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COMPARISON OF EARLY ADOLESCENTS' SELF-PERCEPTIONS WITH
PEER SOCIAL STATUS CLASSIFICATIONS

By

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ABSTRACT

COMPARISON OF EARLY ADOLESCENTS' SELF-PERCEPTIONS WITH PEER SOCIAL STATUS CLASSIFICATIONS

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Identification and differentiation of socially adjusted and maladjusted low-social-status children is difficult with current classification and selection methods. Thus, the purpose of this investigation was to examine the ability of the combined use of peer-assessed social status and social self-evaluation measures to provide an improved approach for identifying children who function differently socially.

Research questionnaires were administered to 124 eighth graders from a suburban mid-Michigan middle school. Most-liked and least-liked peer nominations were used with a two-dimensional social impact and preference classification model. A probability formula to identify greater-than-chance positive and negative as well as common peer-nomination scores was used to categorize students into star, average, neglect, and reject groups. Subjects then completed self-evaluation measures of social competence, self-worth, perceived control, and social anxiety.

Individual and group response means and standard deviations were computed, and multivariate and univariate analyses of variance were conducted to test for overall significant main effects. Planned comparisons were then performed to detect significant differences within and between the status groups.

Males had greater physical and recreational self-competence than females. Males had more attributions of external control than females. No significant gender differences were found for social status, social competence, self-worth, social anxiety, or perceived control.

Stars had the highest social self-perceptions and the lowest social anxiety. Rejects had the lowest social self-perceptions. The neglect and average groups resembled each other, having moderate self-worth, likeability, and social anxiety. All groups had greater internal control than external attributions of control. Only the reject group varied significantly on perceived control. They had the greatest attribution of unknown control in failure situations, which was equal to their internal-control attribution in unsuccessful situations.

Individuals with varying social status differed in their social self-perceptions. The degree of unknown control in failure situations was the most important factor affecting social competency. The rejects had the least understanding about how their personal behavior affected their experience outcomes. The combined use of self- and peer-assessment methods was found to be useful in identifying cognitive factors relevant for social-skill intervention programs.

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CHAPTER I

INTRODUCTION

Statement of the Problem

Interpersonal experiences in school are vital to the acquisition of social, cultural, and economic skills. Those individuals who do not obtain or possess an effective and appropriate range of social capabilities experience social isolation, rejection, and diminished happiness (Michelson & Wood, 1980). Current peer classification procedures for the selection and differentiation of low-status children at risk from those students with low social visibility but who function effectively have generally been unsuccessful.

Peer assessment procedures, used by themselves, provide measures of social functioning effectiveness, but fail to identify differential personal characteristics of individuals who vary in social status. Expanded knowledge about the relationship between social cognitive self-perceptions and peer assessed social functioning will provide additional insight into possible associations between self-evaluations and the abilities of children and adolescents to form peer relations. A more clear understanding of social self-perceptions of socially rejected and socially neglected may provide greater knowledge about personal cognitive factors associated with unsuccessful social functioning.

In recent years, there has been increased recognition of the significant impact of both peer interpersonal relations and the school on children's socialization and development of adjustment skills (Hartup, 1979, 1983). This is due, in part, to the heightened influence of peers on development as children grow into adolescence, as opposed to the influence of parents (Erikson, 1968; Hartup, 1970).

The critical importance of increased understanding of factors that influence peer relations has been well documented in studies examining the relationship between early peer adjustment problems and subsequent later problems of developmental adaptation in adult mental health (Roth, 1970; Cowen, Peterson, Babigan, Izzo, & Trost, 1973), school adjustment (Gronlund & Anderson, 1957), dropping out of school (Ullman, 1957), juvenile delinquency (Roff, Sells, & Golden, 1972; Gaffney & McFall, 1981), academic problems and difficulties (Strain, Cook, & Apollini, 1976), and social adaptability of the learning disabled (Cartledge & Milburn, 1978).

Need for the Study

Heightened awareness of the impact of peer relations on subsequent development has stimulated research examining contributing factors for the development of peer relations and the establishment of intervention approaches to improve children's social functioning. The use of sociometric procedures (peer nominations and peer ratings) has been a primary approach used in this research to assess social functioning and social status.

Sociometric procedures have been useful in the classification of groups of children differing in social status; but these methods have been found to be limited in the identification and description of low-status individuals, e.g., those children who have low social visibility (isolates) in the classroom (Asher & Hymel, 1981; Newcomb & Bukowski, 1983). In addition, the use of sociometric methods alone does not provide information about social cognitions (thoughts and self-appraisals concerning social functioning), important factors which increasingly have been found to influence an individual's social competency (Shantz, 1975; Bandura, 1977, 1978; Ford, 1980, 1982).

The limitations of sociometrics, however, may be circumvented through the use of a modified sociometric methodology, such as that proposed in this study, using a social status group classification approach in addition to the use of self-evaluative measures. This approach will provide information not available through the use of peer evaluation approaches alone.

Statement of Purpose

The overall objective of this study is to investigate whether early adolescents who differ in social status group assignments also exhibit significant group differences in self-perceptions of social functioning and self-worth. The specific purposes of this research are as follows:

1. To determine if there are significant differences between boys and girls on measures of perceived social competence, perceived general self-worth, perceived control, and social anxiety.

2. To determine and compare four social status group classifications (star, average, neglect, and reject) identified through the use of a two-dimensional binomial probability model, on self-evaluative measures of social functioning and self-worth.

3. To determine if different social status groups exhibit similar self-perception response patterns identified by Harter (1981, 1983) in her research on self-identity and self-perceptions.

4. To determine if the combined use of peer assessed social status and self-evaluation measures provides an improved approach for selection and assignment of children to social status groups to be used for peer relations development research and for social functioning intervention programs, particularly children with low social status and low social visibility.

Conceptual and Theoretical Framework

Early adolescent peer relations and social functioning have received limited research attention compared to other developmental periods (Achenbach & Edelbrock, 1981; Michelson & Wood, 1980). This has resulted from a long-time belief that child-peer relations were less important than child-adult relations in their influence on child development and that early adolescents were less differentiated than children or older adolescents. Recently, there has been greater recognition of the importance of early peer relations on subsequent social development among developmental psychologists (Berndt, 1982; Hartup, 1979; 1983). In addition, child-clinical and school

psychologists have increasingly focused on the development of intervention programs to promote peer relations (Combs & Slaby, 1977; Gresham, 1982).

Many of the peer intervention studies have used social skill training programs to improve children's social status positions with their peer group and to evaluate the programs' outcome effectiveness in terms of increased positive social behavior and/or peer acceptance. These intervention programs, however, have achieved only modest success (Allen, 1981). This has particularly been the case when sociometric measures have been used as outcome variables (Oden & Asher, 1977; Ladd, 1981). These promising, although limited, findings have resulted in greater investigation into the components of peer relations formation and social skill development (Gresham, 1982; Putallaz & Gottman, 1981). This research indicates a greater need to identify the common characteristics within different levels of peer social status, to decrease inaccurate or inappropriate individual classification, and to increase the effectiveness of interventions.

This study was an extension of two current areas of research: (1) children's social status and social functioning (peer assessed) and (2) children's self-appraisals of their social status and social functioning. The first current area has been reflected in the increased use of sociometric classification methods to assess social acceptability, peer friendships, and social standing.

Recent attention has been directed toward the development of two-dimensional models that differentiate likeability from social impact

and social visibility. These models have been used to produce group social status classifications (Cofe, Dodge, & Coppetelli, 1982; Newcomb & Bukowski, 1983, in press; Peery, 1979). One method, a binomial probability classification model, using positive and negative peer nominations has demonstrated excellent performance characteristics in providing a constant frame of reference across different social networks (Bronfenbrenner, 1944; Newcomb & Bukowski, 1983). These advantages notwithstanding, peer nomination methods like this have certain limitations when used with individuals who have low social visibility in the classroom social system. This includes those students classified as social isolates or neglects due to the absence of positive or negative peer nominations. Peers have little knowledge about these children, which makes peer assessment approaches limited for identifying and describing social isolates. This suggests that additional assessment methods are needed to provide increased knowledge about these children.

Children's self-perceptions about their self-worth and social functioning may be an additional source of information for improved selection and identification of social status groups. Research on children's self-perceptions of their social functioning and self-worth serves as a second source of influence for this study.

The relationship between social cognitions (including self-appraisals and self-perceptions) and social competence or social effectiveness has increasingly been recognized as an important component in research and development of models of competency and

social competency (Bandura, 1977; Harter, 1981; Ford, 1980; Meichenbaum, 1980). Bandura (1978), for example, observed: "Much of human behavior is regulated through self-evaluative consequences in the forms of self-satisfaction, self-pride, self-dissatisfaction, and self-criticism" (p. 350). To understand a child's social status with peers, it is important to understand children's perceptions of their social world and how these perceptions influence their interpersonal relationships.

Children's self-appraisals of competence, control, and affective reactions have been found to be important correlates of successful functioning in both cognitive (perceptions of academic functioning) and social (making and maintaining friends, gaining peer acceptance) domains (Harter, 1983).

Harter found that children do not feel equally competent in every domain of functioning and, in fact, begin to make discrete judgments and self-appraisals about their competence in different domains of functioning by the age of eight (Harter, 1982). Children also develop general views of their self-worth beyond specific competency judgments by around age eight. Previous theories of competence behavior (Bandura, 1977, 1978; White, 1959) conceptualized competence behavior in more global terms.

Children who have received positive peer nominations have been found to see themselves as high in social competence, and children with negative peer nominations have been found to have low perceived social competence (Kurdek & Krile, 1982). Thompson (1982) found high

perceived social competence to be related to effective social skills. It has also been thought that children with a positive social self-image may be likely to approach and be approached by others, whereas children with negative social self-images may be reluctant to initiate social contacts and may even elicit rejecting behavior from others (Fine, 1981; Putallaz & Gottman, 1981).

A second self-perception, perceived control (Connell, 1980) or locus of control (Rotter, 1966), has also been found to be related to more effective social and academic functioning (Harter, 1983; Lefcourt, 1976). The concept of perceived control has been derived from Rotter's locus of control theory, which defines this construct as an indication of the amount of knowledge individuals claim to know about what or who is responsible for their successes or failures. High perceived internal control (where the individuals perceive themselves responsible for what happens to themselves) has been found to be related to more effective social and academic functioning (Lefcourt, 1976). High external control (where others are perceived as being responsible for an individual's outcomes) and unknown control (situations in which a person does not know who or what has been responsible for what happens to him/her) have been found to be related to less effective social and academic functioning for some people (Harter, 1983; Lefcourt, 1976).

A third important self-appraisal, social anxiety, which in this study is defined as concern about peer social acceptance or social comfort, has been found to be a significant factor in the tendency for children to engage in or avoid social involvement (Harter, 1983; Watson

& Friend, 1969). The impact of social anxiety on a child's tendency to engage in peer relations has significant implications for one's popularity with peers.

Children's self-appraisals of perceived social competence, self-worth, control, and social anxiety all appear to have significant impact on their attitudes about and tendencies toward engaging in peer relations. The key question in this study is: How do children's self-perceptions of social competence, general self-worth, perceived control of social success and failure, and social anxiety relate to differences in peer social status classifications? To date, research has not explored the possible relationships between social status classifications and children's self-perceptions of their social functioning.

Definitions

The following definitions are used in this study:

1. Social status in the classroom. The level of social standing for an individual derived from peer nominations and ratings that measure the extent to which classmates like or dislike each other. Measures of peer standing within the classroom were derived from positive and negative peer nominations of likeability. Positive nominations were summed to obtain a raw liked score, and negative nominations were added to obtain a raw disliked score. A two-dimensional probability model, using a criterion probability level of $p < .05$, was used to assign individuals to social status groups. This approach, using a probability formula, identified significant liked and disliked score deviations from chance expectancy. Liked and disliked scores were

interpreted as "common" (i.e., within the range of values expected by chance) or "rare" (i.e., outside the limits of expected chance). The binomial distribution was then applied to the raw liked and disliked scores to identify (1) rare high or low scores on a preference dimension and (2) high or low rare impact (liked plus disliked) scores on the impact dimension (Newcomb & Bukowski, 1983).

Students were assigned to one of five groups on the basis of class size and the number of selections each student received. The descriptions of the social status group classification and the selection criteria for each group were as follows:

a. stars--those children who are described as the most popular class members on the basis of a high frequency of best friend nominations and low-frequency disliked nominations. These children are highly visible and frequently exhibit strong indications of maturity (Newcomb & Bukowski, 1983a). Their interactions with peers are positive and include frequent social reinforcement such as listening, responding, and encouraging (Hartup & Charlesworth, 1967). This group includes those children who obtain a rare (not expected by chance) liked score and a disliked score below the mean.

b. reject--children who receive a relatively high frequency of least-liked scores. These children tend to receive frequent attention and high social visibility, but in negative ways. They have been sometimes described as restless, talkative, and at times aggressive (Gronlund & Anderson, 1959; Northway, 1944). Assignment to this group

was based on a high-frequency disliked score and a liked score below the expected probability mean.

c. neglects--these children have also been referred to as social isolates. They are characterized as receiving few or no positive or negative peer nominations. Socially neglected children have been described as quiet, avoidant, withdrawn, ill at ease, and lacking in confidence (Mussen, Conger, & Kagen, 1974). These individuals received low rare impact scores.

d. average--this classification group represents the largest majority of students. These students are moderately well accepted by peers, receiving moderate levels of best friend nominations and few disliked nominations. These children generally are socially successful, friendly, and talkative. Selection for this group was based on a rare impact score and a common number of liked and disliked nominations.

e. controversial--this group has not been found to provide a valid and reliable sociometric classification and was not used in this study (Newcomb & Bukowski, 1983). These students have both liked and disliked peer nominations but appear to resemble averages and neglects. The selection criteria previously used for this group have been based on a rare liked and/or disliked raw score, and if only one score is rare, a score above the mean on the other dimension. The individuals in this classification group, for this study, were redistributed into the star and average groups based on the distribution of positive and

negative peer nominations, which closely resembles either star or average groups (Bukowski, personal communication).

2. Peer acceptance. The degree to which a child is positively evaluated by peers.

3. Peer rejection. The extent to which a child is negatively evaluated by peers.

4. Perceived control. The amount of knowledge children claim to know about what or who is responsible for their social successes or failures.

a. internal control--the extent to which a child perceives him/herself as responsible for his/her social successes or failures.

b. external control--the extent to which a child perceives other people being responsible for what happens to oneself.

c. unknown control--the extent to which a child does not know who or what is responsible for his/her social successes or failures.

5. Perceived competence. A self-perception a child has of how successful he/she is within a particular area of functioning (academic, social, athletic, etc.).

6. Perceived social competence. The extent to which children view themselves as popular, and able to make as well as maintain friendship.

7. General self-worth. The extent to which a child likes him/herself as a person.

8. Social competence. "The attainment of relevant social goals, in specified social contexts using appropriate social means, and resulting in positive developmental outcomes" (Ford, 1982, p. 324).

9. Social anxiety. The extent to which a person has worries or is nervous about his/her ability to make friends and be socially accepted.

CHAPTER II

REVIEW OF LITERATURE

This literature review examines multiple factors that affect and influence the development of peer relations and social status among children and adolescents. Previous research on social-assessment methods is examined, and a rationale for this research project on the relationship between self-evaluations and peer assessment is developed.

This review discusses the following areas:

1. The importance of early adolescent peer relations on identity development.

2. The development and use of peer nomination and peer rating assessment approaches for the study of peer social status and social functioning skills.

3. Examination of the development and use of two-dimensional models of social status classification as improved methods for group identification and classification.

4. Combination of the use of sociometric methods with other assessment approaches as means to evaluate the multi-dimensional nature of social status and social competency.

5. Previous efforts and current indications for the use of self-evaluations of social functioning as means to study and assess differential social status characteristics.

Relationships Between Early Adolescent Peer
Relations and Identity Development

The early adolescent period of development is a time of important transitions as well as distinct characteristics from childhood and later adolescence. In this period, increased influence of peers is experienced, and greater separation from one's family of origin occurs. These changes require increasing demands for social skill effectiveness and, as pointed out in the introduction section, significant limitations in social functioning can provide obstacles to later adaptive development.

Developmentally, the early adolescent has reached a point of increased sensitivity and awareness of others. Intimate friendships begin to form, and there is an increasing awareness of the importance of reciprocity (Berndt, 1982). Identification of inconsistencies in people's actions and messages, means-ends thinking, concern about others' appraisals of oneself, and greater responsiveness to needs and problems of others are all emerging characteristics of this period (Newman, 1976). Early adolescents begin to shift from automatic approaches to more conscious and controlled actions in response to environmental demands (Meichenbaum, 1981).

Individuals, in this period, are also occupied with figuring out the rules of life and the roles they wish to play. Different roles do

not begin to become consolidated until later adolescence. Anxiety about one's capabilities or faults can conflict with strong desires for peer acceptance and create interference in the individual's social effectiveness (Newman, 1976).

During adolescence, individuals are thought to combine their impressions and evaluations of their skills, abilities, traits, and personal histories into an integrated sense of self that serves as a major component of the identity construct. The importance of peer relations upon the development of an individual's identity or "self" and one's eventual capability to adapt as well as cope has increasingly been realized (Hartup, 1970, 1983). During the period of early adolescence between the ages of 12 and 16, friendship and peer relations have been viewed as having major influences on the development of personality, social skills, and social behavior (Douban & Anderson, 1966). The intimacy of friendships has been found to increase dramatically between middle childhood and early adolescence (Berndt, 1982).

Peer relations contribute to the development of an individual's sense of self-worth and self-esteem. Peers are in a position to provide respect to an individual and can validate that what an individual does and says can be useful and have an impact on others (Berndt, 1982; Roistacher, 1974). Support from peers can also help reduce fears about the increasing onset of physical and emotional changes.

Peer-directed behavior has distinct characteristics from adult-directed behavior. Peer interactions are more egalitarian, involving

more give and take on a more equal level, with fewer constraints, and less threat of control (Hartup, 1979). Peers facilitate socialization of aggression, refinement of sex-role learning, as well as moral and affective development (Hartup, 1979). By the sixth grade, time spent with peers is twice as much as the time spent with parents (Mussen, Conger, & Kagan, 1974). The large amounts of time and wide range of behavior and situations accessible to peers enable them to be an accurate source of information for evaluating an individual's social competency and social status.

The School and Social Development

The school system has frequently been described as an agency of middle-class culture, faithfully reflecting middle-class beliefs and social organization (Glidwell, Kanter, Smith, & Stringer, 1966). The school system's ability to respond, adjust, and consider diversity of student beliefs and functioning has frequently been limited. This becomes more pronounced as children grow into early adolescence and make the transition from elementary school to middle school-junior high.

The social system of the classroom has important consideration in understanding social status of children in educational settings. Classrooms are systems with a few isolates, some peer pairings, and a few subgroups that center on friendship, influence, and interaction with the group but with relatively little involvement across groups (Glidwell et al., 1966). These subgroups consist of the same sex in elementary school but show increasing opposite-sex inclusion as

students enter secondary school. The children in these groups are in contact with each other because of close proximity at school or home, have similar social values and attitudes, and see desirable personality traits in each other and are viewed as friendly (Kuhlen & Lee, 1943). It is also apparent from observation that some students are more visible in the classroom through positive or negative means and have greater impact on fellow students. A child's personality and characteristics are expressed through social interaction and general behavior which helps to form the person's social standing in the classroom.

Middle school programs have been developed as a means to help bridge the periods of childhood and adolescence, yet deal with the distinctiveness of the transitional nature of early adolescence. These programs usually include grades 5-8 or 6-8. The elementary student usually will move from a smaller neighborhood school to the greater complexity of a middle school or junior high. Students will begin to come in contact and mix with a greater diversity of children and teachers, resulting in increasing demands for increased coping abilities. The placement of students together in common core classes or teams has been one approach used to facilitate this transition.

Difficulty in Definition and Assessment of Social Competency

The concept of social competence has become increasingly useful in identifying positive developmental outcomes, but defining social competence and socially effective behavior is difficult because of the large number of skills and areas of functioning that can be targeted

for study and intervention (Ford, 1980; Water & Stroufe, 1983; Anderson & Messick, 1974).

The use of situational definitions that delineate specific contexts and goals of behavior has gained increasing usage (Rathjen & Foreyt, 1980; Ford, 1980). Ford (1982) characterized social competence as "the attainment of relevant social goals, in specified social contexts, using appropriate social means and resulting in positive developmental outcomes" (p. 324). Use of this definition requires specification of the context, situation, and tasks. The relevance of social goals and the appropriateness of the means to obtain the goals are dependent on the context and the perspective of those evaluating the behavior.

In a similar type of definition, Foster and Richey (1979) described social competent behavior as "those responses which, within a given situation prove effective or, maximize the probability of producing, maintaining, or enhancing positive effects for the interactor" (p. 626). The advantage of these two definitions is that they take a relativistic view of social functioning, considering the context as well as the perspective of the observer.

The assessment of social status and the study of factors that affect peer relations provides some of the significant means of measuring social competence or effectiveness. The following sections in this review will provide an understanding of the use and development of peer-assessment approaches and the increasing use of combinations of multiple methods of assessment as means to investigate peer relations

and their impact on the development of social competency. This investigation will particularly examine the use of self-evaluations and peer assessment as a means to provide increased knowledge about factors which affect the development or absence of peer relations in early adolescents.

Sociometric Peer Assessment

Applications and Utility

The need for methods to identify children who experience difficulty with peer relations, the establishment of means to pinpoint specific reasons for these difficulties, and the development of intervention programs for social deficits have become increasingly important to professionals as the significance of peer relations for healthy development has been recognized. This interest in social competence has been prompted by the results of correlational studies demonstrating the relationship between children's early social competence and later adult adjustment, increased focus on social skill training, and interest in preventative mental health approaches (Foster & Richey, 1979).

The use of sociometric methods is the most commonly used measure for identifying the social competence of children and their social status among their peers. These methods generally measure the attraction between individuals of a social group.

Sociometric measures have been used over the past 50 years in such areas as social competence in peer relations (Asher & Hymel, 1981; Hartup, 1979; Ford, 1980), children's friendships (Asher, Oden, &

Gottman, 1979; Berndt, 1982; Moreno, 1934), early identification of emotionally handicapped children (Bower, 1960), social skills and delinquent behavior (Gaffney & McFall, 1981), social isolation (Gottman, 1977), and identification of early adolescents who are socially accepted, rejected, and neglected (Gronlund & Anderson, 1957; Gottman, Gonso, & Rasmussen, 1975; Oden & Asher, 1977).

Two Major Sociometric Methods-- Peer Nominations and Peer Ratings

The two major methods used in sociometric assessment have been peer nomination measures and rating-scale measures. Moreno (1934) has been credited for the initial development of peer nomination measures to assess classroom peer and friendship relationship patterns. With this method, students are asked to nominate a certain number of classmates according to specified interpersonal criteria (best friend, especially liked, most likely to sit with). Peer nomination methods provide measures of high-priority or best friend peer relations. Negative as well as positive peer nominations have been used together and have been found to better differentiate children at the low end of the peer-acceptance continuum than use of positive nominations alone (Asher & Hymel, 1981; Cole, Dodge, & Coppotelli, 1982; Gronlund & Anderson, 1957). Negative nominations request children to nominate those classmates they like least or prefer least on some social criteria.

Peer nomination measures have demonstrated at least moderate test-retest reliability (Bonney, 1943; Dunnigton, 1957; Roff et al., 1972).

Dunnington (1957) found test-retest reliabilities were significantly lower when only positive nominations were used. Concurrent validity with teacher judgments has frequently, but not always, resulted in significant correlations (McCandless & Marshall, 1957). Cowen et al. (1973) demonstrated predictive validity for peer nominations in the relationship found between early peer relations and adult mental health adjustment.

Peer nominations have been found to be a useful way of assessing social functioning and social impact, but these methods have also been found to have limitations. Because these nominations are based on a limited number of selections and groups vary in size, this method by itself does not provide a constant frame of reference. In addition, small nomination changes create large differences in reliability. Different group sizes can drastically affect the number of nominations a person could receive. Peer nominations, used by themselves, do not provide indications of what assets or deficits contributed to differences in individuals' social standing.

Despite these limitations, the benefits of these methods lie in their predictive validity, their ability to identify populations for further study, and in their use as outcome measures when combined with other assessment methods.

Peer-rating scales (Roistacher, 1974), the second major sociometric method, are similar to but different from peer-nomination methods. Whereas peer nominations provide measures of high priority or friendship, peer ratings provide measures of overall acceptability or

likeability. Each student in the class is provided with a class list of all fellow students. Students are asked to rate each classmate on a specified interpersonal criterion. One frequent method is to ask students to circle a number from 1 to 5 that best describes how much they like (to work with, sit next to) each person in the class (Asher & Hymel, 1981). A low rating indicates that the student "doesn't like" the other person on the dimension, and a high rating indicates the person is "liked a lot."

This method has several positive features: First, information is gathered on all class members, thus providing a measure of each child's attitude toward all class members; second, peer ratings are sensitive to changes in scale criteria. Singleton and Asher (1977) found peer ratings to discriminate greater preferences in white students on a "play with" rating than a "work with" rating in their relationship with black students. Greater test-retest reliability for rating measures than for nomination measures is a third feature. Oden and Asher (1977) obtained reliability coefficients of .82 and .84 for a "play with" rating and a "work with" rating among third- and fourth-grade students over a 6-week period. This compared with .62 for a "best friend" nomination measure. Asher, Singleton, Tinsely, and Hymel (1979) found a .81 reliability coefficient for a "play with" rating compared to a .56 for "play with" nomination measure. The greater reliability of the rating-scale measures results from their being the average score obtained from a large number of peers, in contrast to nomination scores which are determined from a small, limited number of nominations.

These latter scores are more subject to small changes which drastically affect the distribution of scores.

Peer ratings, like nominations, are limited because they do not provide information about the antecedent or consequent characteristics of children with different social status. Rating scales are useful in identifying different groups for further assessment, but are most helpful when used with other procedures (Asher & Hymel, 1981; Gresham, 1981), as was done in this study.

Use of Negative Peer Nomination and Rating Methods

Distinctions between rejected and neglected children cannot be made with the use of positive nominations alone. The use of negative nominations and ratings makes it possible to discriminate between children who do not receive positive nominations because they are disliked (social rejects) and those students who are not known (social neglects). This benefit notwithstanding, the use of negative peer nominations raises potential ethical questions.

Requesting negative evaluations from peers goes against the common general expectation of encouraging children not to reject others or at least openly verbalize negative attitudes (Foster & Richey, 1979). A fear is that asking students to identify disliked peers might encourage class members to increase negative behavior toward less-liked peers. However, this concern has not been empirically proven (Foster & Richey, 1979; Asher, 1983). Further, it has been found that having children respond to negative sociometric questions under experimental conditions

does not result in increased interpersonal stress or conflict (Asher, 1983; Moore, 1973).

Research has demonstrated that negative peer evaluation and peer rejection are a natural part of the classroom social structure (Asher & Hymel, 1981). Identification and assessment of the characteristics involved in peer social status are the first steps in the prevention or intervention for problems in peer relations. Investigators have found that children react to negative nominations in matter-of-fact ways when experimental procedures emphasize the guarantee and assurance of confidentiality, use of numbers for identification, and discouragement of discussion (Cofe et al., 1982; Gottman, 197; Newcomb & Bukowski, 1983).

The Development of Two-Dimensional Sociometric Classifications

Early sociometric research was frequently limited by the use of unidimensional methods for classification of sociometric status (Newcomb & Bukowski, 1983). These approaches usually involved the use of only positive peer nominations due to the previously stated ethical concerns in using negative nominations. At present, both positive and negative peer nominations are frequently used with careful application (Asher & Hymel, 1981).

Expanded use of peer nominations for sociometric classification has resulted in the increased development of two-dimensional sociometric techniques. Lemann and Solomon (1952) used liked, disliked, and indifference (absence of nominations) scores to classify the social status of students. Bronfenbrenner (1944) used binomial probability

theory to classify students into high, low, and middle status students based on the probability of students receiving liked or disliked scores. Liked scores were obtained by summing positive nominations, and disliked scores resulted from the total of negative peer nominations.

Dunnington (1957) was one of the first researchers to add liked and disliked scores to obtain a notice score which provided an indication of individuals' social visibility within a social group. Dunnington also subtracted disliked scores from liked scores to formulate a status score. This approach allowed for the classification of high, low, and middle status groups but was limited in its inability to differentiate neglected, middle status, and children who received frequent nominations on liked and disliked dimensions. These latter three groups might receive similar social status scores but could significantly differ on their social visibility. Dunnington pointed out both notice scores and social status scores were needed to make more discriminant classifications.

Peery (1979) extended this work through the development of a two-dimensional sociometric status approach to be used with preschoolers. This approach used two dimensions: social impact (the total number of positive as well as negative nominations received by a child) and social preference (a significant frequency of either positive or negative nominations). Four classification groups were identified: popular (high social impact, positive social preference), rejected (high social impact, negative social preference), amiable (low social

impact, positive social preference), and isolated (low social impact, negative social preference).

Another, more recent two-dimensional group classification approach was developed by Coie, Dodge, and Coppotelli (1982). This procedure used social impact and social preference dimensions with a standardization of scores approach. Five social status groups were identified with this procedure: popular, neglect, reject, average, and controversial.

In the Coie et al. (1982) study, two experiments were used to investigate the behavioral correlates of the social impact and social preference dimensions in children in grades 3, 5, and 8. For this study, students were asked to nominate three classmates from a grade roster placed in front of them during an interview, three students whom they liked the most and three students whom they liked the least. Most-liked students were described in terms of supports peers, attractive physically, cooperates with peers, and leads peers. Least-liked students were identified as disrupting the group, aggresses indirectly, starts fights, gets in trouble with teachers, and acts snobbish. These significant correlates were found present for each grade level, with supports peers and attractive physically being the most highly predictive correlates of social preference.

Low social preference in eighth graders was more closely linked to not fitting in with peers than active misconduct. The older children in the study were found to be more differentiated and less stereotyped in their descriptions of social preference.

On the social-impact dimension, high social impact was associated with active positive behaviors of supporting peers and leading peers, as well as salient negative behaviors of disrupting the group, getting in trouble with the teacher, and starting fights. "Picks on" was also a significant item for eighth graders but not for the other two grades.

In the second experiment undertaken in the Coie et al. study, the social-impact and social-preference dimensions were used to select children into five sociometric groups--popular, rejected, neglected, average, and controversial. The descriptive behavioral nominations were used to obtain behavior profiles for each of the groups. Overall, it was found that boys (15.4% of over 150 boys) were more likely to be selected for the rejected group than girls (10.6% of over 150 girls in the study). This supported previous research that indicated boys experience more overall difficulties in peer relations than do girls (Rutter, 1976). Girls received more nominations for cooperation and shyness, while boys received more nominations for fighting and seeking help.

The behavioral profiles for the popular, rejected, and neglected groups were consistent with previously reported findings for these groups. The average group was not found to be significant on positive or negative behavioral extremes. The controversial group presented a mixed picture of strong positive and negative characteristics.

Newcomb and Bukowski (1983, in press) compared the Coie et al. and the Peery procedures with an extended application of Bronfenbrenner's (1943, 1944) use of binomial probability theory to obtain social status

group classifications with 322 fourth- and fifth-grade students. This two-dimensional approach used positive and negative peer nominations. A binomial probability formula was applied to liked and disliked scores to identify significant scores on both a peer-preference dimension and a social-impact (liked plus disliked) dimension. This procedure had the advantage over the other two approaches of taking into consideration the size of the nominating group and the number of selections received, in addition to maintaining a constant frame of reference for individual assignment across different social groups. Five groups were identified with this procedure: stars, rejects, isolates, controversial, and average.

In comparing these three approaches, Newcomb and Bukowski found the Peery approach to be least accurate and most problematic. It provided the least-stable group classifications, and it was the least efficient of the three approaches in classifying children into groups with distinct profiles. The children in this study also completed same-sex peer nominations for 14 social role behavior descriptions. These nominations were used to obtain the group descriptive profiles. The Peery approach did not differentiate neglect and amiable groups on impact and social visibility. An absence of social visibility has been one of the consistent research characteristics of the neglect group, and the absence of a difference clouds the distinctiveness and accuracy of these two groups for the Peery approach.

Both Peery and Coie et al. used standardized scores which have greater potential for inaccurately representing the actual group social

network because of the raw score transformation used with standardization. The Peery and the Coie et al. approaches failed to classify 12% and 48% of the subjects, respectively, compared to total classification by the probability method. The probability procedure was found to be superior to the Coie et al. and Peery procedures in the classification of stars and rejects. All three classification methods were found to be less stable for the isolated or neglected groups.

Newcomb and Bukowski found the probability method to have several additional advantages. The ability of this method to maintain a constant frame of reference across different social networks was thought to account for strong and consistent overall reliability and validity. Superior reliability was obtained in identification of reject and isolate groups: Social visibility and likeability were found to be well distinguished. Stars, rejects, and average groups were found to be distinct groupings, but the classification of isolates and controversials was less clear.

Newcomb and Bukowski (1983) found that, regardless of the method of classification used, the children who were initially classified as controversials more closely resembled stars, neglects, or average groups. The controversial group demonstrated poor stability and was seriously questioned as a valid, separate group classification.

The classification of neglects or social isolates has been a consistent problem when sociometric procedures have been used alone. The isolate has, by definition, low social visibility and is not readily available for description through peer-assessment means.

Newcomb and Bukowski recommended the use of peer ratings or other methods to assess the qualitative dimensions of peer interpersonal functioning. Group-classification methods like the probability model demonstrate success in identification of children's social functioning among peers. The complexity of social functioning requires investigation into the use of additional assessment approaches, which are explored below.

Use of Sociometric Methods in Combination With
Other Assessment Approaches to Evaluate
Social Status

The multidimensional nature of social functioning has required increasing use of multimethods and multiperspective assessment approaches to investigate variations in social status and social competency. Gronlund and Anderson (1957), in their investigation of differences in early adolescent social status, used positive and negative peer nominations in combination with a peer assessment approach. The peer nominations were used to identify groups of socially accepted, rejected, and neglected students. The "guess who" (Hartshorne, May, & Maller, 1929) peer assessment technique, which asks students to indicate which behaviors from a set of behavioral descriptions described different class members, was used to identify unique characteristics for each of three social status groups.

Hymel and Asher (1977) found moderately high correlations (.63) between positive peer nominations and peer ratings when used together to assess social functioning.

Asher and Taylor (1981) recommend a similar approach to the one used by Gronlund and Anderson (1957) for identifying and defining socially competent behavior. The "competence correlates" approach, as it is called, identifies significant competent behavior through use of observation or peer assessment approaches. These behaviors are then selected for further research or inclusion in intervention programs on the basis of their relationship to social status or some other independent index of adjustment. Three general areas of social functioning have been identified by this approach: (1) initiation of social interactions, (2) maintenance of social interactions or relationships, and (3) conflict-resolution skills.

Initiation characteristics that have been assessed through combined assessment procedures include meeting and greeting individuals for the first time, initiation of conversation, exchange of information, and offers of inclusion (Asher & Taylor, 1981; Gottman, Gonso, & Rasmussen, 1975). Sensitivity to others' frame of reference is also an important quality (Ford, 1980).

Social maintenance behaviors consist of exhibiting positive attention, positive reinforcement of others' behavior, and providing approval and affection (Hartup et al., 1967). Providing help and cooperation (Bryan & Bryan, 1978) and effective communication skills (Gottman et al., 1975) have also been found important.

Conflict-resolution and problem-solving skills involve the abilities to compromise, negotiate, persuade, and, when appropriate, ignore (Asher & Taylor, 1981). Ford (1980) also has found means-ends

thinking, ability to take the role of the other, and ability to generate alternative solutions to be important.

Social Status Group Characteristics
Identified Through Peer-Nomination
and Peer-Rating Methods

Socially accepted or popular students receive favorable nominations from peers and few negative nominations. Gronlund and Anderson (1957) found socially accepted seventh- and eighth-grade boys and girls to be described by peers as good looking, tidy, friendly, likeable, enthusiastic, and cheerful. Socially accepted girls were also described as being quiet, having an interest in dating, showing initiative, and being talkative. The boys were also described as being active in games. This group has also been described as honest, loyal, gets along well with others, even-tempered, flexible, sympathetic, and receiving and providing high rates of positive interaction (Hartup, Glazer, & Charlesworth, 1967; Kohn, 1977; Mussen et al., 1974). Oden and Asher (1977) found characteristics of cooperation, participation, social validation, and support to be descriptive characteristics. Knowledge of sex-role norms, perceptions of others' emotions and feelings, and good communication skills were additional descriptive characteristics (Gottman et al., 1976; Jennings, 1975).

Socially rejected students receive negative nominations and few positive nominations. Gronlund and Anderson (1957) found these students to be described as not attractive, untidy, not likeable, restless, and talkative in disruptive ways. Northway's (1944) early-adolescent subjects were similarly described, with the addition of

boastful, socially ineffective, more aggressive, and not likeable. Hartup et al. (1967) also found young socially rejected children to be aggressive and to emit frequently negative behavior. The verbal and physical aggression displayed by unpopular or rejected students tended to be immature, indirect, unprovoked, disruptive, and self-centered (Minturn & Lewis, 1968; Walder, Abelson, Eron, Banta, & Laulicht, 1961).

Lesser (1959) found a strong negative correlation of $-.69$ in grade-school boys between popularity and indirect aggression (not going along with the group, hurting someone through the destruction of property). These children have been found to exhibit fewer social initiation, maintenance, and social problem-solving skills (Gottman et al., 1975).

The socially neglected or isolated group consists of children who do not receive nominations of any nature. This is a group for whom peers have little information because of their low social visibility. In the Gronlund and Anderson study, these children were described as not talkative and quiet. Mussen et al. (1974) described this group as ill at ease, lacking confidence, timid, anxious, avoidant, and withdrawn. Gronlund (1959) found that 6% of third- through sixth-grade children in one school system had no friendship nominations in their classroom, and an additional 11% had only one friend. Hymel and Asher (1977) found 12% of the students in their study lacked friends.

Because of the limited social accessibility to peers, sociometric and peer assessment approaches are limited in identifying this group.

Gronlund and Northway pointed out that there is another group of children who are classified as neglected, but these students are socially interested, healthy, self-sufficient individuals who may not know others or choose to remain distant. The difficulty in describing and classifying the children who do not receive peer nominations has been met with by the use of multiple assessment procedures that use additional assessment approaches as well as the use of improved classification methods.

Multimethod-Multiperspective Assessment of Social Functioning

The multidimensional nature of social competence and the complexity in defining socially competent behavior has spurred the use of multimethod and multiperspective assessment. Gresham (1981a) used peer nomination, peer rating, and observation to assess social functioning of children differing in social status. These three approaches were found to have moderate but significant correlations with each other, to be stable over time, and to each assess independent dimensions of social functioning: (1) nominations assessed friendship, (2) ratings measured likeability, and (3) observations evaluated social interaction. There were moderate correlations between rates of positive peer interaction and sociometric acceptance, and rates of negative peer interaction and sociometric rejection.

Vosk, Forehand, Parker, and Rickard (1982) used a multimethod comparison procedure to identify differences between popular and unpopular children, which involved peer nominations, peer-rating

scales, teacher ratings, classroom observation, results from standardized achievement tests, a depression inventory for children, and individual child interviews. Children chosen as unpopular by their peers were found to be rated as more unpopular by teachers, and more depressed as well as maladjusted on the depression scale than popular children. They also spent less time with on-task behaviors, had more negative interactions, and performed at lower achievement levels. A positive relationship was found between academic achievement and popularity. This was felt to be related to the tendency of popular children to spend more time with on-task behavior, which facilitated greater reception of information and production of work.

Ford (1980, 1982) and Koch (1980) used a multimethod design to assess the relationship between social cognition (cognitive skills, awareness, judgments, and self-appraisals related to social functioning) and social competence in adolescents employing self-ratings of social competence, peer nominations, teacher ratings, and an interviewer rating of each student's social competence. Social awareness was found significantly related to socially competent behavior. For example, socially competent adolescents were better able to function effectively in challenging social situations, they had high priorities for interpersonal goals, helping others become socially involved, and getting along with parents and friends than their less-competent peers. They also perceived themselves high in internal control, empathy, means-ends and consequential thinking, and viewed themselves as having a relatively large number of friends.

Use of Self-Perceptions in the Study of Peer Relations

Cognitive self-perceptions such as perceived competence (Harter, 1979, 1982), perceived control (Connell, 1980) or locus of control (Rotter, 1966; Lefcourt, 1976), and social anxiety (Buhrmester, 1982; Watson & Friend, 1969) have been utilized in current research to study important attributes of children's social behavior.

The theories of competency motivation (Harter, 1978, 1981; White, 1959), social learning theory (Bandura, 1977), and self-perception theory (Bem, 1972) have been theoretical foundations for concepts of self-perception. Common themes arising from these theories propose that cognitive processes mediate change and that cognitive processes themselves are affected and shaped by the individual's experiences of mastery or failure. An individual's self-perceptions or cognitions influence a person's tendency to engage in behavior, and the success or failure of an individual's actions influences the person's self-perceptions (Bandura, 1977).

Harter's interest in areas of competency in children evolved out of efforts to extend the work on competency motivation of Robert White (1959). Competency or effectance motivation was described by White as impelling the child to engage in mastery attempts. If a child is successful in his/her efforts, competent performance occurs and the child experiences feelings of efficacy or mastery, which then maintain or increase the child's effectance motivation and efforts in the particular area of functioning.

Harter (1981, 1983) extended White's theory by examining components of the motivative system within a developmental framework. Cognitive perceptual components that she found to be important for understanding a child's tendency to be motivated and engage in behavior in a particular area of functioning include perceived competence, perceived control (locus of control) in successful and unsuccessful situations, and children's affective reactions. Harter and most extensions of her work have primarily investigated the impact of these self-perceptions in the social and academic (cognitive) domains of functioning.

Social learning theory and the role of reinforcement resulting from a child's behavior while interacting with others play a major part in Harter's theoretical formulations. The extent to which a child might be successful in his/her involvement with peers can serve as an incentive or inhibit engagement in peer relations. A child's perceptions of his/her social competency affect the child's tendency to engage in interactions with peers, and actual success or failure with peers will also influence social-competency perceptions as well as willingness for social involvement.

Given these foundations, Harter proposed that a child's perceived competence for a particular domain of behavior will be related to the extent to which the child feels in control and responsible for successes or failures in that area of functioning. In addition, the child's affective reactions will also show a relationship with these

self-perceptions and actual level of achievement in the area of functioning (Harter, 1981, 1983).

Efforts to begin to investigate these theoretical conceptions empirically began with Harter's (1979b) development of the Perceived Competence Scale for Children. This scale can assess self-perceptions in the areas of cognitive (academic functioning), social (peer acceptance, peer-relations initiation, and maintenance), and physical functioning (abilities and preferences for outdoor sports and activities). This scale also provides an estimate of the individual's perceived self-worth. These four subscales have been shown to be stable, with subscale reliability coefficients ranging from .73 to .83 (Harter, 1982). Internal-consistency coefficients for each domain have been moderate to high: cognitive--.76, social--.78, physical--.83, and general self-worth--.73.

Research on the use and the relationship between perceived social competence and peer measures of acceptance and popularity are particularly significant for this study. Thompson (1982) compared the relationship between peer rating measures of peer friendships and individuals' perceived social competence measures of 85 fourth, fifth, and sixth graders and found the correlation between the peer ratings and the social competence subscales to be .59. In addition, a correlation of .42 was found between perceived social competence (perceived popularity/peer acceptance) and peer ratings with 168 fourth- and fifth-grade boys and girls.

Kurdek and Krile (1982) investigated the relationship between peer acceptance and the self-perceptions of interpersonal understanding and perceived social competence. In this study of over 230 boys and girls in grades 3 through 8, children viewed a 6-minute sound filmstrip about a boy's interpersonal dilemma. Children were then asked to answer 10 questions which were then rated for dimensions of interpersonal understanding and friendship formation. Positive and negative peer nominations were used to assess peer acceptance, and the Perceived Competence Scale for Children (Harter, 1979) was used to assess perceived social competence. The results indicated that children's favored peer status was related to high levels of both interpersonal understanding and perceived social competence, while negative peer nominations and ratings were related to low interpersonal understanding and perceived competence. Social cognitions were also found to become more significant and related to positive peer status as children became older. Kurdek and Krile proposed that their results further supported the existence of a relationship between social cognitions and peer-group status.

Relationships Between Perceived Control and Social Functioning

The concept of perceived control has also been found to be a critical cognitive-perceptual variable in the investigation of attitudes toward and involvement in social relations (Harter & Connell, 1982). Perceived control has been defined as the amount of knowledge children claim to know about what or who is responsible for their

successes or failures. This concept was based on learning theory and Rotter's (1966) theory of locus of control. A person's locus of control was his/her general expectancy for internal in contrast to external control of reinforcement for success or failure. Internal control would be present when the individual takes personal responsibility for experience outcomes. External control would occur when experience outcomes would be considered unrelated to personal responsibility or behavior.

Lefcourt (1976) found that people with internal perceived control tend more often to be active, alert to potential meaning of their experiences, more cognitively efficient, less controlled by other people or events, and more effective in use of potential options in challenging situations than people with externally perceived control. Internal control was also found to be associated with greater persistence when frustration and adversity were encountered and was moderately correlated with measures of manifest anxiety and reports of anxiety.

To empirically investigate the role of perceived control in cognitive-academic and social domains of functioning, Harter (1983) used Connell's (1980) Multiple Measure of Children's Perceptions of Control. This instrument measures perceived internal, external, and unknown control within the cognitive, social, and sports-activity domains of behavior. It also measures an individual's general view of perceived control. Each of the three domains of functioning and the general control factor can also be assessed for both successful or unsuccessful situations for each domain of behavior.

Harter and Renick (Harter, 1983) used this instrument to investigate children's self-perceptions of control in peer relations in a study involving 300 third- through sixth-grade students. These investigators identified five response patterns based on the presence of beneffectance in children's perceptions of control in social relations, which are presented in Figure 2.1.

Beneffectance, "the tendency to take credit for success while denying responsibility for failure" (Greenwald, 1980, p. 605), was derived from "benefficiency" (achieving desirable outcomes) and White's (1959) concept of "effectance" (motivation to act competently). Harter and Renick proposed that beneffectance operated as a mechanism for protection or enhancement of an individual's self-image. Used in their research on children's perceptions of control in the development and maintenance of peer relations, beneffectance was then measured as the extent to which subjects attributed responsibility for their failures in peer relations to others or unknown factors. The denial of personal or internal control in unsuccessful social relations was viewed as a means to protect an individual's self-image from discomfort or feelings of conflict.

The five perceived control patterns that are presented in Figure 2.1 included: (1) strong beneffectance, (5) intermediate beneffectance, (2) weak beneffectance, (3) high internality, and (4) self-blame. These five patterns varied in the extent to which internal, external, and unknown attributions of control in success and failure social

Pattern 1--Strong Benefectance

IS > IF
 IS > ES
 IF < EF

Pattern 2--Weak Benefectance

IS > IF
 IS > ES
 IF > EF

Pattern 5--Intermediate Benefectance

IS > IF
 IS > ES
 IF < UKF
 IF > EF

Pattern 3--High Internality

IS = IF
 IS > ES
 IF > EF

Pattern 4--Self-Blame

IS < IF
 IF > EF
 IS \geq FS

IS = Internal Control-Success Situation
 ES = External Control-Success Situation
 IF = Internal Control-Failure Situation
 EF = External Control-Failure Situation
 UKF = Unknown Control-Failure Situation

Figure 2.1.--Response patterns obtained from perceived control measure. (Results from Multi-dimensional Perceived Control Measure (Connell, 1980) used by Harter & Renick (Harter, 1983).)

situations were greater than, less than, or equal to each other. (See Figure 2.1.)

In the Harter and Renick study, 86% of all subjects were able to be categorized into one of these five patterns. The intermediate beneffectance, representing 30% of the sample, was found to be the largest identified group. This group was characterized as having greater attributions of internal control in successful relationships than external-success and internal-failure attributions. Unknown factors were believed more responsible for failure in peer relations than internal or external factors. The weak beneffectance group represented 21% of the sample and believed they were responsible for both their social successes and failures. The high internality group made up 19% of the sample and perceived equal personal responsibility for successful and unsuccessful peer relations and greater internal control than external control. The self-blame group took greater personal responsibility for failed social relations than successful peer interactions and comprised 10% of the sample. The strong beneffectance group consisted of 6% of the sample. Subjects in this group tended to perceive other people as being responsible for a person's difficulties in making and maintaining peer relations.

Overall, this study indicated that the tendency to deny personal responsibility for failures in peer relations was a significant factor (36% of the sample when combining strong and intermediate beneffectance groups). One of the purposes of this study is to examine the perceived control response patterns and determine if this self-image protective

pattern is present in children with low peer assessed social status. These socially rejected children may have the greatest need to protect their self-images from the knowledge of their poor peer relations.

Relationships Between Perceived Control, Social Competence, and Social Anxiety With Social Status

The relationships between perceived control and social competence as well as social anxiety were also investigated in the Harter and Renick study. Subject responses on the perceived social competence subscale of the Perceived Competence Scale for Children (Harter, 1979) and the social anxiety subscale of the Children's Concerns Inventory (Buhrmester, 1982) were compared with the social perceived control findings. Children with strong benefactance patterns were found to perceive themselves as less accepted and more anxious in their peer relations. Generally, the more children indicated they knew who or what was responsible for their successes or failures in their social relations, the greater their perceptions of social competence.

In another study, Thompson (1982) found that the presence of social anxiety was more related to an individual's self-evaluations of his/her social competence than his/her actual popularity. Schmuck (1962) found that self-perceptions of low social status were more significant than actual peer assessments of social status in identifying under-utilization of intellectual abilities. Low social status self-perceptions were also significantly related to negative attitudes about oneself, school, and interactions with others.

Using the social anxiety subscale of the Children's Concerns Inventory, Buhrmester observed significant negative correlations between social anxiety with classroom sociometric status and perceived social competence (Buhrmester, 1982). Social anxiety to some extent tended to increase or decrease in an opposite relationship to social competence and social status (correlations were $-.40$ and $-.28$, respectively).

Children who had been socially rejected and who had low social power (influence) were found to be less accurate in their predictions of their own popularity with peers (Glidwell et al., 1966). This study also determined that, when children relied on more primitive psychological defense mechanisms of denial and projection, self-evaluations of affect and social functioning were less accurate than others' judgments of the child's emotions and social relations.

Sex Differences on Self-Evaluation Measures

Nowicki and Roundtree (1971) found internal locus of control to be related to peer popularity in a high school population based on peer nominations for class president and to be related to different domains of success for males and females. Academic achievement appeared to be a greater predictor of internal locus of control for boys, and high involvement in extracurricular activities was more frequently related to internal locus of control for girls.

Waldrop and Halverson (1975) found that social relations among boys were more dependent on group interaction and play activity, whereas girls' social relations were more dependent on intimate

interactions with specific peers. Bukowski's (1982) study of over 300 sixth graders found sex differences in peer popularity and social acceptance using Harter's (1979) Children's Perceived Competence Scale. Social competence was found to be more strongly related to peer acceptance among girls (.36) than boys (.10), and physical competence (interests and abilities in sports and outside activities) was found to be related to peer acceptance more strongly for boys (.21) than girls (.01).

In the research to validate Buhrmester's Children's Concern Inventory, girls consistently had higher mean scores than boys for anxiety concerning school work, peer acceptance, adult discipline, and sports competition.

Overall, these sex differences can be partially explained by the different levels of reinforcement and encouragement boys and girls have received in the past. Although presently there is greater encouragement for both girls and boys in much wider ranges of experience, there has been a long history of greater academic and athletic encouragement for boys and greater encouragement and reinforcement of the development of social skills for girls.

Summary of the Literature Review

The preceding literature review has described the period of early adolescence and the vital role peer relations play in shaping growth and contributing to later adaptive functioning. An increasing need for methodology for the identification and selection of groups of children

for further developmental research and social skill intervention studies has been stressed.

It was also noted that defining and selecting social competency and social behavior for study and intervention has been difficult because of the multidimensional nature of social functioning. Peer-nomination and peer-rating sociometric approaches have been two primary methods used in previous investigations of social functioning and social status.

Use of two-dimensional sociometric classification systems and multiapproach-multiperspective assessment approaches has been the direction taken to deal with the complex nature of social relations. Peery (1979), Coie et al. (1982), and Newcomb and Bukowski's (1983) modified probability model are examples of two-dimensional approaches that have demonstrated varying levels of improved group classification.

These approaches have been limited in their abilities to describe and identify low social status children and in their capabilities to describe a wider range of characteristics that differentiate social status. However, multimethod approaches, using measures of self-evaluation such as perceived competence, perceived control, and measures of affective reaction, have provided some additional descriptive and predictive information that self-perceptions are related to social competency.

The influences of social learning (Bandura, 1977, 1978), locus of control (Rotter, 1966), and competence motivation (Harter, 1978, 1981) theories have provided the theoretical foundations for a heightened

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awareness of the importance of cognitive self-perceptions for understanding social and peer relations.

Previous research has indicated there are relationships between peer social status and self-perceptions of social competence (Kurdek & Krile, 1982; Thompson, 1982). The presence of internal perceived or locus of control has been found to be related to more effective functioning (Lefcourt, 1976) and popularity (Strickland & Roundtree, 1971). Social anxiety also has been shown to be an influential factor of social functioning (Buhrmester, 1980; Watson & Friend, 1969).

Conclusion

The preceding review of the literature indicated that peer relations in early adolescence are essential for adaptive development and that sociometric peer classifications positively contribute to the selection and description of groups of children for research on the development of peer relations and for social skill intervention programs. The limitations of these methods, however, indicated that additional assessment procedures are needed. A crucial question examined by this study is: Will children's self-perceptions of social functioning provide additional discriminative information to help in the identification and selection of early adolescents into different social status groups?

Findings from peer social skill, social status, and social cognition research lead us to the following tentative conclusions, which will be tested in this study:

1. Sex difference in social status and self-perceptions.

Previous research concerning sex differences in social status and self-perceptions has indicated that it would be expected that girls' perceived social competence would be greater than boys, and greater physical competence would be present for boys than for girls. Girls would also be expected to be more anxious about the status of their peer relations than boys because of the significance the role of limited numbers of intimate friendships plays in female development. In addition, because of the complexity of factors that affect the development of peer relations and the similarity of male and female popular and unpopular social behavior, no significant differences would be expected to be found between sex and social status. Also, no differences in sex would be found in self-worth and perceived control because these factors appear to be more closely related to personality differences.

2. Differences in social status and perceived social competence.

From previous investigations of differences in social status and perceived social competence and self-worth it would be expected that the star group would be highest on these factors. Reject or unpopular children would be expected to be the lowest in their peer popularity but may distort their negative peer relations, thus avoiding extremely low perceived social competence self-perceptions. This proposed expectation would be in line with Harter's (1983) self-protective concept of benefectance. Because of this tendency to deny social failure, social rejects may have distorted perceived social competence

scores that would be even greater than the average group, which would be expected to have moderate social self-perception levels. The social isolate or neglect group, which was described in the literature as having characteristics of withdrawal, shyness, and little social initiative, might be less distorting in their self-perceptions because they protect themselves through physical avoidance and may not need to rely on cognitive distortion or denial.

3. Differences in social status and perceived control.

Children who are socially effective have been found to have a greater sense of self-control, whereas less socially effective and more socially anxious children tend to attribute greater control to external-others or unknown factors (Strickland & Roundtree, 1971; Lefcourt, 1976). This would lead to the expectation that popular children (star group) would tend to have higher attributions of internal control than unknown or external control. The less socially effective neglect and reject groups might be expected to have greater attributions of unknown or external control, particularly for unsuccessful social situations. The majority or average group might be expected to have internal perceptions of control for successful peer relations and attributions of unknown control in unsuccessful situations of initiating and maintaining peer relations, as observed in Harter's intermediate beneffectance group.

4. Variations in social status and social anxiety.

Popular children have been found to have more positive affect and less social anxiety, while unpopular children have been observed to be more anxious and depressed (Vosk et al., 1982). These and other results reviewed in this chapter would lead to the expectations that the popular group might obtain the lowest social anxiety scores, and the reject or less-popular children may have the greatest amount of social anxiety.

5. Relationships between peer ratings and social status.

Peer rating results in this study would be expected to be consistent with previous research which has indicated that the stars are the most liked, rejects least liked, average group members would be found to be moderately liked, and the neglect group would be the least known but not disliked. The star and reject groups would be identified as the most visible and most well-known among their peers.

CHAPTER III

METHODOLOGY

Description of the Subjects and Selection

The population for this study consisted of 124 eighth-grade students (54 boys, 70 girls; X age = 13.8) from a single middle school located in a suburban midwestern community. Approximately 90% of the eighth-grade students from this school participated in the study. The subjects came primarily from white middle-class families, whose parents were employed in blue-collar, service, and some professional positions. These students were completing their third and final year in this middle school. The majority of students had become acquainted with each other over the previous three years, and the average length of attendance within this school system was over 6 years. The inclusion of students for selection and participation in this study was contingent upon receiving school administrative permission, teacher cooperation, and written parental and student consent.

Eighth-grade middle school students were selected as the population for this investigation because it has been found that the accuracy of children's self-perceptions improves dramatically in eighth and ninth grades (Harter, 1982). Research on the relationship between actual scholastic (grades and teachers' ratings) and perceived cognitive competence has demonstrated increased correlation of .30 in

third grade to .60 in sixth grade, a drop to .30 in seventh grade, and continued increased positive correlation of up to .65 in eighth and ninth grades (Harter, 1982). Children's accuracy in judging scholastic competence gradually increases during the elementary school years, and appears to drop temporarily as the children adjust to the transition of a new school program and environment. The correlation between self-judgments and actual functioning once again increases with further experience and adjustment. Eighth graders have had more than 2 full years to know each other and adjust. Harter proposed that the observed increased accuracy of self-judgments compared to actual functioning may generalize to social as well as other domains of functioning.

Research Design

The dependent variables for this study included (1) a perceived social competence measure; (2) a self-worth measure; (3) measures for internal, external, and unknown perceived control for both success and failure in social and general situations (six variables); (4) a social anxiety; (5) a peer liked-disliked; and (6) not known peer ratings. The independent variables were sex and the social status groups of star, reject, average, and neglect. The design matrix was $2 \times 4 \times 11$, as shown in Figure 3.1.

Instrument Description and Rationale for Selection

Positive Peer Nomination

A liked dimension was determined by using a peer nomination question asking each student to choose three same-sex and three

DEPENDENT VARIABLES (Measurement Instruments)		INDEPENDENT VARIABLES				
		<u>Social Status Groups</u>				<u>Gender</u>
		Stars	Rejects	Neglects	Average	Males Females
<u>Perceived Control</u>						
<u>Sources of Control</u>						
Internal	success					
	fail					
External-Powerful	success					
Others	fail					
Unknown	success					
	fail					
<u>Perceived Competence</u>						
Social						
General Self-Worth						
<u>Social Anxiety</u>						
<u>Peer Ratings</u>						
Like-Dislike						
Not Known						

Figure 3.1.--Research design matrix.

opposite-sex peers the individual liked to hang around the most. A grade roster was used to provide a reminder of all grade members, to reduce forgetting.

Negative Peer Nomination

Students were asked to nominate three same-sex and three opposite-sex classmates they liked to hang around the least by checking the names off the grade roster and writing three choices for each gender.

Peer-Rating

Each eighth grader rated all of his/her classmates on how much he/she liked to hang around them. A six-point Likert rating scale was used. The ratings were anchored on one end by 1 (don't like to a lot) and 5 (like to a lot) on the other end of a continuum.

An additional sixth option, and more unique aspect of this study, involved the inclusion of a "do not know the person" or 0 category. This option allowed more clear differentiation of not knowing a person from not liking an individual. Subjects were not forced to choose a liked rating for someone they did not know. This approach provided an additional measure of visibility.

Perceived Social Competence and General Self-Worth Dimensions

These two dimensions were each assessed by seven question subscales obtained from the Perceived Competence Scale for Children (Harter, 1979). (See page for description of the entire scale.) The perceived social competence and general self-worth subscales were

chosen from the Perceived Competence Scale because this instrument has the advantage of validly and reliably measuring self-perceptions of competence for specific areas of functioning and particularly social functioning (Harter, 1982).

This instrument also had the advantage of using a "structured alternative format" which reduced socially desirable response tendencies. Questions consisted of two statements about children's functioning that represent competent and less-competent alternatives. A subject chose which statement best agreed with his/her own views, and the person checked a box under the alternative that indicated whether the statement was "really true for me" or "sort of true for me." (See Appendix E.)

The social subscale focused on questions dealing with perceived popularity, friendship making, and friendship maintenance. The general self-worth subscale examined feelings about oneself as a person.

Perceived Control in the Social
Domain of Functioning and in
General Overall Functioning

These two dimensions were evaluated through the use of the Multiple Measure of Children's Perceptions of Control (Connell, 1980) general and social domain subscales. (See Appendix F.) These self-report measures consisted of 12 questions for each subscale. They were designed to measure reasons children give for their successes or failures generally, as well as in making and maintaining peer relationships. Scores for three possible sources of control were provided: internal, external, and the category of unknown control, which

indicated the child did not know who or what was responsible for his/her experiences of success or failure in social situations.

These measures were chosen because they have the capability of measuring children's perception of control for success and failure situations in specific domains of functioning. This capability has potential for providing greater discrimination of assessment for the development of intervention programs.

Social Anxiety Dimension

This affective dimension was measured by the seven-question Peer Acceptance subscale (see Appendix G) from the Children's Concerns Inventory (Buhrmester, 1982), which is a measure of the extent to which a child might or might not be worried about making and keeping friends. Each child chose one of four options to indicate the extent of his/her concern.

This measure was chosen because it is "one of the few measures available that assesses social anxiety in children" (Buhrmester, 1982, p. 8). It was also designed to be compatible with the perceived competence and perceived control measures used in this study.

Administration of Research Instruments

The investigator met with all eighth-grade students for a 20-minute period during their math classes. The purpose, general goals, and procedures were explained, and students were given an opportunity to ask questions. A letter of explanation and parental consent form were provided and sent home. (See Appendix A.) Students also

completed a consent form indicating whether they were willing to participate. (See Appendix B.)

A 2-week period was used for return of parental consent forms. During this period, a large envelope was taped to the blackboard with the class hour and a slogan urging students to return their consent forms. An incentive program, using a cash reward for the first three classes that obtained a 90% return rate, was employed. The rewards were to be used for a class party. A 90% response rate was obtained for the entire eighth grade.

At the completion of the consent-return period, students were administered a booklet containing the peer nominations; the perceived social competence, self-worth, control, social anxiety scales; and peer ratings during one class period. (See Appendix H.) A second administration was provided 4 days later for students who were absent during the first administration.

Identification numbers were assigned to each booklet and served as the only form of identification for data collection, tabulation, and reporting. A brief set of directions was explained, and students were monitored for questions or problems by the examiner and an assistant.

Students were asked not to talk during the period and not to discuss their responses. Students returned their booklets directly to the investigator upon completion.

Hypotheses

Sex Differences

Hypothesis 1: Girls' perceived social competence mean scores will be greater than boys' perceived social competence mean scores.

Hypothesis 2: Girls will have social anxiety mean scores that are greater than boys' mean scores.

Hypothesis 3: No significant difference will be found between boys and girls on perceived self-worth and perceived control mean scores.

Hypothesis 4: There will be no relationships between sex and sociometric groups.

Sociometric Group Differences on Perceived Competence, Perceived Control, and Social Anxiety

Perceived Competence Measure

Hypothesis 5a: Stars will obtain greater mean scores on perceived social competence and perceived self-worth than the average, neglect, and reject groups.

Hypothesis 5b: Neglects will have perceived social competence and general self-worth mean scores that are less than the star, average, and reject group mean scores.

Hypothesis 5c: Rejects will obtain greater perceived social competence and general self-worth mean scores than the average group.

Perceived Control Measures

Hypothesis 6: Stars will receive internal-success control mean scores that are greater than external-success and internal-failure mean scores.

Hypothesis 7: Stars will have internal-success control mean scores that are greater than the internal-success control mean scores for the rejects and neglects groups.

Hypothesis 8: Rejects will obtain internal-success control mean scores that are greater than external-success control mean scores; external-failure will be greater than internal-failure mean scores; and unknown-failure will be greater than internal-failure mean scores.

Hypothesis 9: Neglects will have unknown control and external control mean scores that are greater than their own internal control mean scores.

Hypothesis 10a: The average group will obtain internal-success mean scores that will be greater than their internal-failure mean scores.

Hypothesis 10b: Internal-success mean scores will be greater than external-success mean scores.

Hypothesis 10c: Unknown-failure will be greater than internal-failure mean scores.

Hypothesis 10d: Internal-failure mean scores will be greater than external-failure mean scores.

Social Anxiety

Hypothesis 11: Stars' social anxiety mean scores will be less than the scores obtained by the average, neglect, and reject groups; and the reject group will obtain social anxiety scores that are greater than the star, average, and neglect groups.

Data Analysis

After the administration of the research instrument booklet, all subject names on the peer nomination and peer rating forms were converted into numerical identification codes. Raw data response scores for all variables were then typed into a Cyber 750 computer using an interactive data-collection system.

Peer social status group classification was accomplished through the use of positive and negative sociometric peer nominations. Children were asked to choose three same-sex and three opposite-sex

students in their grade whom they liked to hang around the most and three same-sex and three opposite-sex eighth-grade peers whom they liked to hang around the least. A peer rating measure of how much each student liked other students in the eighth grade was also used to validate these selections and groupings.

Peer nominations for each student were tabulated, resulting in the creation of peer nomination liked and disliked scores. Total liked and disliked scores were also added together to create a social impact score (a measure of how known or visible the student was to one's peers).

Social status group assignments were then obtained through the use of the two-dimensional social status classification method, which applied a probability formula to establish group selection criteria. This method identified nomination scores that represented rare liked and disliked scores. This approach enabled students to be assigned to one of four social status classifications: star, reject, average, and neglect groups. The star group was defined as those subjects who received a rare liked score greater than or equal to 10 and a rare disliked score of less than 5. The average group was selected on the basis of an impact score (liked and disliked scores) greater than 4, a liked score less than 10, and a disliked score less than 10. Neglect students were identified as those individuals who obtained an impact score of less than 4. The reject group included those individuals with liked scores of less than 5 and disliked scores greater than 10.

The standardized Z-score method for group selection was also used and compared to the probability method. The probability method was found to classify all but 5 students compared to 20 with the Z-score method. The probability method remained the selected method.

After group classification and selection were completed, individual responses on all dependent measures were summed, and mean scores were obtained for social competence, self-worth, perceived control (internal-success, internal-failure, external-success, external-failure, unknown-success, and unknown-failure), social anxiety, liked-disliked, and not known scores. In addition, means for internal, external, and unknown-other for both the social and general domains were calculated.

The next step in the analysis of data began to focus on the basic question of whether eighth graders who varied in gender or social status differed in their self-perceptions of their social and general functioning. To begin to test the hypotheses in this study, multivariate analyses of variance (MANOVA) were used to test for significant overall effects on all the dependent measures. Analysis of variance procedures were used and examined for significant effects within each subscale of each instrument. A third procedure, planned comparisons using t and F tests, was then used to test for significant differences between social status groups on each individual dependent measure. Data analysis was conducted with a Cyber 750 computer at the Michigan State University Laboratory.

Limitations of the Study

An important limitation of this study was the presence of a self-selection factor that produced some restrictions in the population selection. Subject dropout and reduced involvement are a part of most human research efforts. However, examining the limited information on the characteristics available on the nonparticipating students indicated that 13 of the 14 nonparticipants were boys. In addition, peer nomination data were available on all eighth-grade students and indicated that the three students most often chosen as least preferred were also nonparticipants. These findings would indicate that student self-selection tended to attenuate findings for gender differences and, to some extent, social status differences, particularly for the reject group.

In addition, the population was highly homogeneous, with little minority representation. Therefore, the findings from this study should not be generalized to populations with significant minority representation.

CHAPTER IV

RESULTS

The purpose of this chapter is to describe the reliability coefficients for each subscale used in this study, to discuss the results of hypothesis testing, and to present supplementary findings on general subject response trends as well as results on the relationship of peer ratings to social status groups. Succeeding sections examine the relationships between social status and gender differences, perceived social competence, general self-worth, perceived control, and social anxiety.

The Measurement Model

Before analyzing the data, the psychometric properties of the Perceived Competence Scale for Children (PCSC), the Multiple Measure of Children's Perceptions of Control (MMCPC), and the Social Anxiety subscale were investigated. Standard score coefficient alphas were computed to assess the internal consistency for each of the subscales of the three self-perception instruments. Using the total student sample, considerable reliability was obtained for each of the subscales of the PCSC (alpha = .94, .94, .94, and .94 for the cognitive, social, physical, and general self-worth scales, respectively). These

indices of reliability were slightly higher than those reported by both Harter (1982) and Newcomb and Bulkowski (1983).

The perceived control subscales of the MMCPG were also found to be highly reliable ($\alpha = .88, .78, .81, .89, .83$, and $.83$ for the social-internal, social-other, social-unknown, general-internal, general-other, and general-unknown subscales, respectively). These findings were consistent with and higher than the composite internal-consistency coefficient reported by Connell (1980). An $\alpha = .90$ was also obtained on the Social Anxiety Scale. The greater coefficient alphas observed in this study may have resulted from the very homogeneous nature of the population. The subject population represented children with similar backgrounds, with almost no minority participation.

Social Status Group Distribution

Before the analyses to determine the presence of gender or social status differences across all dependent measures, children were classified into four social status groups using the binomial probability approach with a two-dimensions social impact and social preference framework, as described in Chapter I. These two dimensions were created through the use of positive and negative peer nominations, in which students were asked to indicate the pupils in their eighth-grade class they liked to hang around with the most and those with whom they least preferred to associate. By using this classification approach, 133 out of 138 eighth graders were classified into one of four social status groups, as indicated in Table 4.1.

Table 4.1.--Social status group distribution.

Group	Total Class (N = 138)		Group Excluding Nonparticipating Students and Missing Data (N = 118)	
	Freq.	Percent	Freq.	Percent
Star	23	16.6	21	16.9
Average	69	50.0	63	50.8
Neglect	21	15.2	18	14.5
Reject	20	14.5	16	12.9
Unclassified	5	3.6		
Total	138		118	

	Boys	Girls	Total
Star	12	9	21
Average	21	42	63
Neglect	10	8	18
Reject	8	8	16
Total	51	67	118

Note: A multivariate analysis of variance (MANOVA) of Sex and Social Status resulted in no significant overall main effect.

In addition, no significant relationship was found between the length of time a student had been enrolled and attended school in the district and the extent to which he/she was nominated as liked, disliked, or unknown.

Peer Ratings and Social Status

To obtain an additional measure of each student's social desirability among his/her peers, peer rating measures were administered to

each participating student. These instruments provided measures of the students' likeability, as well as their visibility among their classmates, in contrast to the peer nomination instruments, which provided measures of popularity (peer friendship preference). Mean scores and standard deviations for star, average, neglect, and reject groups were computed for the peer liked-disliked ratings and the "don't know" visibility rating. These mean scores and standard deviations are presented in Table 4.2.

To determine if the liked-disliked rating scores significantly interacted with social status, an analysis of variance was computed and a significant overall effect was obtained ($F [3,129] = 47.55, p < .001$). t -tests were then employed to test for significant differences between social status groups. Two of three planned-contrast t -tests were significant. As can be seen in Table 4.2, stars had significantly greater peer ratings than the average, neglect, and reject groups ($t = 8.2881, p < .0001$). Rejects were found to be significantly less liked than subjects in the other three groups ($t = 4.9376, p < .0001$). No significant difference was found between the average and reject groups.

A separate "not known" score was obtained by computing a mean score for all zero ratings obtained and then running a separate analysis of variance (ANOVA). The ANOVA was found to be significant ($F [3,129] = 4.310, p < .01$). Two planned-contrast t -tests were also found to be significant. Significantly fewer people indicated they did not know the star group ($M = 9.8$), as compared to the average ($M = 17.7$), neglect ($M = 20.7$), and reject ($M = 12.6$) groups ($t = -2.7988,$

Table 4.2.--Liked, disliked, and not-known ratings.

Status Group	N	\bar{X}	SD	Significant Contrasts		
				T-Value	DF	T-Prob.
Liked-Disliked Ratings ^a						
Star	23	3.1	.3244	Star > Ave.	8.2881	129.0 .000
Average	64	2.3	.4551	Ave. vs. Neg.	Not Significant	
Neglect	21	2.3	.2774	Neg. > Rej.	4.9376	129.0 .000
Reject	20	1.6	.3258			
Don't-Know Ratings ^b						
Star	23	9.8	3.55	Star < Ave.	2.7988	129.0 .006
Average	69	17.7	13.27	Ave. vs. Neg.	Not Significant	
Neglect	21	20.7	16.27	Rej. > Neg.	2.2123	129.0 .029
Reject	20	12.6	3.5314			

^aLiked-disliked ratings: 5 = Like to hang around a lot
1 = Don't like to hang around a lot

^bDon't-know rating: 0 = Do not know

$p < .006$). Fewer people rated the reject group ($M = 12.6$) as not known compared with the neglect group ($M = 20.7$) ($t = 2.2123$, $p < .03$). The neglect and average groups were not significantly different in terms of the number of people who rated them as not being known.

The star and reject groups were the most visible and most well-known. The average group was more visible than the neglect group (greater mean scores), although the difference was not statistically significant. The neglect group was the least-known group; the most students indicated they did not know these children.

Results from the liked-disliked and not-known ratings were consistent with the social status group classification results obtained through the use of peer nominations. The peer ratings provided concurrent support for the validity of the social status group selection.

Gender Differences for Social Status and Self-Evaluation Measures

In an effort to determine whether there were gender differences between eighth-grade males and females on each instrument administered, mean scores were computed for each child on each instrument. The mean scores were then subjected to multivariate analyses of variance (MANOVAs) to determine whether there were statistically significant effects for gender.

Only one significant main overall effect for gender was obtained, a significant multivariate effect on the PCSC ($F [4,98] = 2.87$, $p < .05$). Univariate analyses of variance were run, and a significant effect was found on the physical subscale of the PCSC ($F [1,101] =$

4.23, $p < .05$). Males ($\bar{X} = 2.3$) attributed responsibility for success or failure in social situations to significant others to a greater extent than did females ($\bar{X} = 2.0$).

Of the four hypotheses examining gender differences, three were not found to be supported by the results in this study; one hypothesis was supported.

Hypothesis 1: Girls' perceived social competence mean scores will be greater than boys' perceived social competence mean scores.

Boys ($\bar{X} = 2.9$, $N = 48$) and girls ($\bar{X} = 3.0$, $N = 61$) were not found to be significantly different in their self-perceptions of their ability to make and maintain friendships. On an average, boys and girls were generally and equally socially competent. The prediction that girls' social competence would be higher than boys' social competence was not supported, nor could it be accepted from the obtained data.

Hypothesis 2: Girls will have social anxiety mean scores that are greater than boys' social anxiety mean scores.

Girls ($\bar{X} = 2.4$, $N = 67$) were not found to have significantly greater social anxiety than boys ($\bar{X} = 2.3$, $N = 51$). Because no significant differences were found, this hypothesis was rejected.

Hypothesis 3: No significant differences will be found between boys and girls on perceived self-worth and perceived control mean scores.

This hypothesis was accepted with one exception. When both boys and girls attributed responsibility for their social successes or

failures to other people, boys ($\bar{X} = 2.3$) perceived others as being responsible to a greater extent than did girls ($\bar{X} = 2.0$).

Hypothesis 4: There will be no relationship between sex and sociometric groups.

Gender and sociometric classification were not found to be related. Neither boys nor girls were overly represented in any one social status group, relative to the number of boys and girls in the sample. Therefore, this hypothesis was accepted.

Intercorrelations Between Perceived Social Competence,
Self-Worth, Perceived Control, and Social Anxiety

The degree of association among the subscales was examined by computing their intercorrelations. The results of the intercorrelations are presented in Table 4.3. All intercorrelation coefficients reported in this section were significant; their individual probability levels are also presented in Table 4.3.

Perceived social competence and general self-worth were found to be the most highly intercorrelated subscales in this study ($r = .56$). Social competence also was found to correlate significantly with the perceived control subscales of social-internal control ($r = .20$) and negatively with both the social-unknown and the social anxiety subscales ($r = -.21$ and $-.33$, respectively). It appeared that as social competence increased, social-unknown perceived control and social anxiety decreased. When social competence decreased, social-unknown control and social anxiety increased.

General self-worth positively correlated with social-internal control ($r = .28$) and negatively correlated with both social-unknown control and society anxiety ($r = -.23$ and $-.46$, respectively). Social-internal control also correlated positively with general internal control ($r = .28$) and negatively correlated with social-unknown control ($r = -.18$). Social-other also positively correlated with general-other and social anxiety ($r = .39$ and $.27$, respectively). Social-unknown control also positively intercorrelated with general-other, general-unknown, and social anxiety ($r = .37$, $.53$, and $.24$, respectively). General-unknown positively intercorrelated with general-other and social anxiety ($r = .22$ and $.33$, respectively).

Relationships Between Perceived Social Competence, Self-Worth, and Social Status

To investigate possible associations between perceived social competence, self-worth, and social status, mean scores for each subject on both seven-question subscales were computed. Subjects were then separated into social status groups, and mean scores for each social status group on each subscale were computed. These group mean scores are shown in Table 4.4.

A multivariate analysis of variance (MANOVA) was then employed. An overall significant effect for social status was obtained ($F [12,260] = 1.72$, $p < .06$). Univariate effects occurred for social competence ($F [3,101] = 4.78$, $p < .05$) and general self-worth ($F [3,101] = 3.51$, $p < .05$). No significant univariate effects for paired

comparisons were obtained for either the cognitive or the physical subscales. Thus no results are reported for these two subscales.

Table 4.4.--Perceived social competence and self-worth subscales: mean scores and standard deviations by social status group.

Subscale	Social Status Group							
	Star (N=20)		Average (N=58)		Neglect (N=17)		Reject (N=14)	
	<u>X</u>	<u>SD</u>	<u>X</u>	<u>SD</u>	<u>X</u>	<u>SD</u>	<u>X</u>	<u>SD</u>
Social	3.3	.4747	2.9	.5766	2.7	.5174	2.7	.7472
Self-worth	3.2	.5051	2.8	.5752	2.9	.5178	2.6	.5727

Hypotheses 5a, 5b, 5c through Hypothesis 10d focused on predicted self-perception differences both within and between the four social status groups. Hypotheses 5a, 5b, and 5c examined possible significant differences in perceived social competence and self-worth response patterns among the star, neglect, average, and reject social status groups. These hypotheses are as follows:

Hypothesis 5a: Stars will obtain greater mean scores on perceived social competence and perceived self-worth than the average, neglect, and reject groups.

Hypothesis 5b: Neglects will have perceived social competence and general self-worth mean scores that are less than the star, average, and reject group mean scores.

Hypothesis 5c: Rejects will obtain greater perceived social competence and general self-worth mean scores than the average group.

Planned comparisons were then performed for each of the four social status groups on both the social competence and general self-worth subscales. Two of three planned comparisons for the social competence subscale were statistically significant. The star ($\bar{X} = 3.3$) and the average groups ($\bar{X} = 2.9$) were found to be significantly more socially competent than the neglect ($\bar{X} = 2.7$) and the reject ($\bar{X} = 2.7$) groups ($E [1,107] = 3.73, p < .06$). Stars also had significantly higher social competence than the average group ($\bar{X} = 2.9$) ($E [1,107] = 6.95, p < .01$). The neglect ($\bar{X} = 2.7$) and reject ($\bar{X} = 2.7$) groups were equal and were not found to differ significantly in their perceptions of social competence.

Planned comparisons between social status groups on general self-worth resulted in significant effects on two out of the three comparisons. Star general self-worth ($\bar{X} = 3.2$) was found to be significantly greater than the average ($\bar{X} = 2.8$), neglect ($\bar{X} = 2.9$), and reject ($\bar{X} = 2.9$) self-worth mean scores ($E [1,107] = 5.05, p < .07$). The average and neglect groups were not significantly different, and the reject group had significantly lower self-worth mean scores than the star, average, and neglect groups.

To summarize these results, the star group was found to have significantly greater perceived social competence and self-worth than the average, neglect, and reject groups. Hypothesis 5a was thus confirmed and could be accepted. The reject group was found to have the lowest self-worth scores, but the reject and neglect groups equally had the lowest perceived social competence. Hypothesis 5b, which

predicted that the neglect group would obtain the lowest perceived social competence and self-worth mean scores of the four social status groups, was not confirmed. Only neglects' social competence was lowest of the four groups. The average group obtained significantly greater perceived social competence and self-worth mean scores than the reject group. These results were opposite the response trends predicted in Hypothesis 5c, which stated that the reject group's social competence and self-worth mean scores would be greater than the average group's scores. Thus, Hypothesis 5c was not confirmed.

In addition, a post hoc comparison was run to determine whether the neglect self-worth score ($\bar{X} = 2.9$) was significantly greater than the neglect social competence score ($\bar{X} = 2.7$). Neglect self-worth was found to be significantly greater than the neglect self-perceptions of social competence ($F [1,16] = 5.29, p < .04$).

Perceived Control and Social Status

To begin to investigate whether significant relationships existed between social status and perceptions of control, social situations and general views about control (social and general perceived subscales) were initially examined separately for differences across the four social status groups. The means and standard deviations for each social status group for each locus of control (internal, external, and unknown) are shown in Table 4.5.

Table 4.5.--Perceived control and social and general situations:
mean subscale scores and standard deviations by social
status group.

Locus of Control and Subscale	Social Status Group							
	Star (N=21)		Average (N=54)		Neglect (N=17)		Reject (N=14)	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
<u>Social</u>								
Internal	3.1	.3900	3.0	.4614	3.0	.4239	2.9	.4284
External	2.2	.4495	2.1	.4189	2.0	.6060	2.3	.4728
Unknown	2.4	.5100	2.4	.5718	2.4	.6370	3.0	.5904
<u>General</u>								
Internal	2.9	.3964	2.9	.4366	3.0	.4507	3.1	.6221
External	2.6	.4282	2.4	.3965	2.5	.6180	2.7	.4265
Unknown	2.2	.4364	2.4	.4748	2.1	.4588	2.5	.6361

An analysis of variance was employed, and a main significant effect was found for the social unknown control subscale (SUNK) ($F [3,97] = 4.90, p < .01$). This was the only significant overall effect obtained across the social perceived control subscale. Planned contrasts for the SUNK subscale comparing star, average, neglect, and reject groups revealed that the reject group ($\bar{X} = 3.0$) made significantly greater attributions of control to unknown factors in social situations than did the star ($\bar{X} = 2.4$), average ($\bar{X} = 2.4$), or neglect ($\bar{X} = 2.4$) groups ($F [1,101] = 12.59, p < .001$). This tendency begins to provide support for the significant presence of attributions of unknown control for the reject group that was predicted in Hypothesis 6.

The next step in the analyses involved the combination of social and general perceived control subscales into one subscale to better examine possible perceived control differences across social status groups in separate success and failure situations and to facilitate the investigation of the a priori planned comparisons developed to test Hypotheses 5a through 10d. Mean scores and standard deviations for these perceived control subscales can be found in Table 4.6. This procedure was necessary to increase the number of perceived control response questions that would contribute to the make-up of each subscale cell and to increase the number of respondents for each perceived control subscale. The combination of domains of functioning (social and general) was deemed permissible in the scale manual as a means of examining differences in attributions of control for separate success and failure situations (Connell, 1980).

Mean scores and standard deviations for the combined perceived control scale were then computed and can be found in Table 4.6. Means for internal, external, and unknown sources of control in success and failure situations were compared within and between social status groups through the use of a priori planned comparisons. These comparisons were designed to examine the presence of possible perceived control response patterns, particularly the self-identity protective benefactance patterns identified by Harter (1983).

Table 4.6.--Perceived control--success and failure situations: mean scores and standard deviations for combined general and social for failure and success situations.

Locus of Control and Situation	Social Status Group							
	Star (N=21)		Average (N=54)		Neglect (N=17)		Reject (N=13)	
	<u>X</u>	<u>SD</u>	<u>X</u>	<u>SD</u>	<u>X</u>	<u>SD</u>	<u>X</u>	<u>SD</u>
<u>Internal</u>								
success	3.1	.4574	3.1	.4314	3.1	.4430	3.2	.4436
failure	2.8	.3345	2.8	.4995	2.9	.5009	2.8	.6739
<u>External</u>								
success	2.7	.4629	2.3	.4350	2.4	.6438	2.6	.5112
failure	2.0	.3732	2.2	.4075	2.1	.5598	2.3	.4820
<u>Unknown</u>								
success	2.3	.5585	2.5	.5619	2.3	.5780	2.6	.6137
failure	2.3	.4931	2.3	.5955	2.2	.5503	2.9	.6109

Perceived Control--Star Group

Hypothesis 6, the first perceived control hypothesis, proposed that the star group would perceive themselves as more personally responsible for their success in social and general situations than in failure situations. It was also hypothesized that they would attribute greater control to themselves than to others in successful situations. This hypothesis stated:

Hypothesis 6: Stars will receive internal-success control mean scores that are greater than external-success and internal-failure mean scores.

A planned comparison confirmed that star internal-success ($\bar{X} = 3.1$) was significantly greater than external-success ($\bar{X} = 2.7$) ($F [1,20] = 5.70, p < .05$). Star internal-success ($\bar{X} = 3.1$) was also significantly greater than star internal-failure ($\bar{X} = 2.8$) ($F [1,20] = 9.06, p < .01$). Both components of the hypothesis were significant in the predicted direction, resulting in the acceptance of Hypothesis 6.

Hypothesis 7 proposed that the star group would perceive themselves as personally responsible for success in social and general situations to a significantly greater extent than the reject and neglect groups.

Hypothesis 7: Stars will have internal-success mean scores that are greater than internal-success mean scores for the reject and neglect groups.

Star internal-success was not found to be significantly different from internal-success for either the reject or the neglect groups. Hypothesis 7 was not proven and was thus rejected.

Perceived Control--Reject Group

In Hypothesis 8, the reject group was predicted to exhibit a defense response pattern on the perceived control measure. It was predicted that this group would perceive themselves as personally responsible in success situations and tending either to blame others or not to know who or what was responsible for failure in general or social situations.

Hypothesis 8: Rejects will obtain internal-success control mean scores that are greater than external-success control mean scores; external-failure will be greater than internal-failure mean scores, and unknown-failure will be greater than internal-failure mean scores.

Reject internal-success ($\bar{X} = 3.2$) was confirmed as being greater than external-success ($\bar{X} = 2.6$) ($E [1,13] = 18.40, p < .001$). Internal-failure ($\bar{X} = 2.8$) was found to be significantly greater than external-failure ($\bar{X} = 2.3$) ($E [1,15] = 5.54, p < .05$), which was contrary to the predicted direction, resulting in the rejection of this statement. Unknown-failure ($\bar{X} = 2.9$) was also not found to be significantly greater than internal-failure ($\bar{X} = 2.8$). These last two statements did not confirm the proposition that the reject group would tend to blame others for their failures. The reject group tended not to know who or what was responsible for their failures to an equal or slightly greater extent than they perceived themselves as being responsible.

Two additional planned comparisons were computed to examine further the prediction, arising out of this hypothesis, that the reject group would exhibit significant unknown and external-other response tendencies in failure situations. Reject external control in failure situations ($\bar{X} = 2.3$) was compared to star external control ($\bar{X} = 2.0$); the reject scores were found to be significantly lower ($E [1,112] = 4.23, p < .05$). Rejects tended to blame others for their failures to a greater extent than did the star group members. Reject mean scores were also greater than those of the average ($\bar{X} = 2.2$) and the neglect groups ($\bar{X} = 2.1$), but they were not statistically significant.

Reject unknown-failure control ($\bar{X} = 2.9$) was contrasted with star unknown-failure ($\bar{X} = 2.3$) to determine if reject uncertainty about what caused their failures was significantly greater than the star, average, and neglect attributions of unknown control in failure situations. The reject group was found to have significantly greater unknown control than the other groups ($F [1,11] = 9.49, p < .005$).

To summarize the findings for Hypothesis 8, reject internal-success was found to be significantly greater than external-success. External and unknown failure were not found to be greater than internal-failure, as originally predicted. Only the first statement for this hypothesis could be accepted (internal-success > external-success); however rejects did have unknown-failure scores that were significantly greater than those of the star, average, and neglect groups. Reject attributions of unknown control ($\bar{X} = 2.9$) were found to be as great as reject internal-failure ($\bar{X} = 2.8$). Rejects also tended to blame others for their failures to a greater extent than did stars.

Perceived Control--Neglect Group

The neglect group was predicted to have a defensive self-protective control pattern similar to that postulated for the reject group. In this pattern, internal control was predicted to be less than external or unknown control.

Hypothesis 9: Neglects will have unknown control and external control mean scores that are greater than their own internal control mean scores.

The results of these analyses indicated that neither statement was confirmed; hence neither one could be accepted. The internal control mean score ($\bar{X} = 3.0$) was found to be greater than, rather than less than, external-other ($\bar{X} = 2.2$) and unknown mean control scores ($\bar{X} = 2.3$). The neglect group perceived themselves as being in control of what happened to them, rather than not being aware or blaming others.

Perceived Control--
Average Group

Hypothesis 10 predicted that the average group would have a perceived control response pattern like Harter's (1983) intermediate beneffectance group. This pattern was found by Harter to have the largest number of people who attributed greater responsibility to themselves (internal control) than to others (external control) but indicated, in failure situations, that they did not know who or what was responsible. Harter found this pattern to be a means of protecting their self-identities in failure situations. The following four hypotheses were developed to test possible perceived control response patterns for the average group:

Hypothesis 10a: The average group will obtain internal-success mean scores that will be greater than their internal-failure mean scores.

Hypothesis 10b: Internal-success mean scores will be greater than external-success mean scores.

Hypothesis 10c: Unknown-failure will be greater than internal-failure mean scores.

Hypothesis 10d: Internal failure mean scores will be greater than external-failure mean scores.

Three of the four hypotheses that tested average group response patterns were confirmed and accepted; only Hypothesis 10c was not confirmed and rejected. Planned comparison results confirmed Hypothesis 10a, which predicted that internal-success ($\bar{X} = 3.1$) was greater than internal-failure ($\bar{X} = 2.8$) ($F [1,58] = 12.30, p > .001$). Average group internal-success ($\bar{X} = 3.1$) was also found to be greater than external-success ($\bar{X} = 2.6$) ($F [1,61] = 87.73, p < .001$), confirming Hypothesis 10b. Internal responsibility for failure situations ($\bar{X} = 2.8$) was significantly greater than attributions of unknown control for failure situations ($\bar{X} = 2.3$) ($F [1,57] = 28.12, p < .0001$)--opposite the direction predicted in Hypothesis 10c. This result indicated that Hypothesis 10c could not be accepted and that the average group did not exhibit a self-protective pattern of avoidance of personal responsibility for failure situations. Finally, as predicted in Hypothesis 10d, the average group perceived themselves in control in failure situations ($\bar{X} = 2.8$) to a greater extent than they believed others to be responsible ($\bar{X} = 2.2$) ($F [1,56] = 45.41, p < .001$).

General perceived control response patterns were also present across all social status groups when differentiating success from failure situations. Internal control for both success and failure situations was found to be greater than external-other and unknown perceived control scores for all but the reject group. This variation involved unknown failure ($\bar{X} = 2.9$) being as high as or greater than internal-failure ($\bar{X} = 2.8$) or others external-failure ($\bar{X} = 2.6$).

Social Anxiety and Social Status

Hypothesis 11 was formulated to investigate the presence of possible differences in social anxiety among star, average, neglect, and reject groups. Social status group mean scores and standard deviations are presented in Table 4.7. Hypothesis 11 predicted that there would be a negative relationship between social anxiety and social status: the higher the social status or popularity, the lower the social anxiety.

Hypothesis 11: Star social anxiety mean scores will be less than the scores obtained by the average, neglect, and reject groups; rejects will obtain mean social anxiety scores that are greater than the other three groups.

A significant main effect (ANOVA) between social status and social anxiety was obtained ($F [3,110] = 3.04, p < .05$). Planned comparisons resulted in one significant univariate effect. Stars ($\bar{X} = 2.0$) were found to be significantly lower on social anxiety than the average ($\bar{X} = 2.4$), neglect ($\bar{X} = 2.3$), and reject ($\bar{X} = 2.5$) groups ($F [1,114] = 8.54, p < .01$). The average, neglect, and reject groups were not found to be significantly different in their self-perceptions of social anxiety.

As predicted by the hypothesis, the reject group had the highest ratings for social anxiety, and the star group was less socially anxious than the average, neglect, and reject groups. The average, neglect, and reject groups were not significantly different, and the prediction that the reject group would have higher social anxiety was not supported.

Table 4.7.--Social anxiety subscale results.

	<u>N</u>	<u>\bar{X}</u>	<u>SD</u>
<u>Social Status Group</u>			
Star	21	2.0	.5242
Average	63	2.4	.4807
Neglect	18	2.3	.5033
Reject	16	2.5	.6878
<u>Gender</u>			
Male	51	2.3	.6204
Female	67	2.4	.4714

Summary of Findings

A summary of all of the hypothesis-testing results can be found in Tables 4.8 and 4.9. The overall analyses yielded no significant gender differences for social status, perceived social competence, self-worth, social anxiety, or peer liked-disliked ratings. Male physical competence was found to be greater than female physical competence, and males had greater attributions of external control than did females.

Stars had the highest social competence, self-worth, and peer liked-disliked ratings; they had the lowest social anxiety. The average group had moderately high levels of social competence, self-worth, and likeability ratings. The neglects had moderately high self-worth and likeability ratings, as well as the lowest social competence along with the rejects. Besides low social competence, rejects had the

Table 4.8.--Summary of support for hypotheses.

Hypothesis	Status
<u>Sex Differences</u>	
Hypothesis 1: Girls' perceived social competence mean scores will be greater than boys' perceived social competence mean scores.	Reject
Hypothesis 2: Girls will have social anxiety mean scores that are greater than boys' mean scores.	Reject
Hypothesis 3: No significant difference will be found between boys and girls on perceived self-worth and perceived control mean scores.	Accept
Hypothesis 4: There will be no relationships between sex and sociometric groups.	Accept
<u>Sociometric Group Differences on Perceived Competence, Perceived Control, and Social Anxiety</u>	
<u>Perceived Competence Measure</u>	
Hypothesis 5a: Stars will obtain greater mean scores on perceived social competence and perceived self-worth than the average, neglect, and reject groups.	Accept
Hypothesis 5b: Neglects will have perceived social competence and general self-worth mean scores that are less than the star, average, and reject group mean scores.	Reject
Hypothesis 5c: Rejects will obtain greater perceived social competence and general self-worth mean scores than the average group.	Reject
<u>Perceived Control Measures</u>	
Hypothesis 6: Stars will receive internal-success control mean scores that are greater than external-success and internal-failure mean scores.	Accept
Hypothesis 7: Stars will have internal-success control mean scores that are greater than the internal-success control mean scores for the reject and neglect groups.	Reject

Table 4.8.--Continued.

Hypothesis	Status
Hypothesis 8: Rejects will obtain internal-success control mean scores that are greater than external-success control mean scores; external-failure will be greater than internal-failure mean scores; and unknown failure will be greater than internal-failure mean scores.	Reject
Hypothesis 9: Neglects will have unknown control and external control mean scores that are greater than their own internal control mean scores.	Reject
Hypothesis 10a: The average group will obtain internal-success mean scores that will be greater than their internal-failure mean scores.	Accept
Hypothesis 10b: Internal-success mean scores will be greater than external-success mean scores.	Accept
Hypothesis 10c: Unknown-failure will be greater than internal-failure mean scores.	Reject
Hypothesis 10d: Internal-failure mean scores will be greater than external-failure mean scores.	
<u>Social Anxiety</u>	
Hypothesis 11: Stars' social anxiety mean scores will be less than the scores obtained by the average, neglect, and reject groups; and the reject group will obtain social anxiety scores that are greater than the star, average, and neglect groups.	Reject

Table 4.9.--Summary of findings.

Hypothesis Description	N	\bar{X}	SD	F	df	p	Status
1. Girl Social Competence > Boy Social Competence	G 61 B 48	3.0 2.8	.3480 .3924	Not Significant			Reject
2. Girl Social Anxiety > Boy Social Anxiety	G 67 B 51	2.4 2.3	.2222 .3849	Not Significant			Reject
3. No Difference Between Girl and Boy Perceived Self-Worth, Perceived Control				Not Significant			Reject
4. No Relationship Between Gender and Social Status				Not Significant			Accept
5a. Star Soc. Comp. > Ave., Neg., Reject Star Self-Worth > Ave., Neg., Reject	(See Table 4.3)			Significant			Accept
5b. Neglect Soc. Comp. < Star, Neg., Reject Neglect Self-Worth < Star, Neg., Reject	(See Table 4.3)			Not Significant			Reject
5c. Reject Soc. Comp. > Ave. Soc. Comp. Reject Self-Worth > Ave. Self-Worth	(See Table 4.3)			Not Significant			Reject
<u>Perceived Control</u>							
6. Star IS > ES	Star 21 21	3.1 2.7	.4574 .4629	5.70	1,20	.05	Accept
Star IS > IF	21 21	3.1 2.8	.4574 .3345	9.06	1,20	.01	Accept

Table 4.9.--Continued.

Hypothesis Description	N	\bar{X}	SD	F	df	p	Status
7. Star IS > Reject IS	21 14	3.1 3.2	.4574 .4436				
	Star Reject				Not Significant		Reject
Star IS > Neglect IS	21 17	3.1 3.1	.4574 .4430				
	Star Neglect				Not Significant		Reject
8. Reject IS > Reject ES	14 14	3.2 2.6	.4436 .5112	18.40	1, 13	.001	Accept
Reject EF > Reject IF	16 EF IF	2.3 2.8	.4820 .6549				
	Reject				Not Significant as Predicted		Reject
9. Neglect E > I	17 E I	2.3 3.0	.6110 .4357				
	Neglect				Not Significant		Reject
Neglect UNK > I	17 UNK I	2.2 3.0	.5320 .4357				
	Neglect				Not Significant		Reject
10a. Average IS > IF	59 IS IF	3.1 2.8	.4314 .4995	12.30	1, 58	.001	Accept
10b. Average IS > ES	62 IS ES	3.1 2.3	.4350 .4904	87.73	1, 61	.0001	Accept

Table 4.9.--Continued.

Hypothesis Description	<u>N</u>	<u>\bar{X}</u>	<u>SD</u>	<u>F</u>	<u>df</u>	<u>p</u>	Status
10c. Average UNK-F > IF	58	UNK 2.3 IF 2.8	.5812 .5034	Not Predicted 28.12	Direct. 1,57	.0001	Reject
10d. Average IF > EF	57	IF 2.8 EF 2.2	.5083 .4401	45.41	1,56	.0001	Accept
<u>Social Anxiety</u>							
11. Star < Ave., Neg., Reject				8.54	1,114	.01	Accept
	Star Average Neglect	2.0 2.4 2.3 2.5	.5242 .4807 .5033 .6878				
Reject > Star, Ave., Neg.					Not Significant		Reject

lowest self-worth, were least liked, and were found to be the second most socially visible group, next to the stars.

The average, neglect, and reject groups were found to be relatively equal in social anxiety. Only limited significant differences were obtained on the perceived control measure. The star, average, neglect, and reject groups all had greater attributions of internal control than external control for success and failure situations. Internal success and failure was also greater than unknown success and failure for the star, average, and neglect groups. The only significant perceived control response variations were observed in the reject group. Unknown-failure was found to be equal to internal-failure, rather than less than as in the other three groups. Reject unknown-failure was greater than star unknown-failure. Also, reject external-failure was found to be greater than star external-failure.

The findings from this investigation resulted in more limited gender differences in children's social self-perceptions than were predicted. Social status groups were found to have several significant variations in the predicted directions. However, little support was found for the presence of self-protective patterns for the neglect or reject groups. The neglects were found to resemble more closely the average group than the reject group. The star and average groups mostly resembled the hypothesized response directions. The following two chapters discuss the implications of these findings and summarize the relationship of the obtained results to the purposes of this investigation.

CHAPTER V

DISCUSSION

Children's abilities to develop and negotiate peer relations are essential for their later adaptive development. Understanding individuals' personal characteristics that affect and are influenced by one's peer relations has become increasingly important in comprehending the dynamics of peer-relations development and in constructing intervention programs to improve social functioning. This chapter discusses the importance of combining self-evaluations with peer evaluations of social status as a means of identifying and differentiating levels of social functioning.

Effectiveness of the Use of Peer Nominations and Ratings

As the influence of peer relations on child and adolescent development has become increasingly understood, the need for flexible, methodical assessment procedures that can provide a constant frame of reference across groups of diverse size and make-up has increased in importance. The use of probability theory applied to the two-dimensional social status classification method has proven to be a useful assessment tool for this purpose (Newcomb & Bukowski, 1983).

Using this approach, 133 out of the 138 eighth graders in the school chosen for study were classified into star, average, neglect, or reject groups. This classification compared with 118 out of 138 when using a modified standard score approach. These results were consistent with the findings of Newcomb and Bukowski (1983), who compared standard-score approaches used by Peery (1979) and Coie et al. (1982). These two studies failed to classify 12% and 46% of the same subjects, respectively, compared to total classification with the probability approach. In the current study, only 4.8% of all students could not be classified, compared to 14% of all students using the standard-score approach. The size and group distribution were generally consistent with those in the Newcomb and Bukowski study, with the number of stars in this study being slightly greater than that in the previous study.

The results of the liked-disliked ratings were consistent with the findings obtained from the peer nominations. The star group was rated as most liked, and the reject group was least liked. The average and neglect groups were moderately liked--more than the reject and less than the star groups. The neglect group, as expected, was the least-known group. These results indicated that children who were identified frequently as preferred companions by other eighth graders were also those individuals who were the best liked. Because of their popularity and high social visibility, students in the popular-status group were the least unknown among all eighth graders. Out of 124 students, only an average of 9.8 students indicated they did not know the popular students.

The reject group comprised those students who were most often nominated by their peers as least preferred to be with. These students were well-known by their peers and received the second lowest not-known rating. An average of 12.6 classmates indicated they did not know these students. Because of these students' highly negative status among their peers, their high visibility could be attributed to their negative reputations and negative interactions.

Peer rating results were particularly important because although the neglects were least known, with an average of 20.7 students indicating they did not know these children, the neglects were rated as well-liked as the average students. Although the neglects were not as well-known as other students, they were not disliked. The neglect subjects resembled the average students in terms of likeability for peer relations.

One of the strengths of this study was the use of the entire eighth-grade class, in contrast to using individual classrooms as the population from which peer nominations and ratings were obtained. This approach moved beyond the constraints of using a specific class or group of peers. It enabled the inclusion of a much larger number of students who experienced a greater number of interactions, developed over an expanded period of time, which occurred beyond the life or beginning of a particular class. The constraints of specific seating assignments and teacher influences on peer perspectives also were reduced.

Gender Differences for Social Status and Self-Perception Measures

Male and female eighth graders were found to be relatively evenly distributed across the social status groups, and no significant gender differences were found. Males and females in this study did not differ in their tendency to develop social status positions among their peers.

Only two significant gender differences were obtained on the self-perception measures used in this study. Eighth-grade boys' perceived physical competence ($\bar{X} = 2.87$) was significantly greater than that of eighth-grade girls ($\bar{X} = 2.66$) ($E [4,98] = 2.87, p < .05$). Boys and girls did not differ significantly on the cognitive, general, or social scales. Bukowski and Newcomb (1983) also obtained results that indicated boys were greater than girls on perceived physical competence and no sex differences on social competence. They also found that girls had greater cognitive competence and boys had greater general self-worth, findings that were not supported in this study.

The finding of greater perceived physical competence for boys may be due to the emphasis of this scale on sports and outdoor activities, which are more group oriented. A strong argument has been made for the presence of differences in friendship and interpersonal style between boys and girls. Boys' social relations have been described as "expansive" and characterized by interactions with several peers which more strongly favor group activities (Brendt, 1982; Bukowski & Newcomb, 1983; Waldrop & Halverson, 1975). Girls' social relations have been described as "intensive," being based on a concentration of friendship with a limited and specific number of friends. The construction of the

physical competence scale would thus favor boys and more likely tap group, sport, and recreational interactive tendencies.

The absence of findings in this study that supported Hypothesis 1, which predicted that perceived social competence for girls would be greater than that for boys, could be attributed to the emphasis of this subscale on general peer initiation and maintenance experiences. Male and female eighth graders did not differ in their levels of perceived social competence when examining peer relationships from a general perspective of peer relations, whereas gender differences have been obtained from research on children's and adolescents' approaches to friendship and intimacy, which was cited earlier.

The one other significant gender difference involved greater male than female attribution of external control in social situations. Boys, to a greater extent than girls, perceived others as being responsible for their social successes or failures. Both boys and girls, however, attributed greater control in social situations to themselves than to others or to unknown factors.

The absence of additional gender differences may have occurred because of the limited power of the self-perception instruments in assessing more intimate friendship relationships. These instruments were designed to examine more global perceptions concerning peer relations. From the results of the self-perception instruments, eighth-grade males and females valued equally the importance of making and maintaining peer friendships. Girls were not found to have

different perceptions of social anxiety, perceived control, or self-worth than boys.

Length of Attendance and Social Status

With the exception of children who had only been in the school system for less than 3 months, length of district residence and school attendance were not significant factors that influenced an individual's social status. From these data and Coie and Kupersmidt's (1983) results on emerging social status, children seem to quickly establish interpersonal standing among peers.

Social Competence and Social Status

The perceived social competence subscale assessed an individual's self-perceptions of one's number of friends, popularity, ease with which the person is liked, ease at making friends, likeability, and the believed significance the person has for other peers. The results of this study indicated that early adolescents who differed in their levels of social status also varied in self-perceptions of social competence. As predicted in Hypothesis 5a, the star group had the highest self-perceptions of social competence, followed by the average group with moderately high social competence and the neglect and reject groups with moderate ratings. Both the star and average groups had significantly higher social competence than the reject and neglect groups. The star group was also significantly higher than the average group. The reject and neglect groups were not significantly different in their perceived social competence.

The social competence self-perceptions of the star and average groups were consistent with peer measures of popularity and social functioning. The stars, who were viewed by their peers as highly popular and very well-liked, accurately viewed themselves as highly socially competent. The moderately popular and well-liked average students also viewed themselves as moderately high in social competence. These results were consistent with earlier findings and support the contention that socially effective and popular children and adolescents tend to be accurate in their social understanding as well as in perceptions of their social skills (Ford, 1982; Hartup, 1983; Kurdek & Krile, 1982). These skills included initiation and maintenance of peer relations, social problem solving, and taking the role of others. The prediction that the neglect subjects would have low perceptions of social competence compared to other peers was upheld.

Although the neglects did have equally low social competence with the rejects, and the neglects were not chosen frequently as most preferred or least preferred, people who did know and interact with these eighth graders rated them as moderately well-liked. Although these children were involved in fewer peer relationships and interactions, they did appear to have sufficient social skills to elicit and develop some positive peer relations. These results were consistent with Kurdek and Krile's (1982) finding that social isolates were less comfortable with their social skills than were more socially competent individuals.

Rejects and neglects were found to have the lowest perceived social competence, compared to the average and most popular eighth graders. Rejects appeared to have some awareness of their unpopularity and deficits in social functioning. These individuals were the least preferred as friends and least liked, but they were highly visible among the entire eighth grade. Rejects were not found to have perceptions of social competence that were greater than those of the average eighth grader.

Self-Worth and Social Status

The general self-worth subscale provided a measure of each subject's view of his/her self-esteem. The items in the scale referred to being sure of one's self, being happy with the way one is, and feeling good about the way one acts. Results of the perceived self-worth measure were similar to the perceived social competence response patterns. The star group had significantly greater self-worth than did the average, neglect, and reject groups. The popularity and social success of the star subjects would encourage further social involvement, increase confidence in their social abilities, and contribute to positive feelings of self-worth. The results of this study supported Hartup's (1983) finding that popular adolescents had higher self-esteem than less-popular adolescents.

Reject self-worth was found to be significantly lower than that of the star, reject, and neglect groups. Reject unpopularity and social failures appeared to have some relationship to lower self-worth. The finding of low perceived social competence and equally low self-worth

would tend to support this conclusion. This finding was consistent with Harter's (1981, 1983) competence theory and findings that indicate that low performance or achievement in a domain of functioning creates low perceptions of competence in that area of functioning, which in turn results in low perceptions of self-esteem.

The neglect self-worth indicant was found to be moderately high, despite low social competence. Neglect self-worth more closely resembled that of the average group than of the reject group. Although the neglects did identify themselves as having lower social competence than most other eighth graders, fewer social relations and these lower social competence perceptions did not appear to negatively affect their sense of their own self-worth. Lower social competence was not related to low self-worth, as was found in the reject group. At first glance, these findings may appear inconsistent with Harter's achievement model, yet as the effect of perceived control and social understanding is examined, these results will appear consistent.

In addition, the neglect perceived social competence and self-worth results in this study were not consistent with some previous findings that described social isolates as having low social visibility, being shy and ill at ease, and lacking confidence (Mussen et al., 1974). Children who were shy, socially withdrawn, and had less-than-adequate social skills were not differentiated by these measurement approaches. It was thus uncertain to what extent social isolates at risk may have been present within the studied population. The use of perceived social competence and self-worth measures in

combination with social status classifications was not found to be a useful approach to identifying socially isolated at-risk individuals.

As might be expected, the average group perceived themselves as having moderately high self-worth. This finding is consistent with their moderately high popularity, likeability, and social competence. Their general social success in peer relations would appear to contribute positively to their positive sense of self-worth.

Perceived Control and Social Status

The concept of perceived control was proposed by Harter (1983) to be an important mediator as well as a consequence in a child's motivation toward competent behavior in such domains of functioning as peer social relations. It was proposed by Harter and tested in this study that children who are socially competent would tend to have significant measures of perceived internal control and that children who experience social failure may show indications of denial or lack of understanding of their personal responsibility in these unsuccessful situations. Children with low perceived social competence have been thought either to attribute responsibility for their failure to others or not to know what was responsible for their lack of success.

In this study, the investigation of possible varying perceived-control response patterns across and within groups of early adolescents who differed in social status resulted in mixed findings. Only two distinct perceived-control response patterns, using a combined social and general domain of functioning, were identified in the social status

groups. The first pattern resembled Harter's weak benefectance group, which was characterized by internal control being greater than external control in both success and failure situations and by internal control being greater in success than failure situations. Star, average, and neglect groups all exhibited this pattern. The second pattern was identified from the reject perceived-control responses. This group corresponded to Harter's intermediate benefectance group, which was identified by greater internal control in success than in failure situations, internal success greater than external failure, internal control greater than external control in failure situations, and the unique difference in the two groups: perceived unknown control in failure situations greater than internal control. Both patterns are shown in Table 5.1.

Table 5.1.--Obtained perceived-control patterns.

Weak Benefectance Pattern	Intermediate Benefectance Pattern
Internal-success > Internal-failure	Internal-success > Internal-failure
Internal-success > External-success	Internal-success > External-success
Internal-failure > External-failure	Internal-failure < Unknown-failure
	Internal-failure > External-failure

These results indicated that for the majority of the eighth graders, with the exception of the reject group members, responsibility for both successful and unsuccessful interpersonal and general life experiences was attributed primarily to themselves. Star, average, and neglect groups were not differentiated on these measures. The neglects did not exhibit the predicted defensive pattern of greater responsibility for failure being attributed to others or to unknown factors than to the individual. These individuals appeared to indicate greater ease with failure than expected. Neglects' fewer social interactions and low social visibility could not be attributed to feelings of lack of control or powerlessness in affecting their social relations.

The neglects' high attributions of internal control for both success and failure situations, as well as their low attributions of unknown control, indicated the neglect individuals understood how their own behavior could affect their general and social outcomes. These individuals did not tend to blame other people for their unsuccessful outcomes. This sense of social understanding and knowledge of how their own behavior affected their outcomes appeared to be a crucial factor in the maintenance of their self-worth in comparison to the reject individuals. The neglect group appeared to have a better understanding and a greater sense of control over the reasons for their low popularity. They appeared more consciously to choose whether to engage or not to engage in peer interactions than did the reject group.

Conversely, the rejects tended to be the only social status group who exhibited significant variations in their sense of locus of

control. The rejects had high attributions of internal control for both success and failure outcomes; however, they also tended to have attributions of unknown control in failure situations that were equal to their perceptions of internal control in failure situations. Reject unknown-failure was also greater than star, average, and neglect unknown-failure. In addition, the rejects tended to blame others for their failures to a greater extent than did the stars.

These results indicated that the rejects had significantly lower understanding of how their personal behavior affected their social and general outcomes. Rejects would tend to have less understanding than their peers about how their behavior negatively affected their peer relationships, and they appeared to be less able to use feedback about their behavior to adjust it. This tendency to accept responsibility for success and to take less responsibility for failure situations was consistent with Harter's (1983) concept of beneffectance.

The presence of limited social understanding in socially unpopular early adolescents was consistent with previous findings that indicated these individuals were generally less socially competent, had lower levels of interpersonal understanding, and were less able to take the role of others than more socially competent and popular individuals (Ford, 1982; Kurdek & Krile, 1983).

Social Anxiety and Social Status

The Social Anxiety subscale measured the extent to which subjects were concerned or worried about their abilities to make and/or maintain friends and how comfortable they were with their own popularity. The

results obtained from this measure indicated the presence of only limited differentiation of social anxiety across different social status groups.

The stars were found to be the most comfortable with and least anxious about their popularity and social skills. These popular students had significantly lower social anxiety than the star, neglect, and average groups. Because of their popularity and being well-liked, as well as the positive social skills that created their positive social status, these individuals most likely received frequent positive feedback, which would encourage self-confidence in their social functioning. As predicted, these popular, socially competent early adolescents had the lowest social anxiety scores. These results were consistent with the Harter (1983) and Thompson (1982) findings, which indicated that socially popular individuals were highly motivated to engage in interpersonal relationships, with little resulting anxiety.

The average, neglect, and reject groups were found to have moderate levels of anxiety related to the self-perceptions of their popularity and social skills. The rejects did not obtain significantly higher social anxiety scores than the other groups, as was predicted. This finding might be expected from their unpopularity and peer dislike.

Again, the average and neglect groups had comparable self-perceptions, in this case for social anxiety. These results indicated individuals in these groups had some concern about their social skills and popularity, but not of an extreme nature. The neglect group did

not exhibit extreme discomfort with their low peer popularity. The social anxiety results in this study further indicated that the neglect group members' self-perceptions about their social functioning more closely resembled those of the average eighth grader than those of shy, withdrawn, socially at-risk children described in previous research (Gronlund, 1957; Peery, 1979).

CHAPTER VI

SUMMARY AND CONCLUSIONS

Although children's self-perception of their social functioning is one of several dimensions that contribute to and influence the development of their self-identity, children's social self-perception and ability to engage in peer relations significantly affect their growth toward effective human functioning. The findings of this investigation supported the importance of understanding the role children's social self-perception plays in their development of social competency and peer relations. Evidence from this study indicated that social self-perceptions do show some significant variations among early adolescents who have different levels of social status. The congruence between perceived social competence and measures of the person's actual social effectiveness in peer relations, and the extent to which the person took personal responsibility for success and failure outcomes, were found to be significantly related to the person's social status. Not knowing or understanding who or what was responsible for failures was found to be related to low social status and social failure.

The following sections are the summaries and conclusions related to each of the four purposes of this study. In the final section of

this chapter, possible future directions for investigation arising out of this study are discussed.

Gender Differences in Self-Perception Evaluations

The first purpose of this study was to determine if male and female eighth graders were significantly different on their self-perceptions of social competence, self-worth, perceived control, and social anxiety. With the exception of boys having greater perceived physical competence and slightly greater attributions of external control than girls, the self-evaluation measures did not yield significant gender differences. Boys valued sports and recreational activities more than girls did, and males to a slightly greater degree than females saw other people as having some responsibility for their experience outcomes. Overall, however, girls and boys did not differ in their perceptions of the value of general attitudes toward the initiation and maintenance of peer relations and social functioning. Perceptions of social anxiety, self-worth, peer liked-disliked ratings, and social status did not differ according to gender. Early adolescent males and females did not appear to differ in their general social self-perceptions, in contrast to findings from previous research that indicated significant gender differences in the behavioral process in interpersonal relations and in the development of intimate friendships (Berndt, 1982; Waldrop & Haverson, 1976).

Self-Perception Variation With Social Status

The second purpose of this research was to create four social status groups (star, average, neglect, and reject) through the use of a two-dimensional binomial probability social classification model and to compare these groups' responses on self-evaluative measures of their social functioning and self-worth. The results from this study provided mixed support for the idea that early adolescents with varying social self-perceptions have different peer relationships and social status. The star and reject social status groups were found to differ the most from each other as well as from the average and neglect groups. The average and neglect groups were the most similar to each other on the social self-perception and peer rating measures. The star group members were the most popular and best-liked eighth graders; they had the highest perceived social competence and self-worth and the lowest social anxiety, as well as predominant perceptions of internal control for both successful and unsuccessful situations.

These results were significant because the stars' self-perceptions of their social competence were highly congruent when compared to actual measures of their peer popularity and likeability. The stars perceived themselves as highly competent in their ability to initiate and maintain peer relations. These self-perceptions appeared to be highly accurate and undistorted. The stars' high attributions of internal control indicated they seemed to have a clear understanding of the role and responsibility their behavior played in their interpersonal and general successes and failures. Their social success and

perceived social competence seemed to contribute to their low social anxiety and confidence in their social skills, which would contribute to their positive sense of self-worth. Their popularity and frequent opportunity for positive peer relations would greatly facilitate their socialization and the development of their self-identity.

The reject social status group's response tendencies were in marked contrast to the star-group findings. These individuals were very well-known, were not very well-liked, and were least desired for friends. The rejects were the only group to obtain a significant variation in their response patterns for perceived control. The star, average, neglect, and reject groups all perceived personal responsibility and internal control for success and failure outcomes, but the reject group was the only one to have significantly high perceptions of not knowing who or what was responsible for their unsuccessful social and general experiences. This tendency toward unknown perceptions of control provided evidence that the rejects were more inaccurate about and had less understanding of their responsibility and role in establishing a negative social status among their peers.

These limitations in rejects' social understanding and sense of control have important implications for rejects' adaptive functioning. The reject group had decreased understanding of what control they had and how they could affect or change their behavior to facilitate more successful social experiences. In addition, the difficulty of establishing positive peer relations could inhibit positive socialization and positive self-validation.

In addition to less social understanding and a greater sense of lack of control in unsuccessful situations, rejects were found to have low self-perceptions of social competence, compared with the average and star groups. These characteristics on which rejects were significantly different from the majority of eighth graders seemed to affect negatively the rejects' sense of self-worth, which was found to be the lowest of the four social status groups. Rejects appeared to be aware of deficits in their social functioning, but they did not know or clearly understand how their negative peer relations were caused or could be within their control to change.

Rejects were also found to have significantly greater social anxiety and concern about their peer relations than did the star subjects, but the rejects were not found to be significantly different in their social anxiety from the average or neglect groups. Rejects' worries and concerns about their popularity and social skills did not appear to be much greater than those of the average eighth graders.

In contrast to the star and reject groups, the average and neglect groups exhibited several characteristics similar to each other. Both the average and neglect groups were found to have self-perceptions of their social competence and abilities that were consistent with peer measures of their likeability. Both groups were moderately well-liked and perceived themselves as socially competent. Internal attributions of control for both success and failure situations were also primary for both groups, and social anxiety was not significantly different for

the neglects, averages, or rejects. Self-worth was also found to be comparable for both groups and greater than that of the reject group.

The lack of differentiation between the neglect and average groups indicated that the majority of the neglects identified in this study were liked by other children who knew them and had social self-perceptions not significantly different from most other eighth graders. These findings were consistent with the results of earlier studies that indicated neglects frequently resembled average children in their control of aggressive behavior, interaction skills, and reactions with peers (Asher, 1983; Asher & Wheeler, 1983; Coie & Kupersmidt, 1983). It can be concluded from these results that neglect members were less well-known and had fewer friends than other eighth graders, but when they did interact their social skills were effective enough that the children were liked by those who did know them. Also, they were no more worried or anxious about their popularity or social skills than other children were.

Neglects were also found to have perceptions of social competence that were lower than those of the average and star groups but equal to those of the reject group. This finding, combined with perceptions of self-worth that were equal to the average group but significantly greater than the reject group, indicated the neglects recognized their more limited popularity but did not experience the lowered self-worth that the reject group experienced. The neglects' tendency to understand the role their behavior played in both successful and unsuccessful social and general experiences and high attributions of internal

control supported a conclusion that the neglects had a greater cognitive understanding and sense of control over their outcomes than did the reject group.

A graph of the social status group response patterns can be found in Figure 6.1. An overall summary of the group response patterns is presented next. The stars, as predicted, were the most popular and best liked and had the highest perceived social competence and self-worth, the lowest social anxiety, and perceptions of personal internal control for both their successes and failures. The average group, as predicted, had moderately high popularity, likeability, perceived social competence, and general self-worth; they had moderate social anxiety. The average group also perceived greater internal control for success and failure situations, but they did not have significant levels of unknown control in failure situations, as was predicted. Thus, average group members were found to take personal responsibility for success and failure outcomes, and they did not tend to deny or fail to understand the reasons for their social and general failures.

As predicted, the neglect group had low popularity and along with the rejects had the lowest perceptions of social competence. These individuals, however, contrary to prediction, closely resembled the average group with moderately high self-worth, moderate likeability, and predominant perceptions of internal control. They were not any more socially anxious than most of their classmates, nor did they tend to overly blame others for their low popularity.

Social Status Group Response Patterns

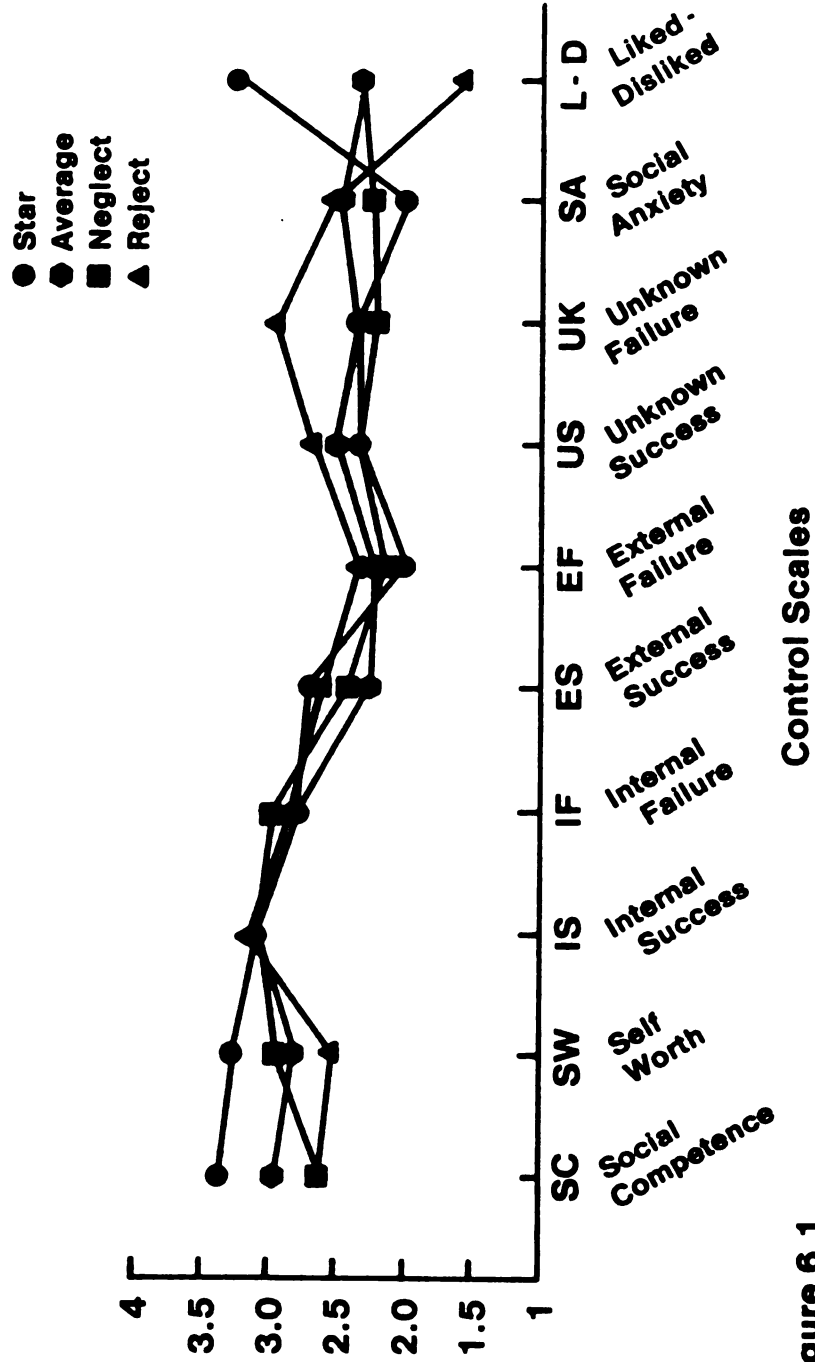


Figure 6.1

The rejects, as predicted, were lowest in popularity, self-worth, perceived social competence, and likeability; in addition, they were highly visible. They also exhibited less social understanding and greater attribution of responsibility to others for failure experiences than did the other groups.

Comparison of Study Findings With Harter Competence and Self-Perception Theories and Results

The third goal of this study was to compare the obtained self-perception results with Harter's (1983) self-perception theories and findings. The overall results of this study did provide support for the validity and utility of Harter's competence model of achievement and its extended applicability to social functioning and academic achievement.

In this study, using social status classifications, two perceived-control response patterns were identified, in contrast to five in the Harter and Renick (1983) study. The first pattern, exhibited by the majority of the eighth graders, primarily attributed internal personal control to both successful and unsuccessful social and general outcomes. The rejects presented a second pattern that was similar to the first, but with the addition of high attributions of unknown control in failure situations. This pattern was not as widely observed as in Harter and Renick's results.

Harter's competency motivation theory predicted that a large majority of children would take responsibility for successful outcomes but tend to deny or not take credit for unsuccessful outcomes, or the

benefectance process as previously described. The majority of eighth graders studied in the current investigation took more personal responsibility for social and general successful and unsuccessful outcomes than attributed control for their outcomes to others or indicated they did not know who or what was responsible. The majority of students did not exhibit an identity self-protective benefectance process.

The second perceived-control response pattern identified in this study did provide support for the presence of benefectance in some children. The rejects exhibited the second pattern, which was characterized by high attributions of internal control for both success and failure situations and equally high attributions of unknown control in failure situations. This pattern was consistent with Harter's intermediate benefectance pattern of personal responsibility for successes but a tendency to deny or take less responsibility for failure experiences. In this study, the rejects had less personal understanding than subjects in the star, average, and neglect groups concerning the personal control and responsibility they had in their unsuccessful social interactions and personal experiences. This process did not appear to be so much a self-protective process, as Harter described, but rather one of less personal and social understanding.

The findings for perceived social competence and general self-worth were consistent with Harter's theory and results. Children's social achievement, perceived social competence, self-worth, and, to a

much smaller degree, social anxiety all appeared to be related to their sense of control and the extent to which they understood the influence of their behavior on their social and general outcomes. Figure 6.2 is a diagram of Harter's competence motivation model, which is generally consistent with the findings of this study.

The level of unknown perception of control was found to be negatively related to level of success in social functioning. The results indicated that the greater the level of perceived unknown control and lack of social understanding in failure situations, the lower an individual's popularity and social achievement. Conversely, the more a child understood his/her responsibility and control in social and general situations, the greater that child's likeability and success with peers. Those children with adequate social understanding had high and moderately high levels of perceived social competence (stars and averages) and high and moderately high levels of self-worth. These relationships between perceived control, social achievement, perceived social competence, and self-worth were consistent with Harter's results for both the social and cognitive domains of functioning (Harter, 1983; Harter & Connell, 1981).

The results obtained for social anxiety were not found to be as consistent with the Harter and Renick results as the previously discussed findings. Although the stars had significantly less social anxiety than the neglect, reject, and average groups, these three groups were not found to differ on the extent to which they were worried about their social functioning. Less-popular subjects were no

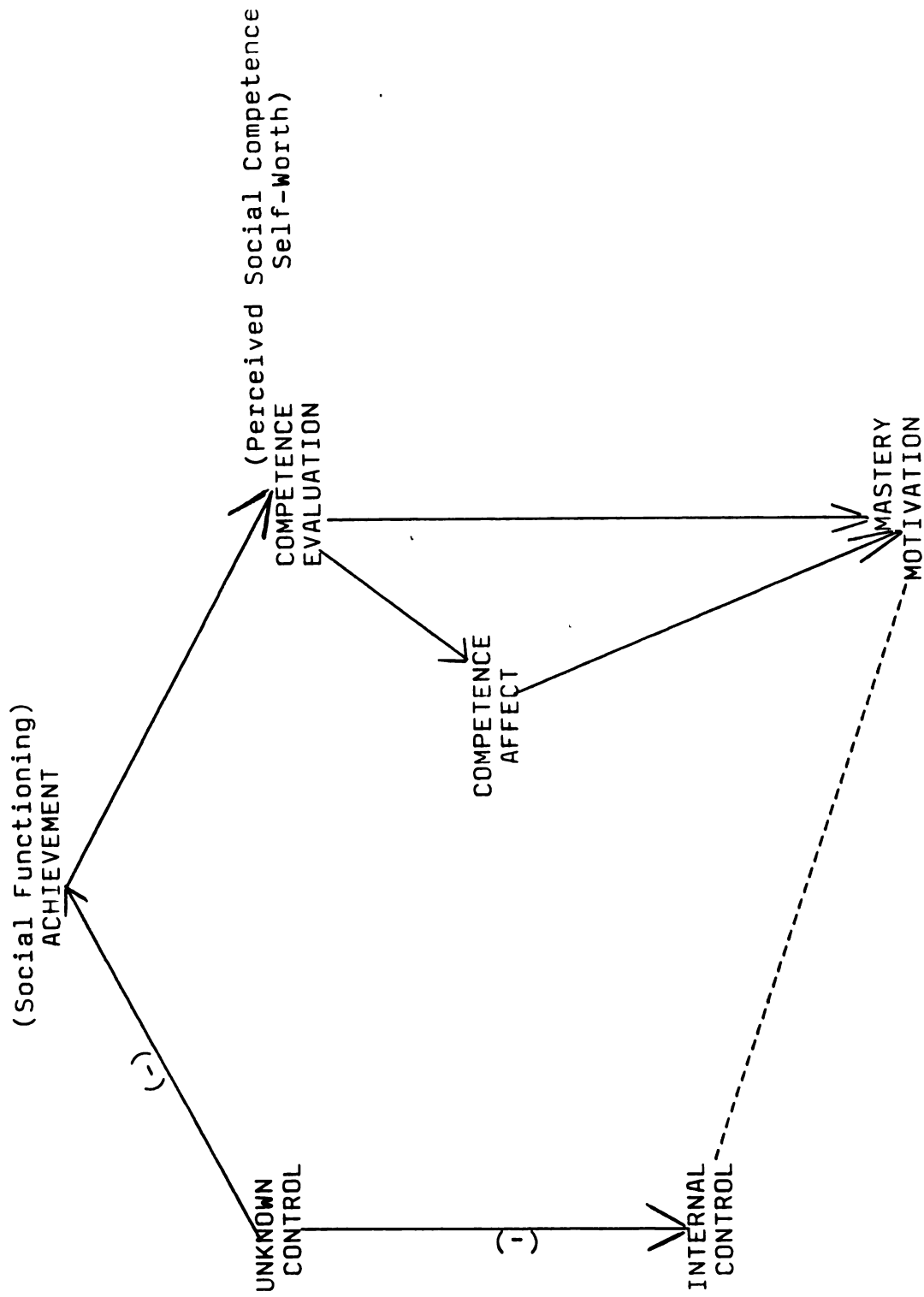


Figure 6.2.--Harter model of competency motivation. (From Harter & Connell, 1982.)

more anxious than the average eighth graders. These findings, too, were inconsistent with Harter's findings. The social anxiety subscale did not result in as much differentiation of self-perceptions as the other instruments used in this study.

Harter also proposed that children with a history of failure would be less motivated to engage in behavior in the unsuccessful domain of functioning. On the contrary, rejects who experienced the highest level of social failure were found to be very well-known and had interpersonal contacts with many fellow students. Even though these individuals experienced negative peer relations, they did not appear to withdraw from social contact or take a low social profile. Their lack of success may have spurred on their social interactions, rather than isolating them from such interactions. The popular and average subjects, who experienced social success, did appear to be motivated to continue to engage in their peer relations as predicted by Harter.

The neglect social status group appeared to function in a fashion consistent with what might be predicted by Harter's theories of competence and motivation. Despite the presence of low social visibility, low peer preference, and low perceived social competence compared to the star and average groups, members of the neglect group continued to perceive themselves as having moderate self-worth. The important factor that differentiated the neglect subjects from the less-successful rejects and the neglect characteristic that was consistent with Harter's theories was a greater capacity for social understanding and personal responsibility in failure experiences. Although the

neglects were less involved with others, they appeared to understand the reasons for their fewer social relationships and appeared to accept these experiences without decreased self-worth.

The preceding findings provided strong support for the applicability and usefulness of Harter's theories of competence and motivation when applied to social functioning. The extent to which individuals understood their role in and responsibility for personal outcomes was found to affect significantly their levels of social achievement and self-worth.

Utility of the Combined Use of Peer-Assessed Social Status and Cognitive Self-Perception Measures

The fourth and final purpose of this investigation was to determine if the combined use of peer-assessed social status and self-evaluation measures provides an improved and useful approach for selection and assignment of children to social status groups for peer-relations-development research and for social-skill-intervention programs. The overall results of this research indicated that the combined use of these methodologies for both research and intervention programs proved valid and useful.

The use of binomial theory applied to a two-dimensional social status classification approach was found to be effective in classifying all but six subjects. The cognitive social self-perception measures were found to differentiate across social status groups, supporting the effectiveness of this classification approach in its ability to identify groups of children with similar characteristics.

Positive and negative peer nominations in combination with liked-disliked and not-known peer roster ratings provided several advantages over the use of an individual method or individual class assessment. Peer preference could be differentiated from peer likeability, and use of the zero (not-known) rating provided a measure of social visibility. The zero score also allowed students to indicate they did not know someone, rather than being forced to choose a likeability score. This approach led to more accurate peer ratings. Through the use of peer ratings and nominations, the social rejects were found to be moderately well-liked by the people with whom they did interact, despite having few friends or peer interactions. This finding could be important in helping to determine whether a child with low social status would be appropriate for social-skill intervention programs or for identifying possible goal directions for an intervention program. Social neglects seemed able to relate to others but may take less initiative than most children. These children may only need assistance in initiation skills, rather than more extensive social understanding, social cognitive problem solving, or means-ends thinking, which might be more appropriate for the reject group.

The combined self- and peer-assessment methods were found to be effective in differentiating the extreme star and reject groups from each other. The average and neglect groups were found to be more similar and less differentiated than the stars and rejects. The peer nomination and rating measures, perceived social competence, self-worth, and control measures were all found to be useful in identifying

different characteristics of the four social status groups. The social anxiety measure found only the star group to be significantly lower than and different from the other groups.

This combined methodology was found to be particularly valuable in identifying social rejects and their deficits in social understanding and their lack of insight into the role their own behavior had in their social failures. This finding has important implications for future research on the role of social understanding and perceived control in peer relations development, as well as for pre- and post-outcome measures for intervention programs in social behavior and social cognitive skill development.

Those subjects who have negative social status and deficits in their social understanding of the causes for their general and social failures might be excellent candidates for cognitive social-skill training programs that develop consequential thinking, empathy training, logical social problem solving, and taking the role of another.

Use of peer assessment in combination with cognitive self-perception measures is superior to the individual use of these methods, as well as to behavior observation by itself. These procedures provide social achievement outcome measures as well as cognitive factors that are both affected by and influence social achievement outcomes themselves. This method provides more of an interactional picture of possible causal components and their social outcomes. Other advantages of these approaches were in their ease of administration and the

ability to collect a great deal of data in a relatively short period of time.

This method did not identify those children previously described in the literature as social isolates or neglects who were withdrawn, shy, and at risk. Those individuals identified as neglects in this study were found to be highly similar to the average eighth grader, and the isolates at risk were not identified as was originally predicted.

Future Directions

Research examining effective social behavior and cognitive self-perceptions is in its relative infancy. Previous correlational studies have demonstrated that indices of ineffective social behavior and low social status can predict later adjustment problems in educational, vocational, interpersonal, and emotional functioning. Research has demonstrated that improving social-skill functioning improved adjustment (Ladd, 1981), but as yet it has not been completely proven that increasing social self-perceptions and cognitive functioning will improve later adjustment.

Future research investigating the relationship between cognitive perceptions and social status could be extended through the use of a longitudinal multi-method and multi-perspective approach. The inclusion of interactive observational analytic methods and teacher and parent ratings, repeated over extended periods of time, could provide increased understanding of the means by which behavioral and cognitive self-perceptions affect and are affected by peer social status and general functioning.

These methods could examine stability and changes of positive and negative nominations, social status classifications, and cognitive self-perceptions over time. Developmental effect of changes in social behavior and cognitive self-perceptions on later adjustment could also be studied. Assessment of self-perceptions over time could be used as an outcome measure to assess the effectiveness of social training and intervention programs.

Investigation of the relationship between social functioning, cognitive self-perceptions, and social status could add to the understanding and definition of social competence. Children's cognitive and behavioral responses to common situations or social contexts could be examined and used to develop empirical baselines for understanding behavioral and self-perceptive functioning. Functional analysis of the interactive process in peer relationships could provide additional methods to investigate the qualitative behavior and cognitive differences among individuals who vary in social status, social functioning, and gender.

Further research involving the use of social status and perceived control measures could expand the number of questions that constitute each subscale and increase the overall size of the population. These procedures could help in avoiding small cell sizes when examining separate subscales. These changes could assist in a more accurate investigation of differences in perceived control for both success and failure situations for separate domains of functioning (social, cognitive, and general functioning). Within and between social status

group differences could be studied in different groups, both longitudinally and concurrently.

As society becomes increasingly complex, the need to understand the characteristics of effective and ineffective coping abilities in peer interactions has become essential. Given the goal of many educators and mental health professionals of facilitating the development of children's and adolescents' cognitive, interpersonal, and intellectual skills, as well as a realistic sense of their abilities, further knowledge concerning the relationship between cognitive perceptions, behavior, and social status can be valuable in the pursuit of these goals. Increased knowledge is needed to understand the effect of strengths and deficits developed by children to cope with peer relationships. Improved knowledge of differential cognitive and behavioral coping characteristics can improve educational and social intervention approaches to assist the socially isolated and the reject, as well as students in general, in their social and adaptive development.

Further research focusing on effective social-skill and social-competency assessment and intervention procedures has several important implications for adolescents. Increased understanding of factors that influence competency behavior may help adolescents obtain maximum benefit from academic instruction, facilitate mainstreaming of learning disabled students, improve effectiveness of social functioning, and improve employment prospects. Intervention studies have demonstrated that training children in social skills, which was found to correlate

with peer acceptance, resulted in increased sociometric standing (Combs & Slaby, 1977; Ladd, 1981).

The results of this investigation supported the importance of recognizing the multi-faceted nature of early adolescents' self-perceptions and social skills in relation to their social status. The complexity of social functioning requires continued refinement and development of assessment and intervention approaches to increase knowledge about the effect of self-perceptions on one's social functioning and peer relationships.

APPENDICES

APPENDIX A

PARENT PERMISSION LETTER AND CONSENT FORM

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION · DEPARTMENT OF COUNSELING,
EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION

EAST LANSING · MICHIGAN 48824-1034

Dear Student and Parents:

I am a doctoral candidate in the Department of Counseling, Educational Psychology and Special Education at Michigan State University and have been studying the importance of peer relations and children's self-appraisal of these relations for healthy social and emotional adjustment. Mr. Roy Doonon, Principal, of the Haslett Middle School, has kindly agreed to work with me, and we would like to request permission for your eighth grade child to participate in a survey.

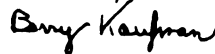
The survey will involve one sixty-minute session, conducted during school and supervised by people from the University. The participating students in your child's grade will be asked to individually complete several short paper-and-pencil questionnaires. In particular, each student will be asked to indicate which students they like to hang around with the most, the least, and, using the eighth grade student roster, rate how much they like to hang around with each of the other students in their grade. In addition, students will answer questions about what they think about their own ability to make friends, who or what is responsible for their peer relations, and how they feel about their own efforts to make friends. Students are asked not to discuss any of their answers with their classmates.

This letter is to inform you of the study, to indicate that participation is voluntary and to request permission for your child to participate. Information collected in this survey will be confidential. Numbers rather than names will be used to identify each student and no information about the individual students will be reported. All written reports of the results will present only group trends. Both you and your child are free to terminate your participation in the study at any time, if you request to do so.

Please fill out and sign the attached form indicating whether you are willing to give your consent for your child to participate, and have your child return the form to school tomorrow. The general nature of the project has been explained to your child and his/her consent has also been necessary for him or her to participate.

If you or your child have any concerns or questions about the questionnaire, please call me at 349-2873 evenings, and I will be glad to discuss them directly with you.

Sincerely,



Barry Kaufman
Michigan State University

BK/tk

PARENTAL PERMISSION SLIP

I have read the explanation letter, and I understand the explanation that has been given, and what my child's participation will involve.

I do ____ or do not ____ agree to let _____ participate in the study of children's peer relations.

Date_____ Parent's signature_____

Please have your son/daughter return this slip tomorrow. Thank you.

APPENDIX B

STUDENT CONSENT FORM

STUDENT PERMISSION SLIP

This study has been explained to me, and I understand the explanation that has been given, and what my participation will involve.

I do ____ or do not ____ agree to participate in the study of children's peer relations and self-appraisals.

Date_____ Student's signature_____

APPENDIX C

PEER-NOMINATION INSTRUMENTS

Using the class list to help you, write down the names of three boys you like to hang around with the most and three girls you like to hang around with the most.

Boys

1. _____
2. _____
3. _____

Girls

1. _____
2. _____
3. _____

Using the class list again, select and write down the names of three boys and three girls who you like to hang around the least.

Boys

1. _____
2. _____
3. _____

Girls

1. _____
2. _____
3. _____

APPENDIX D

PEER-RATING INSTRUMENT

HOW MUCH DO YOU LIKE TO HANG AROUND THIS PERSON?

[illegible]

APPENDIX E

CHILDREN'S PERCEIVED COMPETENCE SCALE

WHAT I AM LIKE
SAMPLE SENTENCES

REALLY TRUE	SORT OF TRUE				SORT OF TRUE	REALLY TRUE
for me	for me				for me	for me
a. _____	_____	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	_____	_____
b. _____	_____	Some kids never worry about anything	BUT	Other kids sometimes worry about certain things.	_____	_____
1. _____	_____	Some kids feel that they are very good at their school work	BUT	Other kids worry about whether they can do the school work assigned to them.	_____	_____
2. _____	_____	Some kids find it hard to make friends	BUT	For other kids it's pretty easy.	_____	_____
3. _____	_____	Some kids do very well at all kinds of sports	BUT	Others don't feel that they are very good when it comes to sports.	_____	_____
4. _____	_____	Some kids feel that there are a lot of things about themselves that they would change if they could	BUT	Other kids would stay pretty much the same.	_____	_____
5. _____	_____	Some kids feel like they are just as smart as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart.	_____	_____
6. _____	_____	Some kids have a lot of friends	BUT	Other kids don't have very many friends.	_____	_____
7. _____	_____	Some kids wish they could be a lot better at sports	BUT	Other kids feel they are good enough.	_____	_____
8. _____	_____	Some kids are pretty sure of themselves	BUT	Other kids are not very sure of themselves.	_____	_____
9. _____	_____	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work quickly.	_____	_____

REALLY TRUE	SORT OF TRUE				SORT OF TRUE	REALLY TRUE
for me	for me				for me	for me
10. ____	____	Some kids don't think they are a very important member of their class	BUT	Other kids think they are pretty important to their classmates.	____	____
11. ____	____	Some kids think they could do well at just about any new outdoor activity they haven't tried before	BUT	Other kids are afraid they might not do well at outdoor things they haven't ever tried.	____	____
12. ____	____	Some kids feel good about the way they act	BUT	Other kids wish they acted differently.	____	____
13. ____	____	Some kids often forget what they learn	BUT	Other kids can remember things easily.	____	____
14. ____	____	Some kids are always doing things with a lot	BUT	Other kids usually do things by themselves.	____	____
15. ____	____	Some kids feel that they are better than others their age at sports	BUT	Other kids don't feel they can play as well.	____	____
16. ____	____	Some kids think maybe they are not a very good person	BUT	Other kids are pretty sure that they are a good person.	____	____
17. ____	____	Some kids like school because they do well in class	BUT	Other kids don't like school because they aren't doing very well.	____	____
18. ____	____	Some kids wish that more kids liked them	BUT	Others feel that most kids do like them.	____	____
19. ____	____	In games and sports some kids usually watch instead of play	BUT	Other kids usually play rather than just watch.	____	____
20. ____	____	Some kids are very happy being the way they are.	BUT	Other kids wish they were different.	____	____
21. ____	____	Some kids wish it was easier to understand what they read.	BUT	Other kids don't have any trouble understanding what they read.	____	____

REALLY TRUE	SORT OF TRUE				REALLY TRUE	SORT OF TRUE
for me	for me				for me	for me
22. ____	____	Some kids are popular with others their age	BUT	Other kids are not very popular.	____	____
23. ____	____	Some kids don't do well at new outdoor games	BUT	Other kids are good at new games right away.	____	____
24. ____	____	Some kids aren't very happy with the way they do a lot of things	BUT	Other kids think the way they do things is fine.	____	____
25. ____	____	Some kids have trouble figuring out the answers in school	BUT	Other kids almost always can figure out the answers.	____	____
26. ____	____	Some kids are really easy to like	BUT	Other kids are kind of hard to like.	____	____
27. ____	____	Some kids are among the last to be chosen for games	BUT	Other kids are usually picked first.	____	____
28. ____	____	Some kids are usually sure that what they are doing is the right thing	BUT	Other kids aren't so sure whether or not they are doing the right thing.	____	____

APPENDIX F

MULTIPLE MEASURE OF CHILDREN'S PERCEPTIONS OF CONTROL-- SOCIAL AND GENERAL SELF-WORTH SUBSCALES

WHY THINGS HAPPEN

NAME _____

Sample Questions

(a) I like chocolate ice cream better than vanilla ice cream	very true _____	sort of true _____	not very true _____	not at all true _____
(b) Most people my age really spinach.	very true _____	sort of true _____	not very true _____	not at all true _____
<hr/>				
1. The reason that people my age find it hard to make friends is that adults don't like them.	very true _____	sort of true _____	not very true _____	not at all true _____
2. When a person my age doesn't do well at something, it's usually his/her own fault.	very true _____	sort of true _____	not very true _____	not at all true _____
3. If a person my age isn't popular with his classmates, there is probably nothing that kid can do about it.	very true _____	sort of true _____	not very true _____	not at all true _____
4. When something goes wrong for a person my age, a lot of times it's somebody else's fault.	very true _____	sort of true _____	not very true _____	not at all true _____
5. If a person of my age doesn't have many friends it's the kid's own fault.	very true _____	sort of true _____	not very true _____	not at all true _____
6. When something bad happens to a person of my age, there is probably nothing that kid could have done to stop it.	very true _____	sort of true _____	not very true _____	not at all true _____
7. If a teacher doesn't like me, I probably won't have many friends in that class.	very true _____	sort of true _____	not very true _____	not at all true _____
8. The main reason that some people my age are good at a lot of different things is that they can get the adults in charge to like them.	very true _____	sort of true _____	not very true _____	not at all true _____
9. If somebody doesn't want to be my friend, there's probably nothing I can do about it.	very true _____	sort of true _____	not very true _____	not at all true _____
10. If an adult doesn't want me to do something that I want to do, I probably won't be able to do it.	very true _____	sort of true _____	not very true _____	not at all true _____
11. If a person my age wants to have a lot of friends, he/she should make friends with the popular kids first.	very true _____	sort of true _____	not very true _____	not at all true _____
12. When something goes wrong for me, I usually can't figure out why it happened.	very true _____	sort of true _____	not very true _____	not at all true _____

13. If somebody is a nice person they will have a lot of friends.	very true —	sort of true —	not very true —	not at all true —
14. When good things happen to me, many times there doesn't seem to be any reason why.	very true —	sort of true —	not very true —	not at all true —
15. If I want my classmates to think that I am an important person, I have to be friends with the really popular kids.	very true —	sort of true —	not very true —	not at all true —
16. I can pretty much control what will happen in my life.	very true —	sort of true —	not very true —	not at all true —
17. A lot of times, there doesn't seem to be any reason why somebody likes me.	very true —	sort of true —	not very true —	not at all true —
18. To get what I want, I have to please the people in charge.	very true —	sort of true —	not very true —	not at all true —
19. If somebody is my friend, it is usually because of the way that I treat them.	very true —	sort of true —	not very true —	not at all true —
20. When something good happens to someone, a lot of times they didn't do anything to make it happen.	very true —	sort of true —	not very true —	not at all true —
21. When I am unsuccessful, it is usually my own fault.	very true —	sort of true —	not very true —	not at all true —
22. People my age can pretty much decide what will happen in their lives.	very true —	sort of true —	not very true —	not at all true —
23. A lot of times, kids are popular for no reason at all.	very true —	sort of true —	not very true —	not at all true —
24. If somebody doesn't like me, it's usually because of something I did.	very true —	sort of true —	not very true —	not at all true —

APPENDIX G

CHILDREN'S CONCERNS INVENTORY--SOCIAL ANXIETY SUBSCALE

STUDENT CONCERNS

Check the box of the answer that best fits you.

- | | | | | |
|--|--|--|---|--|
| 1. How worried are you that maybe you're not as popular as you'd like to be? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 2. How worried are you that maybe other kids don't really like to do things with you all that much? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 3. When a friend gets mad at you, how nervous do you get that they might not want to be your friend anymore? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 4. How worried are you that you don't have as many friends as you might like? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 5. How nervous do you get when you have to sit and talk with kids you don't know very well? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 6. How worried are you about keeping the friends you have? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 7. How worried do you get about being liked by the kids at school? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |

APPENDIX H

STUDENT SURVEY BOOKLET

Student's name _____
Date you were born _____
How long have you attended Haslett Schools? _____

STUDENT SURVEY BOOKLET

CLASS LIST
8th Grade--1983-83

Student names were listed in three columns.
Separate boy and girl lists were provided.

Using the class list to help you, write down the names of three boys you like to hang around with the most and three girls you like to hang around with the most.

Boys

1. _____
2. _____
3. _____

Girls

1. _____
2. _____
3. _____

Using the class list again, select and write down the names of three boys and three girls who you like to hang around the least.

Boys

1. _____
2. _____
3. _____

Girls

1. _____
2. _____
3. _____

HOW MUCH DO YOU LIKE TO HANG AROUND THIS PERSON?

[illegible]

WHAT I AM LIKE
SAMPLE SENTENCES

REALLY TRUE	SORT OF TRUE				SORT OF TRUE	REALLY TRUE
for me	for me				for me	for me
a. _____	_____	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	_____	_____
b. _____	_____	Some kids never worry about anything	BUT	Other kids sometimes worry about certain things.	_____	_____
1. _____	_____	Some kids feel that they are very good at their school work	BUT	Other kids worry about whether they can do the school work assigned to them.	_____	_____
2. _____	_____	Some kids find it hard to make friends	BUT	For other kids it's pretty easy.	_____	_____
3. _____	_____	Some kids do very well at all kinds of sports	BUT	Others don't feel that they are very good when it comes to sports.	_____	_____
4. _____	_____	Some kids feel that there are a lot of things about themselves that they would change if they could	BUT	Other kids would stay pretty much the same.	_____	_____
5. _____	_____	Some kids feel like they are just as smart as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart.	_____	_____
6. _____	_____	Some kids have a lot of friends	BUT	Other kids don't have very many friends.	_____	_____
7. _____	_____	Some kids wish they could be a lot better at sports	BUT	Other kids feel they are good enough.	_____	_____
8. _____	_____	Some kids are pretty sure of themselves	BUT	Other kids are not very sure of themselves.	_____	_____
9. _____	_____	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work quickly.	_____	_____

REALLY TRUE	SORT OF TRUE				SORT OF TRUE	REALLY TRUE
for me	for me				for me	for me
10. ____	____	Some kids don't think they are a very important member of their class	BUT	Other kids think they are pretty important to their classmates.	____	____
11. ____	____	Some kids think they could do well at just about any new outdoor activity they haven't tried before	BUT	Other kids are afraid they might not do well at outdoor things they haven't ever tried.	____	____
12. ____	____	Some kids feel good about the way they act	BUT	Other kids wish they acted differently.	____	____
13. ____	____	Some kids often forget what they learn	BUT	Other kids can remember things easily.	____	____
14. ____	____	Some kids are always doing things with a lot	BUT	Other kids usually do things by themselves.	____	____
15. ____	____	Some kids feel that they are better than others their age at sports	BUT	Other kids don't feel they can play as well.	____	____
16. ____	____	Some kids think maybe they are not a very good person	BUT	Other kids are pretty sure that they are a good person.	____	____
17. ____	____	Some kids like school because they do well in class	BUT	Other kids don't like school because they aren't doing very well.	____	____
18. ____	____	Some kids wish that more kids liked them	BUT	Others feel that most kids do like them.	____	____
19. ____	____	In games and sports some kids usually watch instead of play	BUT	Other kids usually play rather than just watch.	____	____
20. ____	____	Some kids are very happy being the way they are.	BUT	Other kids wish they were different.	____	____
21. ____	____	Some kids wish it was easier to understand what they read.	BUT	Other kids don't have any trouble understanding what they read.	____	____

REALLY TRUE	SORT OF TRUE			REALLY TRUE	SORT OF TRUE
for me	for me			for me	for me
22. ____	____	Some kids are popular with others their age	BUT	Other kids are not very popular.	____
23. ____	____	Some kids don't do well at new outdoor games	BUT	Other kids are good at new games right away.	____
24. ____	____	Some kids aren't very happy with the way they do a lot of things	BUT	Other kids think the way they do things is fine.	____
25. ____	____	Some kids have trouble figuring out the answers in school	BUT	Other kids almost always can figure out the answers.	____
26. ____	____	Some kids are really easy to like	BUT	Other kids are kind of hard to like.	____
27. ____	____	Some kids are among the last to be chosen for games	BUT	Other kids are usually picked first.	____
28. ____	____	Some kids are usually sure that what they are doing is the right thing	BUT	Other kids aren't so sure whether or not they are doing the right thing.	____

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WHY THINGS HAPPEN

NAME _____

Sample Questions

(a) I like chocolate ice cream better than vanilla ice cream	very true _____	sort of true _____	not very true _____	not at all true _____
(b) Most people my age really spinach.	very true _____	sort of true _____	not very true _____	not at all true _____
<hr/>				
1. The reason that people my age find it hard to make friends is that adults don't like them.	very true _____	sort of true _____	not very true _____	not at all true _____
2. When a person my age doesn't do well at something, it's usually his/her own fault.	very true _____	sort of true _____	not very true _____	not at all true _____
3. If a person my age isn't popular with his classmates, there is probably nothing that kid can do about it.	very true _____	sort of true _____	not very true _____	not at all true _____
4. When something goes wrong for a person my age, a lot of times it's somebody else's fault.	very true _____	sort of true _____	not very true _____	not at all true _____
5. If a person of my age doesn't have many friends it's the kid's own fault.	very true _____	sort of true _____	not very true _____	not at all true _____
6. When something bad happens to a person of my age, there is probably nothing that kid could have done to stop it.	very true _____	sort of true _____	not very true _____	not at all true _____
7. If a teacher doesn't like me, I probably won't have many friends in that class.	very true _____	sort of true _____	not very true _____	not at all true _____
8. The main reason that some people my age are good at a lot of different things is that they can get the adults in charge to like them.	very true _____	sort of true _____	not very true _____	not at all true _____
9. If somebody doesn't want to be my friend, there's probably nothing I can do about it.	very true _____	sort of true _____	not very true _____	not at all true _____
10. If an adult doesn't want me to do something that I want to do, I probably won't be able to do it.	very true _____	sort of true _____	not very true _____	not at all true _____
11. If a person my age wants to have a lot of friends, he/she should make friends with the popular kids first.	very true _____	sort of true _____	not very true _____	not at all true _____
12. When something goes wrong for me, I usually can't figure out why it happened.	very true _____	sort of true _____	not very true _____	not at all true _____

13. If somebody is a nice person they will have a lot of friends.	very true	sort of true	not very true	not at all true
	—	—	—	—
14. When good things happen to me, many times there doesn't seem to be any reason why.	very true	sort of true	not very true	not at all true
	—	—	—	—
15. If I want my classmates to think that I am an important person, I have to be friends with the really popular kids.	very true	sort of true	not very true	not at all true
	—	—	—	—
16. I can pretty much control what will happen in my life.	very true	sort of true	not very true	not at all true
	—	—	—	—
17. A lot of times, there doesn't seem to be any reason why somebody likes me.	very true	sort of true	not very true	not at all true
	—	—	—	—
18. To get what I want, I have to please the people in charge.	very true	sort of true	not very true	not at all true
	—	—	—	—
19. If somebody is my friend, it is usually because of the way that I treat them.	very true	sort of true	not very true	not at all true
	—	—	—	—
20. When something good happens to someone, a lot of times they didn't do anything to make it happen.	very true	sort of true	not very true	not at all true
	—	—	—	—
21. When I am unsuccessful, it is usually my own fault.	very true	sort of true	not very true	not at all true
	—	—	—	—
22. People my age can pretty much decide what will happen in their lives.	very true	sort of true	not very true	not at all true
	—	—	—	—
23. A lot of times, kids are popular for no reason at all.	very true	sort of true	not very true	not at all true
	—	—	—	—
24. If somebody doesn't like me, it's usually because of something I did.	very true	sort of true	not very true	not at all true
	—	—	—	—

STUDENT CONCERNS

Check the box of the answer that best fits you.

- | | | | | |
|--|--|--|---|--|
| 1. How worried are you that maybe you're not as popular as you'd like to be? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 2. How worried are you that maybe other kids don't really like to do things with you all that much? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 3. When a friend gets mad at you, how nervous do you get that they might not want to be your friend anymore? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 4. How worried are you that you don't have as many friends as you might like? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 5. How nervous do you get when you have to sit and talk with kids you don't know very well? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 6. How worried are you about keeping the friends you have? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |
| 7. How worried do you get about being liked by the kids at school? | very
worried/
nervous

_____ | somewhat
worried/
nervous

_____ | not too
worried/
nervous

_____ | not at all
worried/
nervous

_____ |

REFERENCES

REFERENCES

- Achenbach, T., & Edelbrock, C. Behavioral problems and competencies reported by parents of normal and disturbed children ages 4-16. Monographs of the Society for Research in Child Development, 1981, 46(1), 82.
- Allen, V. L. Self, social group, and social structure: Surmises about the study of children's friendships. In S. R. Asher & J. M. Gottman (Eds.), The development of children's friendships. Cambridge: Cambridge University Press, 1981.
- Anderson, S., & Messick, S. Social competency in young children. Developmental Psychology, 1974, 10, 282-293.
- Asher, S. R. Social competence and peer status: Recent advances and future directions. Child Development, 1983, 54, 1427-1434.
- Asher, S. R., & Hymel, S. Children's social competence in peer relations: Sociometric and behavioral assessment. In J. D. Wine and M. D. Smye (Eds.), Social competence. New York: Guilford Press, 1981.
- Asher, S. R., Oden, S., & Gottman, J. Children's friendships in school settings. In L. G. Katz (Ed.), Current topics on early childhood education. New Jersey: Able Publishing Corp., 1979.
- Asher, S. R., Singleton, L., Tinsley, B., & Hymel, S. The reliability of a rating scale sociometric method with preschool children. Developmental Psychology, 1979, 15, 443-444.
- Asher, S. R., & Taylor, A. Social outcome of mainstreaming: Sociometric assessment and beyond. Exceptional Education Quarterly, 1981, 1(4), 13-30.
- Asher, S. R., & Wheeler, V. A. Children's loneliness: A comparison of rejected and neglected peer status. Paper presented at the annual meeting of the American Psychological Association, Anaheim, Calif., 1983.
- Bandura, A. Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 1977, 84, 191-215.

- Bandura, A. The self system in reciprocal determinism. American Psychologist, 1978, 33, 344-358.
- Bem, D. J. Self-perception theory. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 6. New York: Academic Press, 1972.
- Berndt, T. A. The features and effects of friendship in early adolescence. Child Development, 1981, 46(4, Serial No. 191).
- Bonney, M. The relative stability of social, intellectual, and academic status in grades II to IV, and the interrelationships between these various forms of growth. Journal of Educational Psychology, 1943, 34, 88-102.
- Bower, E. M. Early identification of emotionally handicapped children in school. Springfield, Ill.: Charles C. Thomas, 1960.
- Bronfenbrenner, U. A constant frame of reference for sociometric research. Part I, Theory and technique. Sociometry, 1943, 6.
- Bronfenbrenner, U. A constant frame of reference for sociometric research. Part II, Experiment and difference. Sociometry, 1944, 7, 40-75.
- Buhrmester, D. Children's Concern Inventory manual. Denver: University of Denver, 1982.
- Bukowski, W. The antecedents of identity formation during preadolescence. Unpublished manuscript, Michigan State University, 1982.
- Bukowski, W., & Newcomb, A. The association between peer experiences and identity formation in early adolescence. Journal of Early Adolescence, 1983, 3, 265-274.
- Cartledge, R., & Milburn, L. Teaching social skills to children. New York: Pergamon Press, 1980.
- Cole, J. D., & Dodge, K. A. Continuities and changes in children's social status: A five-year longitudinal study. Merrill-Palmer Quarterly, 1983, 29, 261-281.
- Cole, J., Dodge, K., & Coppotelli, H. Dimensions and types of social status: A cross-age perspective. Developmental Psychology, 1982, 18(4), 557-571.
- Combs, L. M., & Slaby, D. A. Social skill training with children. In R. Kahey and A. Kazden (Eds.), Advances in clinical child psychology (Vol. 1). New York: Plenum, 1977.

- Connell, J. P. A multidimensional measure of children's perceptions of control. Denver: University of Denver, 1980.
- Coopersmith, S. The antecedents of self-esteem. San Francisco: W. H. Freeman, 1967.
- Cowen, E. L., Pederson, A., Babigian, M., Izzo, L. D., & Trost, M. A. Long-term follow-up of early detected vulnerable children. Journal of Consulting and Clinical Psychology, 1973, 41, 438-446.
- Dodge, K. Behavioral antecedents of peer social status. Child Development, 1983, 54, 1386-1399.
- Douvan, E., & Anderson, J. The adolescent experience. New York: Wiley, 1966.
- Dunnington, M. J. Investigation of areas of disagreement in sociometric measurement of preschool children. Child Development, 1957, 28, 93-102.
- Erikson, E. Identity, youth and crises. New York: Norton, 1968.
- Fine, G. Friends, impression management, and preadolescent behavior. In S. R. Asher & J. M. Gottman (Eds.), The development of children's friendships. New York: Cambridge University Press, 1981.
- Ford, M. E. A multivariate prediction study of social competence in adolescence. Unpublished doctoral dissertation, University of Minnesota, 1980.
- Ford, M. E. Social cognition and social competence in adolescence. Developmental Psychology, 1982, 18(3), 323-340.
- Foster, S., & Richey, W. Issues in the assessment of social competence in children. Journal of Applied Behavior Analysis, 1979, 12, 625-638.
- Gaffney, L., & McFall, R. A comparison of social skills in delinquent and nondelinquent adolescent girls using a behavioral role playing inventory. Journal of Consulting and Clinical Psychology, 1981, 49(6), 959-967.
- Gallina, M., & Miller, C. Middle school: An alternative for the transient. Adolescence, 1977, 48, 511-522.
- Glidwell, J. C., Kantor, M., Smith, L., & Stringer, L. Socialization and social structure in the classroom. In L. W. Hoffman & M. L. Hoffman (Eds.), Review of child development research. New York: Russell Sage Foundation, 1966.

- Gottman, M. Toward a definition of social isolation in children. Child Development, 1977, 48, 513-517.
- Gottman, J., Gonso, J., & Rasmussen, B. Social interaction, social competence, and friendship in children. Child Development, 1975, 46, 709-718.
- Green, K. D., Forehand, R., Beck, S. J., & Vosk, B. An assessment of the relationship among measures of children's social competence and children's academic achievement. Child Development, 1980, 51, 1149-1156.
- Greenwald, A. C. The totalitarian ego: Fabrication and revision of personal history. American Psychologist, 1980, 7, 603-618.
- Gresham, F. M. Validity of social skills measures for assessing social competence in low status children: A multivariate investigation. Developmental Psychology, 1981, 17(4), 390-398. (a)
- Gresham, F. M. Assessment of children's social skills. Journal of School Psychology, 1981, 19(2), 120-133. (b)
- Gronlund, N. E. Sociometry in the classroom. New York: Harper & Brothers, 1959.
- Gronlund, N. E., & Anderson, L. Personality characteristics of socially accepted, socially neglected, and socially rejected junior high school pupils. Educational Administration and Supervision, 1957, 43, 329-338.
- Harper, G. F. Relationship of specific behavior to academic achievement and social competence of kindergarten, first, and second grade children. Unpublished doctoral dissertation, Kent University, 1976.
- Harter, S. Effectance motivation reconsidered: Toward a developmental model. Human Development, 1978, 1, 34-64.
- Harter, S. Progress report: National Institute of Child Health and Human Development. U.S. Public Health Service #HD-09613-03. Denver: University of Denver, 1979. (a)
- Harter, S. Perceived Competence Scale for Children. Denver: University of Denver, 1979. (b)
- Harter, S. A model of intrinsic mastery motivation in children: Individual differences and developmental change. Minnesota Symposia on Child Psychology, Vol. 14. Hillsdale: N. J. Erlbaum, 1981.

- Harter, S. The Perceived Competence Scale for Children. Child Development, 1982, 53, 87-97.
- Harter, S. Competence as a dimension of self-evaluation: Toward a comprehensive model of self-worth. In R. Leaky (Ed.), The development of self. New York: Academic Press, 1983.
- Harter, S., & Connell, J. P. A comparison of alternative models of the relationship between academic achievement and children's perception of competence, control, and motivational orientation. In J. Nicholls (Eds.), The development of achievement-related motivation cognitions and behaviors. Greenwich, Conn.: J. A. I. Press, 1982.
- Hartshorne, H., May, M. A., & Maller, J. B. Studies in the nature of character: II. Studies in service and self-control. New York: Macmillan, 1929.
- Hartup, W. W. Peer interaction and social organization. In P. H. Mussen (Ed.), Carmichael's manual of child psychology (Vol. 2). New York: Wiley, 1970.
- Hartup, W. W. Peer relations and the growth of social competence. In M. W. Kent & J. E. Rolf (Eds.), Primary prevention of psychopathology (Vol. 3): Social competence in children. Hanover, N.H.: University Press of New England, 1979.
- Hartup, W. W. The peer system. In E. M. Hetherington (Ed.), Handbook of child psychology: Socialization, personality, and social development. New York: Wiley, 1983.
- Hartup, W. W. The peer system. In P. H. Mussen (Editor in chief) & E. M. Hetherington (Ed.), Carmichael's manual of child psychology (4th ed.) (Vol. 4). New York: Wiley, in press.
- Hartup, W., Glazer, J., & Charlesworth, R. Peer reinforcement and sociometric status. Child Development, 1967, 38, 1017-1024.
- Jennings, K. People versus object orientation, social behavior and intellectual abilities in children. Developmental Psychology, 1975, 11, 511-519.
- Koch, D. The assessment of interpersonal effectiveness of early adolescence. Unpublished doctoral dissertation, Rutgers University, 1980.
- Kohn, M. Social competence, symptoms and underachievement in childhood: A longitudinal perspective. Washington, D.C.: V. H. Winston & Sons, 1977.

- Kuhlen, R. G., & Lee, B. J. Personality characteristics and social acceptability in adolescence. Journal of Educational Psychology, 1943, 34, 321-340.
- Kurdek, L., & Krile, D. A developmental analysis of the relation between peer acceptance and both interpersonal understanding and perceived social self-competence. Child Development, 1982, 53, 1485-1491.
- Ladd, G. W. Effectiveness of social learning method for enhancing children's social interaction and peer acceptance. Child Development, 1981, 52, 171-178.
- Ladd, G. W., & Oden, S. L. The relationship between peer acceptance and children's ideas about helpfulness. Child Development, 1979, 50, 402-408.
- Lefcourt, H. Locus of control: Current trends in theory and research. New York: Wiley, 1976.
- Lemann, T. B., & Solomon, R. L. Group characteristics as revealed in sociometric patterns and personality ratings. Sociometry, 1952, 15, 7-90.
- Lesser, G. S. The relationship between various forms of aggression and popularity among lower-class children. Journal of Educational Psychology, 1959, 50, 402-408.
- Maccoby, E. F., & Jacklin, C. N. The psychology of sex differences. Stanford: Stanford University Press, 1974.
- McCandless, B., & Marshall, H. A picture-sociometric technique for pre-school children and its relation to teach judgements of friendships. Child Development, 1957, 28, 139-149.
- Meichenbaum, D., Butler, L., & Gruson, L. Toward a conceptual model of social competence. In J. D. Wine & M. D. Smye (Eds.), Social competence. New York: Guilford Press, 1981.
- Michelson, L., & Wood, R. Behavioral assessment and training of children's social skills. In M. Hersen (Ed.), Progress in Behavior Modification, 1980, 9.
- Minturn, M., & Lewis, M. Age differences in peer ratings of socially desirable and socially undesirable behavior. Psychology Review, 1968, 23, 783-791.

- Moore, S. G. A sociometric status test for young children: Manual of instructions. Unpublished manuscript, University of Minnesota, 1973.
- Moreno, J. L. Who shall survive? A new approach to the problem of human interrelations. Washington, D.C.: Nervous and Mental Disease Publishing, 1934.
- Mussen, P., Conger, J., & Kagan, J. Child development and personality. New York: Harper & Row, 1974.
- Newcomb, A., & Bukowski, W. Social impact and social preference as determinants of children's group status. Developmental Psychology, in press. (a)
- Newcomb, A., & Bukowski, W. A longitudinal study of the utility of social preference and social impact sociometric classification schemes, in press. (b)
- Newman, B. M. The study of interpersonal behavior in adolescence. Adolescence, 1976, 9, 129-141.
- Northway, M. Sociometry and some challenging problems of social relationships. Sociometry, 1946, 9, 187-198.
- Nowicki, S., & Roundtree, J. Correlates of locus of control in a secondary school population. Developmental Psychology, 1971, 4, 477-478.
- Oden, W., & Asher, S. Coaching children in social skills for friendship making. Child Development, 1977, 48, 495-506.
- Peery, J. Popular, amiable, isolated, rejected: A reconceptualization of sociometric status in pre-school children. Child Development, 1979, 50, 1231-1234.
- Piaget, J. The mechanisms of perception. Trans. from the French by G. N. Geagun. New York: Basic Books, 1969.
- Piers, E., & Harris, D. The Piers-Harris Children's Self-Concept Scale. Nashville, Tenn.: Counselor Recordings & Tests, 1969.
- Putallaz, M., & Gottman, J. M. Social skills and group acceptance. In S. R. Asher & J. M. Gottman (Eds.), The development of children's friendships. New York: Cambridge University Press, 1981.
- Rathjen, D. P., & Foreyt, J. P. Social competence: Interventions for children and adults. New York: Pergamon Press, 1980.

- Roff, M. Some life history factors in relation to various types of adult maladjustment. In M. Roff & D. Ricks (Eds.), Life history research in psychopathology. Minneapolis: University of Minnesota Press, 1970.
- Roff, M., & Sells, S. Juvenile delinquency in relation to peer acceptance, rejection and socioeconomic status. Psychology in the Schools, 1968, 5, 3-18.
- Roff, M., Sells, S. B., & Golden, M. M. Social adjustment and personality development in children. Minneapolis: The University of Minnesota Press, 1972.
- Roitach, R. C. A microeconomic model of sociometric choice. Sociometry, 1974, 37, 219-238.
- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, (Whole No. 609).
- Rubin, K. H. Child Development, 1983, 54, 1383-1385.
- Rubin, K. H., & Daniels-Bierness, T. Concurrent and predictive correlates of sociometric status in kindergarten and grade one children. Merrill-Palmer Quarterly, in press.
- Schmuck, R. A. Sociometric status and utilization of academic abilities. Merrill-Palmer Quarterly, 1962, 8, 165-172.
- Shatz, C. U. The development of social cognition. In E. M. Hetherington (Ed.), Review of child development research (Vol. 5). Chicago: University of Chicago Press, 1975.
- Singleton, L. C., & Asher, S. Peer preferences and social interaction among third-grade children in an integrated school district. Journal of Educational Psychology, 1977, 69, 330-336.
- Strain, P. S., Cooke, T. P., & Apolloni, T. Teaching exceptional children: Assessing and modifying social behavior. New York: Academic Press, 1976.
- Sullivan, H. S. The interpersonal theory of psychiatry. New York: Norton, 1953.
- Thompson, R. Children's self-evaluations of peer relations. Unpublished doctoral dissertation, University of Denver, 1982.
- Ullman, C. A. Identification of maladjusted school children. Public Health Monograph No. 7. Washington, D.C.: Federal Security Agency, 1952.

- Vosk, B., Forehand, R., Parker, J., & Rickard, K. A multimethod comparison of popular and unpopular children. Developmental Psychology, 1982, 18(4), 571-576.
- Walder, L. O., Abelson, R. P., Eron, L. D., Banta, T. J., & Laulicht, J. H. Development of a peer rating measure of aggression. Psychological Reports, 1961, 9, 497-556.
- Waldrop, M., & Halvorson, C. Intensive and extensive peer behavior: Longitudinal and cross-sectional analysis. Child Development, 1975, 45, 19-26.
- Waters, E., & Sroufe, L. A. A developmental perspective on competence. Developmental Review, in press.
- Watson, D., & Friend, R. Measurement of social-evaluative anxiety. Journal of Consulting and Clinical Psychology, 1969, 33, 448-457.
- White, R. Motivation reconsidered: The concept of competence. Psychological Review, 1959, 66, 297-323.
- Wine, J., & Syme, M. Social competence. New York: Guilford Press, 1981.