boys. The correlations between these variables are presented in Table 5. All three correlations for both boys and girls are significantly greater than zero ($P<0.002$).

TABLE 5

Relationships among the Five Major Variables for Boys and Girls

	Accept		Comp		Power		Disapp	
	Male	Female	Male	Female	Male	Female	Male	Female
Comp	0.5425	0.5769						
Power	0.5132	0.6960	0.3150	0.5969				
Disapp	0.1125	-0.0813	-0.0723	-0.1920	0.4516	0.1123		
App	0.4311	0.5300	0.8022	0.8810	0.2695	0.5838	-0.0726	-0.1009

The difference in the correlations between competence and power for the two sexes is significant ($P<0.002$). The difference between sexes on the acceptance-power relationship--although not significant--is in the predicted direction. There is no difference between boys and girls in the

degree of the relationship between acceptance and competence.

SES Differences - Two hypotheses regarding differences in the relationships among status systems for high and low SES boys and high and low SES girls were advanced:

1. The relationship between acceptance and competence is significantly higher for high SES boys than low SES boys.

2. The relationship between power and competence is significantly higher for high SES girls than low SES girls.

The data for high and low SES boys may be seen in Table 6. Note that with the stringent alpha level being used, the correlation between acceptance and competence is not significant for low SES boys, while it is for the high SES group. The difference between these two correlations is not significant, albeit in the predicted direction.

TABLE 6

Relationships among the Five Major Variables for High and Low SES Boys

	Accept		Comp		Power		Disapp	
	Hi SES	Lo SES	Hi SES	Lo SES	Hi SES	Lo SES	Hi SES	Lo SES
Comp	0.7028	0.3833						
Power	0.4700	0.6059	0.3854	0.4191				
Disapp	-0.0176	0.1728	-0.2109	0.1193	0.4553	0.5648		
App	0.6158	0.3768	0.8302	0.9065	0.3659	0.4437	-0.1168	0.1341

The correlations for high and low SES girls are presented in Table 7. As can be seen, the relationship between competence and power is significantly greater than zero for both the high and low SES groups.

The difference between the correlations obtained for each is not significant, but is in the predicted direction.

TABLE 7

Relationships among the Five Major Variables for High and Low SES Girls

	Accept		Comp		Power		Disapp	
	Hi SES	Lo SES	Hi SES	Lo SES	Hi SES	Lo SES	Hi SES	Lo SES
Comp	0.6407	0.6131						
Power	0.6435	0.7528	0.7196	0.5958				
Disapp	-0.1046	-0.0086	-0.1720	-0.2371	0.0522	0.0170		
App	0.6222	0.5248	0.9627	0.5967	0.7254	0.5257	-0.1319	-0.1345

Relationships Between Status Systems and Teacher Approval and Disapproval

A total of five hypotheses were tested concerning the relationships between teacher approval and disapproval, and the three status variables:

1. The absolute (unsigned) values of the correlations between teacher disapproval and acceptance, and teacher disapproval and competence are significantly higher for girls than for boys.

2. The relationship between teacher disapproval and power is significantly higher for boys than for girls.

3. There is no significant difference in the relationship between teacher approval and acceptance for boys and girls.

4. Teacher approval is more highly related to power for girls than for boys.

5. The relationship between teacher approval and acceptance is significantly higher for high SES boys than for low SES boys. The data

obtained for boys and girls may be seen in Table 5. Considering hypothesis 1--the relationships between teacher disapproval and competence and teacher disapproval and acceptance--note that for both boys and girls these correlations are insignificant. Thus, the data do not support the notion that there is a difference in the degree to which acceptance and competence are related to teacher disapproval for boys and girls.

Examining the correlations between power and teacher disapproval for boys and girls, it may be noted that while a significant positive correlation between the two variables was obtained for boys, the correlation obtained for girls was not significant. Even had the correlation for girls been significant, however, the difference between the obtained coefficients for boys and girls is significant ($P<0.002$).

The correlations obtained for both boys and girls between acceptance and approval were significant positive ones. It was hypothesized that there was no difference in the degree of relationship between these variables for boys and girls. Note that the coefficient for girls is slightly higher than that obtained for boys. However, this difference did not prove to be statistically significant.

For both boys and girls a significant positive correlation was obtained between approval and power. The correlation obtained for boys could be considered low while that for girls moderate. The difference between these two correlations proved to be significant at the 0.002 level, supporting the notion that teacher approval and power are more highly related for girls than for boys.

The fifth and final hypothesis concerned the relationship between teacher approval and acceptance for high and low SES boys. It was hypothesized that this relationship would be higher for high SES boys than

for low SES boys. An examination of the data in Table 6 indicates that for high SES boys a significant positive correlation was obtained between the two variables while the correlation for low SES boys was not significant. Again, when the difference between the two correlations is tested, the result is not significant, but the difference is in the predicted direction.

Summary of Results

1. The difference in the relationship between acceptance and competence for boys and girls was not significant.

2. The correlations between acceptance and power for girls and boys did not differ significantly.

3. The relationship between competence and power for girls is significantly greater than the corresponding relationship for boys.

4. The relationship between acceptance and competence was not significantly greater for high SES boys than for low SES boys, but was in the predicted direction.

5. No difference was obtained in the magnitude of the correlations between competence and power for high and low SES girls.

6. The correlations obtained between teacher disapproval and competence and teacher disapproval and acceptance were insignificant for both boys and girls.

7. The relationship between teacher disapproval and power is significantly greater for boys than for girls.

8. No difference was noted in the degree of relationship between acceptance and teacher approval for boys and girls.

9. The relationship between teacher approval and power is higher for girls than for boys.

10. The relationship between acceptance and teacher approval is not significantly greater for high SES boys than for low SES boys.

Incidental Findings

The highest correlations between the five major variables were those obtained between teacher approval and competence. Note that with the exception of the coefficient obtained for low SES girls all correlations exceeded 0.80. In terms of a comparison between boys and girls, the difference between the obtained coefficients was not significant. The coefficient for high SES boys was slightly higher than that obtained for low SES boys; but again, the difference was not significant. The difference between high and low SES girls on this relationship did prove to be significant ($P<0.002$).

C. Relationships between individual items and the three status variables. Before beginning the discussion of these results, it should be pointed out that the purpose of this section is purely descriptive. No attempt was made to test the statistical significance of the data which are cited. However, since this study is a descriptive-correlational one, and since a major purpose of such a study is to provide the grist for further research, it was felt that such an exercise might prove profitable. This discussion will center around male-female differences.

In order to facilitate the presentation of this data, each item has been given a name to be used in the text. These names along with the item number, category and a brief description of the item content may be found in Table 8. The correlations between each item and each major variable may be found in Table 9 for boys and Table 10 for girls. (Although not discussed here, the corresponding data for high and low SES boys and girls may be found in Appendices D, E, F and G.)

TABLE 8

Names and Brief Content Descriptions of Each Item on the Questionnaire

Item Name	Item No.	Item Category	Summary of Item Content
Play	6	Accept	Like to play with on playground
Work	11	Accept	Like to work with
Sit	15	Accept	Like to sit next to
Make	1	Compet	Good at making things
Well	8	Compet	Does well in school
Inproj	25	Compet	Thinks of interesting classroom projects
Fight	4	Power	Gets others to do by bossing or fighting
Nice	17	Power	Gets others to do because is nice
Get	20	Power	Can get others do do something
Moreno*	--	Power	Moreno's Power Score
Attend	3	Disapp	Scolded for not paying attention
Noise	5	Disapp	Scolded for disturbing class
Punish	10	Disapp	Sent to principal's office or punished
Talk	13	Disapp	Scolded for talking in class
Susout	16	Disapp	Suspected while teacher is out
Waste	19	Disapp	Scolded for wasting too much time
Late	21	Disapp	Scolded for late assignments
Pickon	23	Disapp	Scolded for fighting or picking on others
Errand	2	App	Is asked to run errands
Help	7	App	Asked to be monitor
Comment	9	App	Praised for comments in class
Ontime	12	App	Praised for on-time assignments
Right	14	App	Called on for right answer
Things	18	App	Praised for bringing special things to school
Try	22	App	Praised for trying hard
Spproj	24	App	Chosen to work on special projects

*Derived from the three Acceptance items

TABLE 9

Correlations of Each Item with Each of the Five Major Variables for Boys

	Accept	Compet	Power	Disapp	Approval
Play	0.8884	0.4221	0.4542	0.1044	0.3678
Work	0.9231	0.5719	0.4317	0.0673	0.4236
Sit	0.9460	0.4968	0.5255	0.1362	0.3967
Make	0.4944	0.8493	0.2989	-0.0009	0.5185
Well	0.3250	0.7142	0.1641	-01334	0.7279
Inproj	0.4905	0.8881	0.2938	-0.0688	0.7888
Fight	0.3562	0.1137	0.9316	0.5613	0.0907
Nice	0.5739	0.6686	0.3406	-0.1589	0.6921
Get	0.4827	0.3064	0.9079	0.3424	0.2320
Moreno	0.7732	0.3781	0.4384	0.1409	0.2988
Attend	0.0452	-0.0521	0.2644	0.8858	-0.0325
Noise	0.1489	-0.0214	0.3814	0.8186	-0.0146
Punish	0.1852	-0.0611	0.5354	0.8699	-0.0417
Talk	0.1454	0.0452	0.3742	0.8109	0.0687
Susout	0.1115	-0.0475	0.4463	0.8862	-0.0136
Waste	-0.0049	-0.0961	0.2053	0.8736	-0.0970
Late	-0.1309	-0.2247	0.0472	0.6911	-0.2329
Pickon	0.2605	-0.0241	0.7539	0.6532	-0.0163
Errand	0.0070	0.3529	0.0232	-0.0315	0.4323
Help	0.3604	0.4670	0.2205	0.0578	0.5847
Comment	0.3811	0.6428	0.2585	-0.0095	0.7977
Ontime	0.4206	0.5984	0.1751	-0.1349	0.7048
Right	0.3468	0.6524	0.1723	-0.0957	0.7730
Things	0.2071	0.4495	0.1636	-0.0375	0.6393
Try	0.0730	0.1850	0.0788	0.0710	0.3646
Spproj	0.4024	0.7967	0.2634	-0.0348	0.8202

TABLE 10

Correlations of Each Item with Each of the Five Major Variables for Girls

	Accept	Compet	Power	Disapp	Approval
Play	0.8979	0.5425	0.6466	-0.1028	0.5216
Work	0.9391	0.5980	0.6683	-0.0645	0.5397
Sit	0.9402	0.4660	0.6257	-0.0767	0.4195
Make	0.4810	0.8167	0.4462	-0.1583	0.5952
Well	0.4966	0.9285	0.5178	-0.2013	0.8761
Inproj	0.5523	0.8641	0.6239	-0.1230	0.7875
Fight	-0.0087	-0.0439	0.4454	0.4904	0.0128
Nice	0.8140	0.6015	0.8835	-0.1983	0.6352
Get	0.5681	0.5221	0.9068	0.1045	0.5233
Moreno	0.8296	0.5179	0.5755	-0.0549	0.4698
Attend	-0.1683	-0.1455	0.0704	0.8546	-0.1458
Noise	0.0641	-0.1537	0.2303	0.6905	-0.1474
Punish	0.0204	-0.1322	0.1416	0.8716	-0.1122
Talk	0.0454	-0.0943	0.1824	0.7545	-0.0689
Susout	-0.1206	-0.0956	0.0632	0.7570	-0.0908
Waste	-0.1621	-0.1951	-0.0737	0.7633	-0.2018
Late	-0.2331	-0.2060	-0.1668	0.6331	-0.1901
Pickon	0.1444	-0.0427	0.3522	0.6071	-0.0418
Errand	0.3227	0.5224	0.3657	-0.0981	0.7320
Help	0.4540	0.6265	0.4466	-0.0988	0.7906
Comment	0.5250	0.8476	0.5531	-0.1940	0.8808
Ontime	0.5055	0.8936	0.5268	-0.2043	0.9012
Right	0.4763	0.8743	0.5217	-0.1680	0.8910
Things	0.2416	0.4106	0.2968	-0.1043	0.5453
Try	0.2195	0.4506	0.3312	-0.1075	0.5131
Spproj	0.5573	0.8673	0.6112	-0.1749	0.9069

Correlations with Acceptance

The three acceptance items show about the same degree of relationship to the total acceptance score for both boys and girls. The correlations for boys and girls between acceptance and the competence items "make" and "inproj" are essentially the same, while that with "well" is slightly higher for girls than boys. The power item "get" shows about the same degree of relationship for both boys and girls. However, the power item "fight" shows a moderate positive relationship to acceptance for boys and essentially a zero order relationship for girls. On the other hand, the power item "nice" is more highly related to acceptance for girls than for boys. The correlations between disapproval and acceptance ten to be low--half positive and half negative for girls, and six positive and two negative for boys. The approval items "errand" and "try" show essentially no relationship with acceptance for boys. All eight approval items for girls, and the remaining six for boys show low to moderate positive correlations with acceptance.

Correlations with Competence

The three acceptance items show about the same degree of relationship to competence for both boys and girls. The competence item "well" shows a higher correlation with total competence for girls than for boys. In terms of the power items, the item "get" shows a higher correlation with competence for girls than for boys. All eight disapproval items show low mostly negative correlations with competence for both boys and girls.

Correlations with Power

The greatest differences between boys and girls may be seen in the relationships between individual items and the total power score. The

three acceptance items all show moderate positive correlations with power for both boys and girls. However, the correlations for girls tend to be higher than those for boys. A similar result was obtained with the three competence items, although the differences between boys and girls tend to be larger than with acceptance items. The greatest difference is with the competence item "well" (0.1614 for boys, 0.5178 for girls). The power items show boy-girl differences also. The second highest correlation with total power score for girls was obtained with the item "nice" (0.8835 versus 0.3406 for boys). For boys, the highest correlation with power was obtained with the item "fight" (0.9316 versus 0.4454 for girls). It should be noted that on the general power item "get", the obtained correlations with the total power score were virtually the same for both sexes (0.9079 for boys, 0.9068 for girls). Of the eight disapproval items, five show substantial correlations with power for boys. The items "punish" and "pickon" show the highest correlations of 0.5354 and 0.7539 being obtained respectively. Of the correlations between disapproval items and power for girls, only the item "pickon" shows a substantial degree of relationship. Finally, all approval items with the exception of "things" show positive correlations in the range of 0.30 to 0.60 with power for girls. The highest correlation between an approval item and power for boys was obtained with the item "spproj" (0.2634).

D. Factor analyses. Factor analyses were performed separately on the data for boys and girls. The use of factor analysis represented both an attempt to simplify the quantity of data obtained in this study, and an attempt to reach a more precise understanding of the nature of the variables being measured. Earlier it was pointed out that items were

classified as measuring one of the five major variables of the study primarily on the basis of logical rather than empirical criteria. The use of factor analysis can to some degree be considered a test of the validity of these logical criteria.

In this study a principal axis analysis was performed followed by a varimax rotation. Varimax rotation was used because a multifactor solution with the total variance spread over a number of factors--rather than a general factor solution--was desired. A varimax rotation yields an orthogonal solution. Some argue that this is unrealistic when applied to psychological data (because psychological factors are usually correlated) others maintain that the decision to use an orthogonal or an oblique rotation is largely a matter of one's taste (Kerlinger, 1964, p. 670). A orthogonal solution often lends itself to a more forward interpretation than an oblique one. Given these considerations, it was decided to try the orthogonal rotation and see whether the solutions obtained were satisfactory.

Initially, the number of factors to be rotated out was arbitrarily set at five--the number of logically derived variables in the study. However, the number of factors rotated out in the final solution was dependent upon the eigen values obtained from the principal axis analysis. Simply put, the number of factors in the final solution was equal to the number of factors in the principal axis solution that had an eigen value equal to or exceeding one. An item was considered to show a significant loading on a factor if the factor loading was equal to or exceeded 0.30.

Factor Analysis - Boys

The rotated factor loadings for boys may be seen in Table 11. The proportion of variance accounted for by each factor may be seen at the

bottom of the page. Note that the final solution was a five factor one.

Factor I could be considered an academic competence factor. Seven of the eight teacher approval items, two of the three competence items and the power item "nice" showed significant loadings on this factor. The highest loadings were obtained for those items which logically are associated with classroom competence: doing well in school, being called on to give the right answer, and turning in assignments on time.

Factor II appeared to be measuring teacher disapproval. All eight disapproval items plus the power item "fight" show significant loadings on this factor.

Factor III is clearly the acceptance factor. All three acceptance items have high loadings on this factor as does the Moreno power score. Note that this is the only factor upon which the acceptance items show significant loadings. In addition, the power items "nice" and "get" and the competence item "make" had smaller, but still significant loadings on this factor.

Factor IV seemed to represent a second kind of competence. Whereas factor I was apparently tapping academic competence, factor IV seemed to relate to special competencies. The highest loadings on this factor were shown by the items "good at making things", "has good ideas for special projects", "is chosen to work on special projects" and "is praised for bringing things to school for others to see". Lesser loadings were shown by the items "nice" and "is praised for comments in class".

The fifth factor seemed to be a power factor. The highest loadings were obtained with the power items "fight" and "get", and the disapproval item "scolded for picking on others". The disapproval items--getting

TABLE 11

Factor Analysis Boys: Factor Loadings

Item	Factor I	Factor II	Factor III	Factor IV	Factor V
Play	0.2143	0.0260	-0.8356	-0.0898	-0.1450
Work	0.2274	0.0173	-0.8622	-0.2060	-0.0753
Sit	0.1850	0.0608	-0.8581	-0.1937	-0.1853
Make	0.1470	-0.0029	-0.3931	-0.6700	-0.0181
Well	0.9083	-0.1088	-0.1335	-0.1359	0.0291
Inproj	0.4455	-0.0362	-0.2832	-0.7415	-0.0023
Fight	0.0164	0.3681	-0.2410	-0.0312	-0.8158
Nice	0.5474	-0.1357	-0.3857	-0.3249	-0.0573
Get	0.0756	0.1180	-0.3538	-0.1939	-0.7442
Moreno	0.0938	0.0600	-0.8003	-0.1258	-0.2086
Attend	0.0090	0.9546	0.0009	0.0170	-0.0599
Noise	-0.0191	0.8197	-0.0997	0.0000	-0.2312
Punish	-0.0171	0.8125	-0.1075	0.0629	-0.4303
Talk	0.0450	0.8280	-0.0612	-0.0819	-0.2018
Susout	0.0107	0.8615	-0.0325	0.0126	-0.3456
Waste	-0.0723	0.9356	0.0245	0.0141	0.0302
Late	-0.1573	0.7760	0.0756	0.1350	0.2010
Pickon	-0.0350	0.4664	-0.1596	0.0634	-0.7797
Errand	0.4052	-0.0263	0.2272	-0.2967	-0.2202
Help	0.5027	0.0480	-0.2058	-0.2423	-0.1044
Comment	0.6007	-0.0156	-0.1625	-0.4998	-0.0725
Ontime	0.8831	-0.1273	-0.2354	-0.0291	0.0167
Right	0.9058	-0.0745	-0.1265	-0.1580	0.0128
Things	0.0638	-0.0354	-0.0261	-0.8076	-0.0438
Try	0.3508	0.1894	-0.0125	-0.0623	0.2148
Spproj	0.3828	-0.0084	-0.1907	-0.8083	0.0086

Proportions of Variance

1	2	3	4	5
0.1607	0.2161	0.1419	0.1166	0.0959

punished and being suspected of wrongdoing while the teacher is out of the room--also showed significant loadings on this factor. Thus, five factors appear to underlie classroom status for boys as measured by the questionnaire: two competence factors--one tapping academic competence and the other special competencies; a disapproval factor; an acceptance factor; and a power factor.

Factor Analysis - Girls

The final solution for girls was a five factor solution. The rotated factor loadings are given in Table 12, with the proportions of variance accounted for by each factor given at the bottom of the page.

The first factor obtained for girls seemed to be an academic competence factor. All of the three competence items including the item "make" and seven of the eight teacher approval items show significant loadings on this factor. In addition, two power items "nice" and "get" show small but significant loadings on factor I. The fact that the competence item "make" and the approval item "things" show significant loadings on this factor may indicate that girls make less of a distinction between academic competency and "special" competencies than do boys.

Factor II was a relatively clearcut factor, tapping teacher disapproval. Six of the eight disapproval items show significant loadings on this factor. Factor II is thus similar to the corresponding factor for boys with one notable exception--the absence of significant loadings with those items dealing with acting out and aggression--i.e. "fight", "noise" and "pickon".

Factor III is an acceptance-power factor for girls. The three acceptance items, all three competence items, three of the four power items (not

TABLE 12

Factor Analysis Girls: Factor Loadings

Item	Factor I	Factor II	Factor III	Factor IV	Factor V
Play	0.2616	-0.0982	-0.8416	0.0874	0.0431
Work	0.2618	-0.0390	-0.8762	0.1385	0.0406
Sit	0.1401	-0.0751	-0.9039	0.0557	0.0528
Make	0.4229	-0.0316	-0.4168	0.3723	-0.1150
Well	0.6462	-0.0449	-0.3119	0.5717	-0.1211
Inproj	0.6692	-0.0402	-0.3986	0.3604	0.0122
Fight	0.0459	0.0860	0.1109	0.1234	0.8383
Nice	0.3362	-0.0997	-0.7493	0.3256	-0.0248
Get	0.3009	-0.0486	-0.4849	0.3768	0.4339
Moreno	0.2609	-0.1063	-0.8347	0.0143	0.1185
Attend	-0.0419	0.7994	0.1389	0.0220	0.3960
Noise	-0.1056	0.1898	-0.0810	-0.1318	0.7787
Punish	-0.0707	0.7443	-0.0727	-0.0451	0.4973
Talk	0.0637	0.3572	-0.0656	-0.2192	0.6920
Susout	0.0202	0.8119	0.0857	-0.0062	0.2451
Waste	-0.1167	0.8433	0.0780	-0.0474	0.1280
Late	-0.1180	0.8007	0.1590	-0.0271	-0.0624
Pickon	-0.0581	0.2413	-0.1632	-0.0069	0.7768
Errand	0.7723	-0.0775	-0.1140	0.0477	0.1090
Help	0.8115	-0.1079	-0.2343	0.0693	0.1239
Comment	0.6863	-0.0804	-0.3244	0.4870	-0.0564
Ontime	0.6619	-0.0525	-0.3185	0.5594	-0.1160
Right	0.6539	-0.0366	-0.2753	0.5851	-0.0702
Things	0.6647	-0.0453	-0.1019	-0.1056	-0.0371
Try	0.1178	-0.0133	-0.0938	0.8008	-0.0428
Spproj	0.7614	-0.0337	-0.3712	0.3862	-0.0640

Proportions of Variance

1	2	3	4	5
0.1986	0.1320	0.1860	0.1023	0.1219

the power item "fight") and three approval items show significant loadings on this factor. Note that five of the twelve items loading on factor III deal with academic competence, suggesting that in girls approval rests at least to a small extent on academic competence. None of these five items show significant loadings with the corresponding factor for boys.

Factor IV apparently represents a second competence factor, but it does not lend itself to as clear-cut an interpretation as does the corresponding factor for boys. The factor for boys is a second competence factor involving competencies other than strictly academic ones--i.e. making things, bringing things to school to share, etc. For girls, again the special competencies seem to be to some degree embedded in academic competence; hence the significant loadings of the competence item "well" and the approval items "ontime", "right" and "try".

Factor V seems to represent a second power factor for girls--i.e. coercive power. Significant loadings are obtained for the power items "fight", and "get" and five of the disapproval items including "pickon", "noise", and "punish".

Thus, as with boys, a five factor solution is obtained for girls: a competence factor, a teacher disapproval factor, an acceptance-power factor, a second competence factor which seems to be more general than that obtained with boys, and a second power factor based on coerciveness. One is left with the impression (to be taken up in the discussion) that the factors are less clear-cut for girls and in some instances more difficult to interpret.

E. Adjective check list. As was noted previously, an adjective check list was used to provide some information as to the kinds of

criteria used by the Ss in making their choices on the sociometric items. A summary of the data obtained is presented in Table 13. This table presents both the percentages of boys and girls checking each item on the list, and the rank of each item in terms of the frequency with which it was chosen.

Boys chose an average of 15.52 items on the list, while girls chose an average of 17.53. The item "friendly" was the most frequently chosen item for the girls (98.2%), while it ranked as the second most frequently chosen for boys (86.3%). The most frequently chosen item for boys was the item "fun to be with" (89.3%). This item ranked second for the girls (97%). The least chosen items were "strong" for girls (25%) and "sharp dresser" for boys (36.3%).

Some items were chosen more frequently by one sex than the other. Those items chosen by a substantially greater proportion of girls than boys were: cheerful, outgoing, kind, polite, considerate, honest and patient. Only two items tended to be chosen more frequently by boys: strong and athletic.

Looking at the overall trends, although girls tended to choose more items than boys, their choices tended to converge on a smaller number of items, particularly those reflecting social skills and traditional social values. Six items--friendly, cheerful, helpful, kind, honest and fun to be with--were chosen by over 90% of the girls' sample. An additional seven items were chosen by between 80% and 90%.

In contrast, the choices given by the sample of boys were spread more evenly over all of the items. Four--friendly, can be trusted, helpful and fun to be with--were chosen by 80 - 90% of the sample. No single item was chosen by as much as 90% of the boys' sample.

TABLE 13

Summary of Responses to Adjective Check List
for Boys and Girls

Item	% Boys Choosing	Rank of Item Boys	% Girls Choosing	Rank of Item Girls
Friendly	86.3	2	98.2	1
Good Looking	51.2	20	50.6	20
Cheerful	64.3	13	90.4	6
Smart at School	52.4	19	57.8	19
Good Sense of Humor	74.4	7	83.7	11
Can be Trusted	81.5	4	89.7	8
Sharp Dresser	36.3	24	41.0	23
Likes Same Things	67.3	10	71.7	15
Athletic	66.1	12	44.0	22
Sure of Self	56.5	18	63.9	17
Outgoing	48.8	22	66.9	16
Helpful	82.1	3	91.1	5
Considerate	62.5	15.5	84.9	9.5
Loyal	67.1	11	81.3	13
Kind	79.2	5	94.6	3
Honest	75.0	6	91.6	4
Imaginative	73.2	8	81.9	12
Good at Making Things	63.1	14	61.4	18
Patient	62.5	15.5	84.9	9.5
Polite	67.9	9	89.9	7
Popular	36.9	23	44.6	21
Fun to be With	89.3	1	97.0	2
Would Like to be Like	61.9	17	74.1	14
Strong	50.0	21	25.9	24

CHAPTER V - DISCUSSION

Representativeness of the Sample

Among the stated purposes of this study was the replication of previous work in this area with an attempt to provide a sample more representative of school children in this country, especially in terms of SES. All too often in previous work the samples used were drawn from laboratory schools or the school systems of major university communities. These samples probably were biased in the direction of upper middle class and professional values; thus leading one to question the extent to which one can generalize beyond this class. The study by Pope (1953) on characteristics of popular children among the middle and working classes provides sufficient cause to question whether data drawn from children of upper middle class/professional parents is comparable to that drawn from blue collar samples.

Unquestionably, the sample used in the present study has certain characteristics which limit its representativeness. Virtually all of the children in the sample were Caucasian, although a few were of Oriental extraction. No Negroes were included because there are no Negroes enrolled in the school system from which this sample was drawn. In spite of the limitations, however, the occupational mix of this sample seems to be more representative than those found in the samples of many previous studies. The most highly represented group was the skilled, blue collar and service occupations group. However, the sample did include a number of individuals from both the unskilled-unemployed group and the professional group.

Sex Differences on the Mean Teacher Approval and Disapproval Scores

In the study by Meyer and Thompson (1956), cited earlier, children perceived boys as receiving a significantly greater share of teacher disapproval than girls, but boys and girls were perceived as receiving the same amount of teacher approval. Their finding was in accord with a number of studies which used observational techniques to measure the dispersion of teacher approval and disapproval in the classroom (see Withall and Lewis, 1964).

As in the Meyer and Thompson study, the boys used in the present study were perceived as receiving a significantly greater portion of teacher disapproval than girls. However, unlike their study, girls were perceived as receiving a greater share of teacher approval than did boys. Such a conflict in findings could conceivably be explained on the basis of difference in the modal SES levels of the respective samples, and differing expectations for the male role in each sample.

Before discussing this matter further, it should be pointed out that such an explanation suggests a sex by SES interaction in regards the variables of teacher approval and disapproval. The sex by SES interaction in the multivariate analysis of variance carried out on the data of the present study was not significant. There are two possible explanations for the failure to obtain a significant interaction: 1. The samples at the extreme SES classifications used in the present study were very small. In order to make SES comparisons, it was necessary to combine the upper three SES levels to obtain a high SES group and the lower two SES levels to obtain a lower SES group. By combining the extremes with groups nearer to the middle of the SES distribution it is possible that any differences

between the extreme groups would tend to be washed out. The upper group, for example, would tend to be more like SES level three than SES level one; the lower, more like SES level six than SES level seven. Such an interpretation would suggest that in order to obtain significant differences between the different SES levels one must use homogeneous samples of the extremes rather than the more heterogeneous groups obtained by combining several SES levels. 2. A second explanation deals with the tendency of a child's attitudes and values to gravitate towards the modal peer attitudes and values in a given school. There is some evidence that this tendency is more marked in the lower than the upper SES groups (Coleman et al., 1966, p. 305). It would seem logical, however, that the smaller the proportion of upper SES children in a particular school the more marked the tendency to gravitate towards the values and attitudes held by lower SES groups. In the present study, only 29 children (less than 10% of the total sample) came from the two upper SES groups. It would seem likely that their attitudes and values would be more like those of lower SES groups than children from comparable SES levels in a primarily upper SES school. Thus, either through the combining of several SES levels into more heterogeneous groups, or through the actions of the peer group itself (via pressures to conform) or a combination of both--it is possible that SES differences were minimized and the sex by SES interaction eliminated.

Meyer and Thompson did not present the SES characteristics of their samples, but apparently it was of upper middle class extraction. If their sample were of upper middle class children, one would expect there to be no difference in the amount of teacher approval perceived as going to each sex. It is typical of white/professional groups to see a narrowing of the differences in sex roles. Typically, the males tend to become less openly

aggressive and more oriented towards school achievement. Thus, receiving a good deal of teacher approval would be consonant with the male role in this stratum of society. Conversely, with children of blue collar extraction, a boy is expected to be rough-and-tumble and to be less school oriented than girls. Thus, high teacher approval would tend to be dissonant with sex role expectations.

In regards the difference in teacher disapproval between boys and girls noted in both studies, even in upper middle class society a boy should not be too much of a "goody gumshoes"--i.e. a certain amount of teacher disapproval is consonant with the male role for both strata of society. Role expectations could account for differences between boys of the upper and lower middle classes via two mechanisms:

1. It is possible that there are differences in school performance and conduct such that lower middle class boys actually do receive less teacher approval than their upper middle class counterparts.

2. It is possible that the stereotypes which underlie sex role expectations exert an influence directly on the perceptions of the children--i.e. there is no difference between the amount of approval received by lower middle class boys and girls, but according to the stereotypes of male and female roles there should be. Thus, such a difference is attributed even though it does not objectively exist. This question can only be resolved by the use of observational techniques to measure the dispersion of teacher approval and disapproval in the classroom for children of differing SES levels.

Factors Related to Status

The general notion that different factors are related to status for boys and girls is supported by the data obtained in this study. The greatest sex differences were noted on the power variable, but acceptance and competence do show differences that warrant mention.

Power

There is a tendency for the individual acceptance and competence items to show higher correlations with power for girls than for boys. This is manifested in the significantly higher relationship between power and competence for girls. The relationship between acceptance and power was also higher for girls, but the difference was not significant at the 0.002 level used in this study. It was significant at the 0.01 level and thus warrants a further look in future studies.

Examining the loadings of the individual power items on the total power score for boys, one sees that the coercive power item shows a high positive correlation with power, while the social reinforcer item shows a low positive one. The reverse is true for girls. This suggests that power in boys is related to aggressive behavior and in girls to acceptance and ability as a social reinforcer. In addition, power for both sexes is related to classroom decorum--but again in different ways for each sex. Teacher approval shows a significantly higher relationship with power for girls than for boys. Teacher disapproval for girls shows a nonsignificant relationship with power, but a moderate positive relationship for boys.

These findings suggest that the bases for power are different for boys and girls. Thus when talking about the status variable "power", one seems to be talking about different behaviors for boys and girls. The generalizability of these findings, however, does require confirmation from an upper middle class sample. Possibly with such a sample there would be less emphasis on aggression as the base of power for boys than with the essentially working class sample used in this study.

Acceptance

The major finding of this study regarding acceptance concerns the relationship between this variable and teacher disapproval. For both boys and girls the correlation between these two variables was not significant. It has been anticipated that this relationship for girls would be statistically significant and negative. Presumably, status in girls is related to the values espoused in the schools to a greater degree than status in boys. Since the disapproval items used in this study represented the antithesis of these values, it seemed the hypothesized relationship for girls was reasonable. These results suggest that the notion of a relationship between teacher disapproval and status is in need of revision.

Table 14 presents the mean values on the five major variables obtained by the 30 most accepted and 30 least accepted individuals for both boys and girls. For girls, the high acceptance group received slightly fewer disapproval mentions than the low acceptance group. The reverse is true for boys--i.e. the high group received more mentions than the low group. However, there is no consistent pattern for either group. Three of the five highest disapproval scores were obtained by the high acceptance group for boys. Similarly, several of the lowest disapproval scores were obtained by boys in the same group. With the low acceptance group for boys this extreme variability was also observed. A similar result was obtained with girls; however, the high disapproval scores for girls were not as extreme as they were for boys. These data, while only descriptive in nature, do tend to support the earlier conclusion that there does not appear to be a significant relationship between peer acceptance and perceived teacher disapproval.

TABLE 14

Means on the 5 Composite Variables for the
30 Most and 30 Least Accepted Children of Each Sex

	Boys		Girls	
Variable	High Acceptance	Low Acceptance	High Acceptance	Low Acceptance
Accept	17.32	1.30	17.47	1.57
Compet	13.11	2.38	13.11	2.66
Power	16.62	3.57	13.03	3.32
Disapp	40.68	25.65	9.18	13.37
App	25.73	10.43	48.45	12.61

One further thing should be pointed out in regard to factors relating to acceptance. Those items dealing with aggressive behavior showed low to moderate positive correlations with total acceptance for boys. The same items had essentially zero order correlations with acceptance for girls. This suggests that there is a tendency for highly accepted boys to be perceived as aggressive, while there is no such tendency where girls are concerned.

Competence

The major finding for competence involved the relationship between this variable and teacher approval. For both boys and girls, a high positive correlation ($r>0.80$) was obtained between perceived competence and teacher approval. Unfortunately, one of the limitations of a correlational study is that it is impossible to specify cause and effect. In the present case does high teacher approval lead to the perception of high competence or vice versa.

In weighing the two alternatives--high competence causes high teacher approval versus high teacher approval causes high competence--the author

must opt for the latter. First, one must remember that this study dealt with children's perceptions. Thus, the competence score reflected perceived competence as opposed to actual competence. Second, the teacher is the judge and final arbiter of performance--i.e. competence--in the classroom. In the course of classroom discussions and other interaction with students, the teacher makes verbal evaluations of their work and conduct. It would seem likely that these verbal evaluations of one's peers would tend to influence one's perceptions of the competence of others. Given a fellow student who receives a large share of teacher approval, it seems likely that a child would tend to perceive this fellow student as relatively competent.

This relationship between perceived teacher approval and perceived competence should be further investigated by experimental manipulation of the teacher approval variable, thus helping to establish cause and effect. Theorists such as Sullivan and Rogers have emphasized the role of feedback from others in the formation of one's self-concept. This feedback is based upon an individual's perceptions of another. A good self-concept appears to be conducive to academic achievement; the self-concept is dependent upon feedback from others; and this feedback depends upon the perceptions which others have of another individual. If perceived competence depends upon the amount of teacher approval received by a child, the implications are obvious. By systematically employing approval, a teacher might serve to raise a child's self-esteem and perhaps indirectly his academic performance.

Teacher - Approval/Disapproval

The findings regarding the relationships between teacher approval, teacher disapproval and the three status measures have been discussed in

previous sections. In this section the relationship between the approval and disapproval variables will be discussed.

For both boys and girls the correlations obtained between approval and disapproval were not significant. This indicates that approval and disapproval are not simply the opposites of one another. The results of the factor analyses lend further support to this view. If approval and disapproval were merely the opposites of one another, one would expect a single bipolar approval-disapproval factor with significant loadings on this factor for all approval and disapproval items. Such is not the case. For girls the approval items showed their highest loadings on the same factor as did the competence items. For boys all but one of the approval items had their highest loadings on the factor including the competence item "well"--i.e. the item dealing with academic competence. On the other hand, six of the eight disapproval factors formed a single factor for girls. For boys all of the disapproval items plus the power item "fight" formed a factor.

If one examines the content of the approval and disapproval items used in this study, an explanation is suggested. The approval items used in this study deal primarily with approval of behavior reflecting academic performance--i.e. turning in assignments on time, making comments in classroom discussions, etc. On the other hand, the content of the disapproval items deals mostly with behaviors which, while undoubtedly disruptive of classroom functioning, are not directly involved in academic performance--i.e. picking on others, talking in class, etc. The fact that the items deal with different content would help explain the lack of a relationship between them. Further, the content of the

approval items would help explain the magnitude of the relationship between approval and perceived competence.

Generality of Status

The data reported in this study support the notion of a general factor underlying status in each of the three systems studied. Further, the data indicate that this general factor may be greater for girls than it is for boys.

First, consider the correlations among the composite status variables for both boys and girls. There was no difference between the sexes on the relationship between acceptance and competence ($R > 0.50$ for both sexes). The correlation obtained between competence and power was significantly greater for girls than for boys. However, the correlations for both sexes were significantly greater than zero. Finally, the relationship between acceptance and power tended to be of higher magnitude for girls than for boys. Although the difference was not significant at the alpha level used in this study ($\alpha = 0.002$), it was significant at a lower level ($\alpha = 0.01$) indicating that this relationship should be investigated more fully.

Secondly, the factor analyses tend to support both the notion of a general status factor and the notion of a greater interrelationship between status systems for girls. Little difference was noted between boys and girls on the competence factors (factor 1 for each). For girls, all three competence items, two power items ("nice" and "get") and seven of the eight approval items (all but the item "try") showed significant loadings on the factor. For boys, two competence items (not "make"), one power item ("nice") and seven of the eight approval items (not "things") showed significant loadings. Of possible significance is the fact that

the girl who is academically competent is at least to some extent perceived as able to "get" others to do something, whereas this is not the case for boys. Further, the primary base of power for girls--i.e. ability as a social reinforcer--showed a significant loading on this factor for girls. The item "nice" likewise had a significant loading for boys, but "nice" boys don't "get" other people to do things. The power base for boys is aggressiveness. Thus, competence seems to some degree confounded with power for girls.

Factor III, the acceptance factor for both boys and girls, again shows this pattern of greater generality for girls than boys. For girls, the three acceptance items, all three competence items, two of the three power items ("get" and "nice"), the Moreno power item, and three approval items ("comment", "ontime" and "spproj") showed significant loadings on this factor. For boys, the three acceptance items, the competence item "make", and the same three power items as for girls showed significant loadings on the acceptance factor. Apparently, for both boys and girls, power as a social reinforcer is related to acceptance. For girls in contrast to boys, however, academic competence is to some extent associated with acceptance.

Finally, it should be pointed out that for boys apparently a distinction is made between two kinds of competence--academic competence and special competencies. The latter factor includes significant loadings for the following: the competence items "make" and "inproj", the power item "nice", and the approval items "comment", "things", and "spproj". Such a distinction between academic competence and special competencies is not made for girls. Rather the competence factor is a global factor subsuming all aspects of competence tapped in this study. This question of the generality of status should be examined more closely using a

greater number of items dealing with more specific types of competence, power and acceptance than have been used in the past.

The Highly Accepted Child - A Composite

In Table 14, as was previously noted, the mean scores obtained on the five major variables in this study for the 30 most accepted and 30 least accepted children of each sex are presented. Note that with the exception of disapproval for boys, the trend is what one might expect--i.e. the children high on acceptance tend to be perceived as higher on competence, power and teacher approval than children low on acceptance. It could be that there is a halo effect at work--i.e. children who are highly accepted by their peers are perceived as being high in the other areas also. As was pointed out in the introduction to this paper, to a certain extent peer group behavior is guided by the children's perceptions of one another vis-a-vis status. One major question pertaining to the peer group, however, is the extent to which these perceptions and actual behavior coincide. One urgent need is for studies dealing with this question.

A strategy for obtaining such comparisons would involve the use of a sociometric type instrument of the sort used in this study to determine perceptions, and objective criteria such as observational data, achievement tests, etc. as behavioral measures. However, it would be imperative that the variables being tapped by each be the same. For example, if social reinforcement and coerciveness are used as the bases of power on the sociometric instrument, then behavior so defined should be rated using observational techniques. It has been difficult to compare the results of many previous studies because of the many different definitions of the status variables and the different methods used. A study designed

as suggested above would help clarify the relationship between data obtained with different methods.

Educational Implications

Most of the past studies of interaction in cthe classroom have stressed the role of the teacher (Withall and Lewis, 1963; Schmuck and Schmuck, 1971). The teacher, by virtue of her position, was considered to be the focal point of interpersonal behavior in the classroom. Power (i.e. influence) was viewed as largely unidirectional--i.e. flowing from the teacher to the students (for example the studies of Polansky, 1954 and Flanders and Havumaki, 1960). However, as previously indicated, a number of investigators have found that a large portion of the variance in academic achievement (thus in effect, the attainment of the major objective of educational institutions) can be accounted for by the congruence of peer values and those values associated with academic endeavor (Coleman et al., 1966). Further, even when there is considerable motivation to succeed academically, peer values influence the ultimate level of academic involvement, and even the specific material learned (Bushnell, 1962; Hughes, Becker and Greer, 1962).

A more reasonable view of teacher influence is provided by Schmuck and Schmuck (1971, pp. 29-31) at the beginning of the school year a teacher's influence has three bases: 1. legitimate power--power which is hers due to her office; 2. reward power; and 3. coercive power. Of the five bases of power described by French and Raven (1959), these three are the least effective in influencing others. The teachers who come to have most influence on classroom behavior are those whose bases of power shift from the above to power based on reference (modeling) and expertness. The most powerful children in the classroom peer group are those children possessing

referent power and expert power (Gold, 1958). The above suggest that at least when the classroom group is being formed, the peer group has a greater potential for influence upon its members than does the teacher.

In the present study, there is substantial evidence to support the notion that peer status is minimally related to either adherence to or breaking of classroom rules as set down and enforced by the teacher. This finding indicates that there is a gap between those values which are considered important to the peer group and those considered important to teachers. When such a situation exists, it seems likely that the educator and classroom group will spend considerable time working at cross-purposes to one another. Given that the peer group does have a significant effect on academic performance, and given the estrangement of peer and educational values in many schools, it seems imperative that the forces of the peer group be harnessed to serve, rather than impede the educational process.

One obvious area of conflict between peer group and teacher is in the setting and enforcing of classroom rules. Typically, the teacher serves the function of legislator, judge, jury and executioner in regard to discipline. More recent works on the subject point out the need for peer group involvement in both the making and enforcing of rules (Bronfenbrenner, 1970; Brown, 1971).

Under such a procedure, rules are set as the need arises. The teacher points out a maladaptive or disruptive behavior and discusses it with the class. Using this concrete exemplar, the reasons why this behavior is undesirable are discussed. The class as a whole decides whether a rule is necessary. If a rule is made, then appropriate sanctions to be taken against offenders are discussed. Such a procedure has several desirable

effects:

1. It removes the arbitrary nature of discipline as found in most classrooms. Since responsibility for setting and enforcing rules does not rest solely with the teacher, it is likely to lead to fewer conflicts between teacher and peer group over discipline.

2. It should lead to the reduction of deviant behavior by bringing to bear the influence of both the teacher and the influence of the peer group. Often the peer group will be supportive of disruptive behavior--even if they don't approve of it--merely to bait or get back at the teacher. Given the major role in setting and enforcing rules, there is less likelyhood of peer support for such behavior.

3. A democratic disciplinary procedure as outlined above could conceivably have a positive impact upon the children's moral development. According to Piaget (1965), the highest levels of moral judgment cannot be obtained in an environment in which rules are handed down and enforced on an arbitrary basis. It is only through peer group interaction in play settings that the child generally has a chance to make and enforce rules, and to study the reasons underlying and the implications of rules. This interaction leads a child from a morality of constraint to a morality of cooperation--i.e. a morality based on mutual respect. It would seem that the approach to classroom management would tend to foster the development of a morality of cooperation.

The use of peer models (especially older children) as effective agents of socialization in the educational setting has been demonstrated in the Soviet Union (Bronfenbrenner, 1970, p. 51). Under their system an older class "adopts" or sponsors an entering class in the same school.

The older children help the younger ones with homework, play with them, teach them games, and in general provide a model of the desired behavior in an educational setting. Bronfenbrenner (pp. 157-58) suggests that the adoption of such a system would be an aid to all children in the schools--especially culturally deprived children. Although middleclass parents tend to reinforce curiosity, and tend to serve as models for intellectual endeavor, such is not the case with the disadvantaged child. The development of an achievement orientation depends in part upon intense personal relationships--i.e. the interest and involvement of the parents and others in a child's academic and intellectual performance. Such interest and involvement is typically lacking where the disadvantaged child is concerned. By using older children as models and reinforcers for intellectual and academic achievement, it seems likely that the situation as regards the disadvantaged child could be alleviated to some extent.

In summary, the values fostered in the educational institutions of this country are not reinforced by the peer group. There is substantial evidence to indicate that the attainment of educational objectives is in large measure determined by the consonance of peer values and educational values. When the peer group accepts and reinforces the values associated with academic achievement, performance tends to be higher than when the peer group rejects such values. The foregoing discussion stressed the need for changing our approach to classroom management by involving the peer group in the making and enforcing of classroom rules. Such an approach directs the power of the peer group toward educational ends. Additionally, it was suggested that such an approach will foster a morality of cooperation among students. Finally, it was suggested that use be made of the potential of older children in socializing children into the academic environment.

It is incumbent upon educators in the United States to harness the tremendous force of the peer group to serve the educational process. Although the author does not advocate the coerciveness which underlies the Soviet system, he does advocate a rethinking and rational planning of the role of the peer group in the educational process.

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APPENDIX A

Categorical Listing of Items Used in Scale

I. Acceptance

A. What children do you like to play with on the playground?

B. What children would you enjoy working with in class?

C. What children would you choose to sit next to you in class?

II. Competence

A. Here is someone who is good at making things.

B. Here is someone who always does well in school.

C. Here is someone who thinks of many interesting classroom projects to do.

III. Power

A. Here is someone who gets other children to do something by bossing them or fighting with them.

B. Here is someone who can get others to do something because he or she is a nice person.

C. Here is someone who can get other children to do what he or she wants them to do.

IV. Disapproval

A. Here is someone who is often scolded by the teacher for not paying attention in class.

B. Here is someone whom the teacher often scolds for disturbing the class in some way (shooting paper wads, passing notes, making noises, etc.)

C. Here is someone who sometimes has to go to the principal's office or has to be punished by the teacher.

D. Here is someone whom the teacher often scolds for talking too much in class.

E. Here is someone who is often suspected by the teacher when something happens while she is out of the class.

F. Here is someone who is often scolded by the teacher for wasting too much time in class.

G. Here is someone who is often scolded by the teacher for not turning in assignments on time.

H. Here is someone whom the teacher often scolds for starting fights or picking on someone else.

V. Approval

A. Here is someone whom the teacher often asks to do errands for her.

B. Here is someone whom the teacher often chooses as a monitor.

C. Here is someone who is praised by the teacher for his or her comments during classroom discussions.

D. Here is someone who is praised by the teacher for always having their assignments done on time.

E. Here is someone who is called on by the teacher when she wants the right answer.

F. Here is someone who is often praised by the teacher for bringing special things to school for the class to see.

G. Here is someone whom the teacher praises for trying hard, even if the work isn't easy for him or her.

H. Here is someone who is chosen to work on special projects in class.

APPENDIX B

McGuire-White Occupational Level Scale

Level 1

Professionals.--Lawyer, judge, physician, engineer, professor, school superintendent, et al.

Proprietors.--Large businesses valued at $100,000 or more, depending on community.

Businessmen.--Top executive president, et al., of corporations, banks, public utilities.

White collar.--CPA; editor of newspaper, magazine; executive secretary of status organization.

Blue collar.--None.

Service.--None.

Farm people.--Gentlemen farmers or landowners who do not supervise directly their property.

Level 2

Professionals.--High school teacher, librarian, and others with four year degrees.

Proprietors.--Businesses valued at $50,000 to $100,000.

Businessmen.--Assistant office and department managers or supervisors; some manufacturing agents.

White collar.--Accountant; insurance, real estate, stock salesmen; editorial writers.

Blue collar.--None.

Service.--None.

Farm people.--Land operators who supervise properties and have an active urban life.

Level 3

Professionals.--Grade school teacher, registered nurse, minister without four year degree.

Proprietors.--Business or equity valued from $10,000 to $50,000.

Businessmen.--Managers of small branches or buyers and salesmen of known merchandise.

White collar.--Bank clerks, auto salesmen, postal clerks, railroad or telephone agent or supervisor.

Blue collar.--Small contractor who works at or supervises his jobs.

Service.--None.

Farm people.--Farm owners with "hired help," operators of leased property who supervise.

Level 4

Professionals.--None.

Proprietors.--Business or equity valued from $5,000 to $10,000.

Businessmen and white collar.--Stenographer, bookkeeper, ticket agent, sales people in department stores, et al.

Blue collar.--Foreman; master carpenter, electrician, et al.; railroad engineer.

Service.--Police captain, tailor, railroad conductor, watchmaker.

Farm people.--Small landowners, operators of rented property hiring "hands."

Level 5

Professionals.--None.

Proprietors.--Business or equity valued from $2,000 to $5,000.

Businessmen and white collar.--Dime store clerks, grocery clerks, telephone and beauty operators, et al.

Blue collar.--Apprentice to skilled trades, repairmen, medium skilled worker.

Service.--Policeman, barber, practical nurse, brakeman, et al.

Farm people.--Tenants on good farms; foremen; owners of farms who "hire out."

Level 6

Professionals.--None.

Proprietors.--Business or equity valued at less than $2,000.

Businessmen, white collar, and blue collar.--Semiskilled factory and production workers, assistants to skilled trade, warehousemen, watchmen.

Service.--Taxi and truck drivers, waiter, waitress, gas station attendant.

Farm people. Sharecroppers, established farm laborers.

Level 7

Professionals.--None.

Proprietors.--None.

Businessmen.--None.

White collar.--None.

Blue collar.--Heavy labor, odd-job men, mine or mill hands, unskilled workers.

Service.--Domestic help, busboy, scrubwoman, janitor, janitor's helper.

Farm people.--Migrant workers, "squatters" and "nesters."

Plus.--The reputed lawbreakers and the unemployed.

APPENDIX C

Scale

NAME_____ AGE_____ GRADE_____

TEACHER'S NAME_____

In this booklet are twenty-five items. Some questions ask you to name the children with whom you would like to work, play, and sit next to in class. The others are descriptions which probably fit some of the children in this classroom. Below each item are three blank spaces. We will read each item together. Then I want you to choose three children who are best described by the item and write their names in the blank spaces. You must choose children from this room. You may choose children who are absent. Write the first name and the first letter of the last name for each child you choose. You may only choose three children for each item. However, you may choose the same child for more than one item. If you cannot think of three names for an item, write as many as you can. Your choices will not be seen by anyone else, not even your teacher.

REMEMBER:

1. Choose three children for each item.
2. If you cannot think of three children for an item, write down as many names as you can.
3. The children you choose must be in this class.
4. You may choose children who are absent.
5. You may choose the same child for more than one item.

1. Here is someone who is good at making things.

   (a) _____ (b) _____

   (c) _____

2. Here is someone whom the teacher often asks to do errands for her.

   (a) _____ (b) _____

   (c) _____

3. Here is someone who is often scolded by the teacher for not paying attention in class.

   (a) _____ (b) _____

   (c) _____

4. Here is someone who gets other children to do something by bossing them or fighting with them.

   (a) _____ (b) _____

   (c) _____

5. Here is someone whom the teacher often scolds for disturbing the class in some way (shooting paper wads, passing notes, making noises, etc.)

   (a) _____ (b) _____

   (c) _____

6. What children do you like to play with on the playground?

   (a) _____ (b) _____

   (c) _____

7. Here is someone whom the teacher often chooses as a monitor.

   (a) _____ (b) _____

   (c) _____

8. Here is someone who always does well in school.

   (a) _____ (b) _____

   (c) _____

9. Here is someone who is praised by the teacher for his or her comments during classroom discussions.

(a) _____ (b) _____

(c) _____

10. Here is someone who sometimes has to go to the principal's office or has to be punished by the teacher.

(a) _____ (b) _____

(c) _____

11. What children would you enjoy working with in class?

(a) _____ (b) _____

(c) _____

12. Here is someone who is praised by the teacher for always having their assignments done on time.

(a) _____ (b) _____

(c) _____

13. Here is someone whom the teacher often scolds for talking too much in class.

(a) _____ (b) _____

(c) _____

14. Here is someone who is called on by the teacher when she wants the right answer.

(a) _____ (b) _____

(c) _____

15. What children would you choose to sit next to you in class?

(a) _____ (b) _____

(c) _____

16. Here is someone who is often suspected by the teacher when something happens while she is out of the class.

(a) _____ (b) _____

(c) _____

17. Here is someone who can get others to do something because he or she is a nice person.

(a) _____ (b) _____

(c) _____

18. Here is someone who is often praised by the teacher for bringing special things to school for the class to see.

(a) _____ (b) _____

(c) _____

19. Here is someone who is often scolded by the teacher for wasting too much time in class.

(a) _____ (b) _____

(c) _____

20. Here is someone who can get other children to do what he or she wants them to do.

(a) _____ (b) _____

(c) _____

21. Here is someone who is often scolded by the teacher for not turning in assignments on time.

(a) _____ (b) _____

(c) _____

22. Here is someone whom the teacher praises for trying hard, even if the work isn't easy for him or her.

(a) _____ (b) _____

(c) _____

23. Here is someone whom the teacher often scolds for starting fights or picking on someone else.

(a) _____ (b) _____

(c) _____

24. Here is someone who is chosen to work on special projects in class.

(a) _____ (b) _____

(c) _____

25. **Here is someone who thinks of many interesting classroom projects to do.**

(a) _____ (b) _____

(c) _____

There are many reasons why you might choose someone to be your friend. Below are some possible reasons. Put a check beside each one which is important to you when you choose a friend.

_____Friendly

_____Good-looking

_____Cheerful, good natured

_____Strong

_____Smart at school

_____Good sense of humor

_____Can be trusted

_____Sharp dresser

_____Likes the same things as you

_____Athletic

_____Sure of himself (herself)

_____Outgoing

_____Helpful

_____Considerate--thinks of others

_____Loyal

_____Kind

_____Honest

_____Imaginative (can think up things that are fun to do)

_____Good at making things

_____Patient--does not get mad easily

_____Polite

_____Popular

_____Fun to be with

_____Someone you would like to be like

APPENDIX D

Correlations of Each Item with Each of the Five Major Variables for High SES Boys

	Accept	Compet	Power	Disapp	Approval
Play	0.9039	0.5680	0.3523	-0.0476	0.5207
Work	0.9384	0.7114	0.4075	0.0290	0.6063
Sit	0.9477	0.6707	0.5457	-0.0371	0.5853
Make	0.5447	0.8964	0.2786	-0.1862	0.6039
Well	0.6754	0.8070	0.3229	-0.1779	0.7582
Inproj	0.6652	0.9239	0.4346	-0.1916	0.8743
Fight	0.1501	0.0324	0.8789	0.5203	0.0393
Nice	0.6018	0.7090	0.3914	-0.2494	0.6900
Get	0.5738	0.4944	0.8454	0.1931	0.4361
Moreno	0.7604	0.4345	0.5537	0.2227	0.3882
Attend	-0.0768	-0.2179	0.2642	0.8356	-0.1282
Noise	-0.0237	-0.1388	0.3543	0.8402	-0.0930
Punish	0.0471	-0.1591	0.4927	0.8073	-0.0858
Talk	-0.0411	-0.1573	0.3026	0.8134	-0.1061
Susout	-0.0005	-0.1919	0.4051	0.8422	-0.1166
Waste	-0.0600	-0.2700	0.1833	0.8704	-0.2231
Late	-0.0802	-0.3007	0.0292	0.6229	-0.2797
Pickon	-0.0316	-0.1561	0.6306	0.7263	-0.0958
Errand	0.0551	0.3343	0.1305	0.0171	0.4144
Help	0.4192	0.5720	0.3073	-0.0359	0.6304
Comment	0.5160	0.6212	0.3511	-0.0280	0.8158
Ontime	0.6983	0.7040	0.3003	-0.1600	0.7335
Right	0.6648	0.7889	0.3493	-0.1463	0.8313
Things	0.3011	0.5061	0.2342	-0.0623	0.7226
Try	0.3644	0.4405	0.2209	0.1450	0.4716
Spproj	0.5187	0.7871	0.3210	-0.1623	0.8951

APPENDIX E

Correlations of Each Item with Each of the Five Major Variables for Low SES Boys

	Accept	Compet	Power	Disapp	Approval
Play	0.8754	0.1814	0.5981	0.2374	0.1686
Work	0.9068	0.4650	0.5035	0.0967	0.4387
Sit	0.9532	0.3655	0.5725	0.1598	0.3823
Make	0.4757	0.8549	0.4941	0.2018	0.7121
Well	0.0819	0.6944	0.1554	0.0181	0.7272
Inproj	0.3658	0.9478	0.3806	0.0748	0.8387
Fight	0.5319	0.2695	0.9583	0.5679	0.3370
Nice	0.4898	0.6991	0.6039	0.1570	0.6521
Get	0.5473	0.3864	0.8922	0.3005	0.3441
Moreno	0.7402	0.1949	0.3544	0.1893	0.2211
Attend	0.1213	0.2770	0.2464	0.8859	0.2922
Noise	0.2121	0.0211	0.3157	0.8307	0.0698
Punish	0.2031	-0.0031	0.4855	0.9446	0.0297
Talk	0.2116	0.4896	0.4044	0.7802	0.4873
Susout	0.1540	0.1232	0.3985	0.9347	0.1264
Waste	-0.0472	0.1633	0.1055	0.8150	0.1426
Late	-0.1604	-0.1100	0.1251	0.7336	-0.1037
Pickon	0.3243	0.0274	0.6596	0.7465	0.0453
Errand	0.0188	0.3443	0.1602	0.1129	0.4267
Help	0.2990	0.5653	0.2631	0.0814	0.6308
Comment	0.2639	0.7916	0.2739	0.1531	0.8653
Ontime	0.2155	0.5127	0.2232	0.0193	0.6707
Right	0.0541	0.5975	0.0979	0.0008	0.7310
Things	0.4440	0.7803	0.5725	0.1932	0.7571
Try	0.2764	0.3245	0.3970	0.0417	0.5005
Spproj	0.4197	0.8778	0.4003	0.1454	0.8175

APPENDIX F

Correlations of Each Item with Each of the Five Major Variables for High SES Girls

	Accept	Compet	Power	Disapp	Approval
Play	0.8881	0.5726	0.6194	-0.1140	0.5777
Work	0.9391	0.6897	0.6534	0.0039	0.6723
Sit	0.9553	0.5245	0.5281	-0.1809	0.4890
Make	0.5663	0.8315	0.4531	-0.1930	0.7178
Well	0.5900	0.9356	0.7187	-0.1790	0.9328
Inproj	0.5633	0.9116	0.7159	-0.0787	0.9000
Fight	-0.1160	-0.0493	0.2913	0.4294	-0.0048
Nice	0.7801	0.7591	0.9066	-0.0751	0.7477
Get	0.3808	0.5740	0.8742	0.0732	0.5919
Moreno	0.8371	0.5373	0.5750	0.0255	0.5314
Attend	-0.1011	-0.1506	-0.1200	0.6381	-0.1541
Noise	-0.1202	-0.1935	0.0280	0.7053	-0.1762
Punish	-0.0110	-0.0888	0.0592	0.7664	-0.0510
Talk	0.0512	-0.0215	0.2660	0.7385	0.0472
Susout	-0.0818	-0.1129	0.0617	0.6446	-0.0378
Waste	-0.1223	0.1300	-0.1203	0.6777	-0.1334
Late	-0.0689	-0.0807	0.0278	0.5406	-0.0929
Pickon	0.1036	0.0548	0.2831	0.5137	0.1437
Errand	0.4625	0.6538	0.4854	0.0259	0.7450
Help	0.6638	0.8330	0.5698	-0.0376	0.8536
Comment	0.6175	0.9303	0.7255	-0.2208	0.9357
Ontime	0.6385	0.9516	0.7286	-0.1514	0.9517
Right	0.5834	0.9126	0.7035	-0.1755	0.9329
Things	0.1149	0.3859	0.2412	-0.0290	0.4821
Try	0.2100	0.6016	0.5521	-0.1492	0.6251
Spproj	0.6475	0.9590	0.7318	-0.1305	0.9603

APPENDIX G

Correlations of Each Item with Each of the Five Major Variables for Low SES Girls

	Accept	Compet	Power	Disapp	Approval
Play	0.9506	0.5798	0.7526	0.0577	0.5875
Work	0.8887	0.7078	0.6447	-0.1029	0.5164
Sit	0.8642	0.3824	0.6482	-0.0214	0.3100
Make	0.4324	0.8464	0.3701	-0.2181	0.3616
Well	0.4830	0.8824	0.4292	-0.2955	0.6869
Inproj	0.5935	0.6827	0.6869	-0.0318	0.3719
Fight	0.3743	0.1773	0.6883	0.2222	0.0376
Nice	0.8251	0.6423	0.8330	-0.1906	0.6913
Get	0.5915	0.6378	0.9121	0.0115	0.5154
Moreno	0.8104	0.4838	0.5294	0.0741	0.4018
Attend	-0.0446	-0.1373	0.0476	0.7981	-0.1194
Noise	0.2807	-0.0832	0.1333	0.6858	0.0245
Punish	0.2513	-0.0778	0.0491	0.5867	0.1100
Talk	0.1104	-0.1488	-0.0088	0.7255	-0.0168
Susout	-0.2146	-0.1377	0.0053	0.6306	-0.1859
Waste	-0.2767	-0.2328	-0.1167	0.6826	-0.2585
Late	-0.3711	-0.3643	-0.1959	0.6046	-0.2032
Pickon	0.2857	0.0539	0.3299	0.6132	-0.0745
Errand	0.3796	0.3343	0.3362	0.0149	0.7210
Help	0.5940	0.4717	0.5328	0.1009	0.7910
Comment	0.5742	0.7281	0.5315	0.1227	0.6917
Ontime	0.4715	0.6751	0.4765	-0.2046	0.7717
Right	0.5633	0.8579	0.5399	-0.1703	0.7087
Things	0.4814	0.5269	0.4820	-0.2064	0.7774
Try	0.0305	0.6311	0.0432	-0.0648	0.2224
Spproj	0.5928	0.7596	0.6970	-0.2249	0.8353

APPENDIX H

Mean Scores and Standard Deviations on Each Item for Both Boys and Girls

Item	Boys		Girls	
	Mean	Standard Deviation	Mean	Standard Deviation
Play	2.58	2.05	2.89	2.14
Work	2.66	2.31	2.92	2.37
Sit	2.80	2.52	2.84	2.40
Make	3.06	4.54	2.45	3.70
Well	1.45	3.13	3.99	6.36
Inproj	2.09	3.36	2.51	3.55
Fight	3.90	5.51	1.05	1.85
Nice	1.71	1.72	3.43	3.29
Get	2.60	3.49	2.23	2.58
Moreno	9.23	5.87	9.29	5.90
Attend	4.66	6.35	0.87	3.08
Noise	3.84	5.08	1.87	3.63
Punish	4.64	6.77	0.61	2.09
Talk	3.73	5.15	1.95	3.86
Susout	4.54	6.77	0.77	2.66
Waste	4.40	6.06	1.06	2.75
Late	4.23	6.43	1.22	2.98
Pickon	4.60	6.36	0.61	1.48
Errand	1.42	2.52	3.72	5.26
Help	1.58	2.24	3.63	4.61
Comment	2.34	3.01	2.63	3.58
Ontime	1.40	2.57	3.79	5.65
Right	1.72	3.56	3.58	5.95
Things	2.77	4.68	2.12	3.58
Try	2.35	2.35	2.47	2.84
Spproj	2.08	3.84	3.02	4.35