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**The effects of a preventive social skills training program on
the social skills, self-concept, peer acceptance and academic
achievement of early adolescents**

Brickman, Jean Berzon, Ph.D.

City University of New York, 1995

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**THE EFFECTS OF A PREVENTIVE SOCIAL SKILLS TRAINING PROGRAM
ON THE SOCIAL SKILLS, SELF-CONCEPT, PEER ACCEPTANCE
AND ACADEMIC ACHIEVEMENT OF EARLY ADOLESCENTS**

by

JEAN BERZON BRICKMAN

**A dissertation submitted to the Graduate Faculty in Educational Psychology
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy, The City University of New York**

1995

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This manuscript has been read and accepted for the Graduate Faculty in Educational Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

**THE EFFECTS OF A PREVENTIVE SOCIAL SKILLS TRAINING PROGRAM
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by

Jean Berzon Brickman

Advisor: Professor Marian C. Fish

This study explored the impact of a cognitive-behavioral social skills training program (Gresham & Elliott, 1991) on the self-esteem, sociometric status, perceived social competence, and academic achievement of middle school students when the program was implemented in a primary preventive manner. Subjects were 89 students in the 7th grade of a small, rural/suburban middle school. They were all pre- and post tested on self-report measures of self-concept and social skills, peer acceptance, and academic achievement. The students were ranked according to their pretest scores on the Social Skills Rating Scale, Student form, Secondary level (Gresham & Elliott, 1990) and evenly divided into 9 small advisory groups; 5 groups received the social skills training program, and 4 groups were given topics to discuss from the mental health portion of the New York State 7th grade health curriculum. The groups were randomly assigned to leaders and conditions. It was expected that the students who received the social skills training in the Social Skills Intervention Program would show significantly greater improvement in their self esteem, peer acceptance, perceived social skills, and academic achievement in comparison to students in the control group.

Four multiple regression analyses were performed comparing the experimental and control groups on posttest measures of each of the personality tests as well as on the achievement test, while controlling for pretest scores on all of the variables. In each analysis, the effect of program in context with each of the premeasures was not significant. Suggestions of how both primary and secondary preventive social skills training programs might be implemented were offered.

Acknowledgements

I would like to express my appreciation and gratitude to my dissertation advisor Marian Fish for her scholarly advice, editorial expertise, and for her encouragement throughout the program. My thanks also go to Phillip Saigh for his valuable suggestions and confidence in me. I am indebted to Alan Gross who also served on my committee for his assistance with the design and statistical analysis of the study, and to all the members of my committee for their accessibility. In addition I would like to thank Amy Schmidt for her assistance with the statistical analysis.

Throughout the dissertation and the entire doctoral program Mr. James Walker, Mrs. Patricia Cyganovich, Mr. George Bovino as well as the school board of the North Salem Central Schools facilitated and supported my studies. I am especially grateful to Lois Guberman and Bill Dahl for their help in the logistical planning and implementation of the research. The cooperation of the faculty and students of North Salem Middle School made the study possible.

Without the patience, love, and support of my husband, Peter, my successful completion of the program would not have been accomplished. My children Jessica and Jeff seem to have survived unscathed, and at least pretended that they were not adversely affected by their mother's dedication to her studies. Their love and encouragement sustained me as well.

I appreciate the support of my friends Richard and Evelyn Kurtzberg who were always there whenever I needed them throughout this whole process, and my friend Ruth Mayer who lent her experience and knowledge as well.

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CHAPTER I

INTRODUCTION AND STATEMENT OF PROBLEM

The important role that social behavior plays in the overall emotional adjustment, social well-being, and academic achievement of both children and adolescents has been well documented. As early as 1927, E. L. Thorndike introduced the construct of social competence or social intelligence and emphasized the importance of social intelligence as one of the three types of general intelligence. Research over the past 25 years has explored the connection between children's social competence and other factors related to their social and academic success in school. An examination of the literature reveals that there are relationships between children's social competence and academic achievement (Bursuck & Asher, 1986; Green, Forehand, Beck, & Vosk, 1980); between classroom behaviors and academic achievement (Durrant, Cunningham, & Voelker, 1990; McKinney, Mason, Perkerson, & Clifford, 1975; Silberberg & Silberberg, 1971; Swift & Spivack, 1969a, 1969b); between peer evaluation and academic achievement (Muma, 1965); between social sensitivity and interpersonal competence (Rothenberg, 1970); between social competence, peer acceptance, and academic achievement (Austin & Draper, 1984; Frentz, Gresham, & Elliott, 1991); between social interaction, social competence, and friendship in children (Gottman, Gonso, & Rasmussen, 1975); between social competence and stress (Garmezy, Masten, & Tellegen, 1984); between behavior and peer social status (Dodge, 1983); and between self-concept and social skills (Brickman, 1992; Piers, 1984). These variables are all interrelated, but the exact ways in which children's social behavior towards peers and teachers, their social status, and their self-concept both affect and are affected by their academic achievement is yet to be

unequivocally determined (Bursuck & Asher, 1986). Furthermore, children who have deficient social skills are not always readily identifiable or apparent to their teachers or parents unless they become a behavior problem at home or school, although they may be socially isolated (Gresham, 1981a). Other researchers have looked at the long-term negative consequences for children with social skill deficits. Cowen, Pederson, Babigian, Issa, and Trost (1973) and Coie and Dodge (1983) have established the connection between social maladjustment in childhood and maladjustment in later life.

A great deal of attention has been paid in the literature to clearly defining the constructs of social competence, social skills, and adaptive behavior; and to refining accurate assessment techniques. The distinction between the terms "social competence" and "social skills" has been hazy at best (Gresham, 1992) and even now the terms are sometimes confused. Attempts have been made to make the terms more specific. Foster and Ritchey (1979) equated social competence with positive social behavior, and advocated sociometric assessment and nonspecific behavioral observations as the most effective means to measure it. Gresham (1981b) conceptualized social skills deficits along three different dimensions: skill deficits, performance deficits, and self-control deficits. He mentioned behavioral observations, sociometric measures, and teacher ratings as the measures most commonly used at that time. Gresham and Elliott (1984) advocated focusing on behaviors that were "socially valid" and using assessment devices that predicted "important social outcomes." By 1986 Gresham and Reschly defined social skills as a subdomain of the larger construct of social competence, which included adaptive behavior and peer acceptance. In a further refinement of their earlier work Gresham and Elliott published The Social Skills Rating System (SSRS), a comprehensive

set of three rating forms (parent, teacher, and student self-report), the student form of which serves as the basis for this study. In 1991, Elliott and Gresham published their Social Skills Intervention Guide. The techniques of this cognitive-behavioral social skills training program (discussion, modeling, rehearsal, and follow through) form the basis for the intervention used in this study. The focus of many of the studies in the areas of social skills has been on special populations, especially learning disabled students (Durrant, Cunningham, & Voelker, 1990; Gresham, 1992; Gresham & Elliott, 1989a, 1989b; Gresham & Reschly, 1986; Merrell, Johnson, Merz, & Ring, 1992; Wanat, 1983). Gresham and Elliott (1990), however, in their introduction to the Social Skills Rating System indicate that although social skills deficits are characteristic of many learning disabled children, there is "currently little research to indicate unique social skills deficits in this population" (Gresham & Elliott, 1990, p. 8). Other researchers have found similarities in social skills between learning disabled and nonhandicapped low-achieving students (Durrant, Cunningham, & Voelker, 1990; Gresham, Evans, & Elliott, 1988; Merrell & Shinn, 1990; Merrell, Johnson, Merz, & Ring, 1992; Sater & French, 1989; Silver & Young, 1985). These researchers have established similarities between learning disabled and low-achieving, non-labeled students, and provides a rationale for viewing the studies done on learning disabled students as an indication of how low-achieving students might perform under the same circumstances.

Although much has been written on remediation of academic and social problems that have already occurred, it is only relatively recently that the focus has begun to shift to looking at a preventive approach to social skills training. Elias and Branden (1988) described their conceptual basis for primary prevention of behavioral and emotional

problems, and looked at the relationship between the likelihood of behavioral or emotional problems and social and environmental factors. Most of the work in this area, however, has been done with elementary aged populations. Urbain and Kendall (1980), for example, in their review of social-cognitive problem-solving interventions found that only three of 14 programs in both clinical and non-clinical settings involved adolescent populations, and these were with either delinquent or emotionally disturbed subjects. Gresham (1985) evaluated 33 studies that used cognitive-behavioral social skills training procedures which he classified according to the techniques they employed (modeling, coaching, treatment packages, and social problem solving); but only one of those programs used an adolescent sample. The particular relevance of teaching social skills during the transitional middle school years (early adolescence) has been validated by others (Damon & Hart, 1982; Elias, Gara, & Ubrico, 1985; Simmons, Blyth, Van Cleave, & Bush, 1979).

This dissertation study explores the impact of a cognitive-behavioral social skills training program (Elliott & Gresham, 1991) on middle school students' self-concept, sociometric status, perceived social competence, and academic achievement when the program is implemented in a preventive, proactive manner. The literature on the relationship of social skills to self-concept, peer acceptance, and academic achievement is reviewed here, as well as the work of researchers who have designed and implemented various social skills training programs and assessment techniques. Elliott and Gresham's program is outlined in particular. Studies are presented which explore social skills deficits and programs for both learning disabled and regular students. In addition, the transitional period of early adolescence is discussed in terms of its relationship to social skills

development, and as a particularly appropriate time to be investigating the variables of interest here. The techniques of Elliott and Gresham's program (discussion, modeling, rehearsal, follow through) are based on Bandura's theories of social learning and his conception of how human behavior is learned through observing others and then modeling their behavior. In addition, Bandura's construct of self-efficacy and how it is hypothesized to affect student's motivation, perseverance, and learning serves as another theoretical underpinning for this study. Finally, Elias's conceptual basis for primary prevention of behavioral and emotional problems provides another theoretical rationale for the preventive model employed here.

CHAPTER II

REVIEW OF THE LITERATURE

Social skills definition and assessment

Much of the literature has been devoted to examining the role of social skills in the emotional adjustment, social behavior, and academic performance of children and adolescents. How one defines "social skills" affects how one goes about assessing them - assessment and definition are inextricably connected. As recently as the late 1980's, the terms "social skills" and "social competence" were used interchangeable (Gresham, 1992; Hops, 1983). Foster and Ritchey (1979) discussed issues in the assessment of social competence in children and looked at what they called "social skills training programs" in use at that time. They said "a closer look at the assumptions underlying these investigations reveals questions and ambiguities related to both the definition and assessment of social competence with children" (Foster & Ritcher, 1979, p. 625). Foster and Ritchey offered a relatively simple behavioral definition for social competence that was then in use by behaviorally oriented child psychologists: socially competent behavior are responses which are effective in gaining positive effects for the interactor. They noted that the available training programs focused on substituting positive, incompatible behaviors for negative ones, but complained that by using such a narrow focus, the behaviorists ignored the social context in which the responses were occurring. The definition they proposed did not lend itself to identifying specific behaviors which would be considered "socially competent." They suggested expanding the focus of programs that teach socially competent behavior to include the antecedents and consequences of the

behavior, as well as the social context in which the behavior occurs. In addition, they advocated including the possible long term effects of social behavior in order to determine whether or not it is "competent," because how a child responds in one situation may have a lasting effect on the opinions of others around him. In spite of their attempt to arrive at a meaningful definition of social competence, Foster and Ritchey still did not specify a list of which behaviors they viewed as "competent" ones, and under what circumstances. In terms of assessment, these authors named sociometric assessment and behavioral observation as the two methods used to identify the socially competent versus incompetent child. They specified peer nomination techniques, in which children are asked to name the peers with whom they would most and least prefer to play or work as the means of sociometric assessment; they considered children who were identified by their peers as popular to be socially competent. They admitted that this technique did not detect the precise nature of the deficits in the problem child, nor did it yield information about the nature of the positive behavior of the popular child. In fact, Foster and Ritchey suggested that because of the imprecise nature of the assessment, it is best used for research purposes to identify populations for further study, and that behavioral observations should be used as well, a technique that they claimed was less subject to bias. A problem still existed because no system had been established for precisely defining which behaviors were "socially competent." Observing frequency of interactions is only one small facet of social competence, even though it had frequently been used as the major behavioral criterion for identifying children with poor social skills (Gottman, Gonso, & Rasmussen, 1975). Foster and Ritchey warned about the potential danger of training children to behave in certain ways without taking into account the value system on which

those behaviors are based. Perhaps they envisioned a "Brave New World" of automatons, all following the same rigid behavioral code.

An earlier study by Gottman, Gonso, and Rasmussen (1975) on social interaction, social competence, and friendship in children attempted to define children's social skills in terms of children's abilities to recognize and label emotions, to communicate accurately to a listener, and to take the role perspective of another person on perceptual and social tasks. With a population of second and third grade children, they used a sociometric measure of friendship in which children were asked to name their best friends and others with whom they would like to do a variety of tasks. In addition, the children were asked to perform a specific set of tasks that they hypothesized to be indicative of social skills. These tasks were: to label the emotions displayed in the facial expressions on a set of photographs, to effectively communicate one of two words in a pair of similar or dissimilar words in a "Password"-type game; to tell which of two objects was on his/her left and right, and then which was on the experimenter's left and right; to choose a card which showed a picture from the experimenter's perspective; to pretend to give directions about how to proceed through an obstacle course to a blindfolded puppet; to pretend to make friends with the experimenter who represented a new child in school; and to pretend to give arithmetic help to the experimenter. The children were also observed in their classrooms recording 14 behaviors in four situations: lecture or demonstrations, seat work, small-group work, and play periods involving physical activity. The experimenters then examined the relationships among the social skill variables, classroom interaction variables, and friendship (peer acceptance). What is as interesting here as their findings that popular children had better social skills than unpopular children and related differently

to their peers, was their relatively primitive means of assessing and increasing social skills. Their use of "referential communication skills," for example, or the ability to give directions to a blindfolded puppet as indicators of children's ability to communicate in social situations may be clearly observed in a laboratory, but do not necessarily relate to how children behave in real life. Their recommendation to train low-friends children on the variables identified as related to friendship does not seem to be either the most direct or the most effective means to improve social skills.

Ford (1982) in his study of social cognition and social competence in adolescence expanded on Foster and Ritchey's definition by referring to social competence as "the attainment of relevant social goals, using appropriate means and resulting in positive developmental outcomes (Ford, 1982 p. 324). His comprehensive model to predict socially competent behavior relied upon an outcome measure in which teachers were asked to judge the degree to which a group of adolescents were able to handle social situations well.

Ford's important "relevant social goal" was positive interpersonal relationships, so he directed his research to the area of adolescent social relationships with peers, parents, and teachers. Ford developed a theoretical model to predict socially competent behavior. In Ford's model, information about interpersonal transactions and the ability to take feedback from the environment comparing what actually happened to what had been intended was seen as vital to successful relationships. He labeled this ability as "social cognition." In his study of the social characteristics of 9th and 12th grade students in two midwestern schools, Ford identified four factors related to overall social competence which he labeled academic competence, social concern (i.e. empathy), cognitive

resourcefulness, and social desirability (i.e. peer acceptance). He determined that effective social behavior is strongly related to effective social cognition, and theorized that people are composed of four subsystems- "vegetative, arousal, transactional, and governing" (Ford, 1982 p. 324)- with the governing subsystem containing cognitive functions. From these subsystems he further hypothesized nine "social cognitive predictor variables" (information storage, retrieval functions, goal directedness, interest in social goals, empathy, consideration of consequences, social and nonsocial goal capabilities, goal improvement ideas, and means-ends thinking) that determined the degree to which a person had the social cognition that made socially competent behavior possible. Ford used a complicated set of scales to measure his predictor variables, but the psychometric properties of his scales are not documented. He used ratings by peers and teachers, as well as self-judgments of social competence, and found significant correlations between peer and teacher ratings. In Ford's study, the adolescents who were judged by their teachers as being able to handle social situations well were more likely to describe themselves as having the "social cognition" described by Ford. Ford also identified the successful students as being more goal directed and being more cognitively resourceful than their less socially successful peers. This clearly represented a major improvement over the simplistic techniques described by Foster and Ritchey. His use of the four factors of social competence resembles the more comprehensive model we use today. Nevertheless, the methods employed here were extremely cumbersome to apply, and lacked evidence of validity and reliability.

Hops, in his 1983 article on children's social competence and skill, worked on differentiating between two concepts, a distinction that until then had been blurred. He

defined competence in more general terms which included social judgment about how well an individual was performing in a specific situation, while social skills were described as specific behaviors necessary for socially competent behavior. A person without those skills could be predicted to have interpersonal problems. So far, a list of those specific social behaviors/ skills had been lacking. Hops discussed ratings of peers, teachers, and parents as the then current means of measuring social competence, and the inherent problems in those ratings. Hops and Finch (1982) conducted a study of 200 preschool children at the 8th Annual Convention for the Association of Behavior Analysis, in which they found parent, peer, and teacher judgments to be independent and not highly correlated. In fact, their own direct observations of the positive social behavior of these children correlated somewhat with teacher judgments but not with the ratings of parents or peers. Perhaps the ratings by these different sources were measuring separate dimensions of social competence, a fact that makes one unified definition of social competence difficult to arrive at. In terms of social skills, Hops recommended examining at least three different types of children's behavior in order to arrive at all the social skills that together comprise social competence. These behaviors are: the specific social skills that allow a child to initiate and continue social contact, language skills that allow social communication, and the physical or motor skills which allow children to explore their environment with their friends. Since Hops' work was with very young children, the skills he defined were based on the behaviors he observed with them. Those skills become less relevant for adolescents.

Hughes and Hall (1987) proposed a model for the assessment of children's social competence which was based on an information-processing view of the construct, and

integrated social-cognitive and behavioral strategies. In their model, social cognition was linked with cognitive behavioral skills to reduce what they term the "problem space." They emphasized the child's ability to interpret social situations accurately, generate appropriate strategies, and then develop a plan. These authors used the terms "social competence" and "social skills" interchangeably. They proposed a two-dimensional model in which they divided social incompetence into three main categories: behavioral skills deficits, cognitive deficits, and cognitive/behavioral deficits. A child could have either no deficit or a deficit in one of the three areas, and an appropriate treatment strategy would be prescribed depending on which category the child fell into. They advocated using sociometric and teacher behavior ratings to measure behavioral skill deficits. They then listed a choice of 14 specific assessment procedures, most of which were used in individual research studies and were neither standardized nor have remained in general use, to determine whether the child had problems "reading" the social situation, generating appropriate problem solving strategies, or applying the strategies. This assessment procedure constituted "Stage 1" of their method. In "Stage 2," Hughes and Hall advocated interviewing children who were suspected of having social skills problems based on results from the sociometric and rating scale assessments. Thus, the assessments would serve as a preliminary screening to be followed up by an individual interview in which a series of stories would be presented depicting social problems in different contexts. The child would then be asked questions to determine which problem-solving process he/she would choose. Based on the interview, and the first set of teacher assessments, the school psychologist would formulate tentative hypotheses about which specific cognitive and behavioral skill deficit the child had. Then in "Stage 3" the

psychologist would administer another assessment device to confirm which skills needed to be remediated. The authors point out "... that clinically adequate measures of many of the constructs do not currently exist" (Hughes & Hall, 1987 p. 254). Their proposed model, therefore, was purely a theoretical one based on their own study of existing models. Hughes and Hall justified recommending their nonvalidated model because of what they saw as the lack of a systematic approach to assessing and remediating social skills deficits. Aside from the purely theoretical basis for their method and the lack of valid assessment devices, the complicated nature of their three-stage process would make application in the schools impractical.

Gresham (1981b) conceptualized social skills deficits along three different dimensions: skill deficits, performance deficits, and self-control deficits. He stated that at that time, "no universally accepted definition of social skills exists" (Gresham, 1981b p. 123). He named behavioral observations, which were of questionable validity and reliability; sociometric techniques which he found better suited to pre-school populations; peer rating scale sociometrics, described as more reliable than peer nominations; and teacher ratings as the methods of social skills assessment then in use. Gresham asserted that in spite of the close link that ought to exist between assessment and intervention, they had remained quite separate.

Gresham and Elliott (1984) outlined three general definitions of social skills. They first labeled the "peer acceptance definition," which equates children and adolescents being accepted by their peers with their being socially skilled. They dismissed this first definition because of its narrowness, and its failure to delineate the specific behaviors that result in peer acceptance. The second definition of social skills they referred to as "behavioral"

which viewed social skills as: situationally specific responses: and operationalized the antecedents and consequences of social behaviors in ways that made them able to be readily assessed and remediated. The drawback of this approach, according to Gresham and Elliott, was that although the behaviors were specific, they were not necessarily socially significant or important. The third and final approach to defining social skills they labeled the "social validity definition," which consisted of situationally specific behaviors that predicted important social outcomes. These outcomes included peer acceptance, the judgments of behavior of significant others, and other social behaviors that correlated with the previous two.

Gresham and Reschly (1987) further developed the definition of social skills viewing them as being part of a broader construct which they labeled "social competence." Gresham and Reschly divided social competence into three subdomains: adaptive behavior, social skills, and peer acceptance. Within the subdomain of social skills, the authors delineated a number of relevant abilities including interpersonal behaviors, academic related skills, assertion, and communication skills. Gresham with Elliott (1987) promoted this conceptualization of social competence and social skills as being particularly relevant to and applicable in school settings. It is also these areas that are assessed in Gresham and Elliott's Social Skills Rating System (1990). Gresham and Elliott were careful to designate which social skills qualified as good predictors of important social outcomes, and included such behaviors as sharing, helping, initiating relationships, requesting help, giving compliments, and saying "please" and "thank you" (Gresham & Elliott, 1990 p. 368).

Gresham and Elliott have built and improved upon the work of their predecessors during the past 25 years. In reviewing their work one can see the progress that has been made in the assessment of social skills in the years since the early work done by Gottman and his colleagues. In the section on social skills training programs, it will be seen how Elliott and Gresham's program has gone beyond the work of earlier researchers.

The studies in the next three sections are divided into three main categories that are relevant to the current study: research on the relationship between social skills and peer acceptance, between social skills and academic achievement, and between social skills and self-concept. Since many of these studies are multidimensional, they do not "cleanly" fit into only one niche. Consequently, there is some degree of overlap between categories.

Social Skills and Peer Acceptance

A great deal of research has been done that has explored the connection between children's social competence/social skills and other factors related to social, emotional, and academic success. A longitudinal investigation of Cowen, Pederson, Babigian, Izzo, and Trost (1973) found that children who were not accepted by their peers (i.e., had negative peer status) in middle school were much more likely to have adjustment problems in adolescence and young adulthood. In a retrospective study of children over an 11-13 year period, these researchers found that adolescents and young adults identified in a community psychiatric clinic as having psychiatric problems, and for whom early data was available, had been identified six to seven years before on the average as being at risk. A screening battery that had been administered to a population of 537 third grade children consisted of school records, teacher judgment, self-report data, and ratings of 8-9 year-old

peers. They found that the peer sociometric ratings best predicted later psychiatric difficulty. They also made a case for the widespread early screening and detection of children with social skills deficits, and for "viable preventive programs to reduce the likelihood of later, more serious psychiatric casualty" (Cowen et al., 1973, p. 444).

Another longitudinal study by Coie and Dodge (1983) report that in a sample of 208 third and fifth graders there was a high degree of continuity over a five year period for children identified as "least liked." They found that the negative behavior items (disruptive and starts fights) on a peer behavior description questionnaire remained more stable than the positive ones. In other words, students identified as displaying negative behaviors and as being disliked by peers in the earlier grades remained more stable than the positive ones. Thus, students identified as displaying negative behaviors and as being disliked by peers in the earlier grades remained negatively evaluated as they entered junior high school. Coie and Dodge distinguished between "neglected" and "rejected" students - those not named on sociometric ratings, and those receiving a high number of "least liked" nominations. The stability of rejected status was higher than that of neglected. They suggested that their study proved justification for social skills intervention programs, particularly for rejected children whose social difficulties persist over the years.

Parker and Asher (1987) also looked at the relationship between peer relations and later personal adjustment. In their comprehensive review of the literature, they found a link between peer difficulties in childhood and difficulties later in life. They hypothesized that since low-accepted children would be expected to have limited opportunities to react positively with peers, they would be denied the opportunity to learn positive, adaptive social behavior. They also suggested that poor relationships might sabotage academic

achievement as well, since it occurs in a social context. In their extensive literature review, Parker and Asher concluded that low acceptance and aggressiveness were better predictors of maladjustment in later life than shyness/withdrawal. They noted that shyness/withdrawal had been studied predominantly using in-school samples, and "follow-back" (i.e. retrospective) methods of data analysis. It is for these reasons that this research was found to be lacking in practicality. Parker and Asher refer to the distinction between a child's being accepted by the peer group and being able to maintain close friendships with individuals. They also point to the lack of attention paid in the literature to children's own perceptions about their peer relations. Parker and Asher suggest that as a definitive test of the relationship between low peer acceptance and later maladjustment, social skills training programs might be employed to determine whether such intervention would lead to long-term gains in personal adjustment. An even broader question to be addressed is whether such programs would be of benefit when employed in a preventive manner with children not necessarily identified as being rejected or neglected, as part of the regular school curriculum.

An early study by Rothenberg (1970) looked at the relationship between what she termed "interpersonal competence," "intrapersonal comfort," intellectual level, and children's social sensitivity. Rothenberg's operational definition of interpersonal competence was scores on a sociometric measure of peer acceptance. She defined social sensitivity as "the ability to accurately perceive and comprehend the behavior, feelings, and motives of other individuals" (Rothenberg, 1970 p. 335) and she hypothesized, among other things, that children who were more socially sensitive would have greater interpersonal competence and higher self-concept. Rothenberg's construct of social

sensitivity is a precursor to the construct of Empathy on the student form of Gresham and Elliott's SSRS, the capacity for which they view as important to the development of overall social competence (Gresham & Elliott, 1990). In her study of 108 third and fifth-grade children Rothenberg used a series of taped short stories to depict realistic but uncommon interactions between two persons. The children were asked to describe the feelings of the actor in the story, and to tell why he/she felt that way. The stories depicted the feelings of happiness, anger, anxiety, and sadness. She used teacher ratings and peer nominations to measure interpersonal competence; non-standardized measures of self-concept and defensiveness to measure intrapersonal comfort; and the Peabody Picture Vocabulary Test to measure intellectual level. Rothenberg found a positive relationship between social sensitivity and interpersonal competence/peer acceptance; and between social sensitivity and intelligence. In addition, highly socially sensitive children were rated more positively by peers and teachers in their interpersonal adjustment. The qualities of leadership and friendliness were found to be outstanding in the socially sensitive children. Rothenberg's hypothesis that self-concept and interpersonal competence/peer acceptance would be related was not born out.

Kenneth Clark (1980) wrote about the importance of the ability for what he termed "functional empathy" in interpersonal relationships- the ability of a person to feel the needs and emotions of others as if they were his/her own. Clark saw empathy as a characteristic that is very well developed in some, and lacking in others. He viewed an adequate capacity for empathy as "essential for stable and moral interaction with fellow human beings" (Clark, 1980 p. 189). He also believed that the ability to empathize with others is

a skill that can be taught, and that is should be the job of the social scientists to find a way to teach that skill.

Austin and Draper (1984) looked at the relationship among peer acceptance, social impact, and academic achievement in 145 third through sixth grade children. They used a sociometric technique to measure both peer acceptance and social impact, and a standardized achievement test to measure academic achievement. They defined social impact in terms of the number of times a child was mentioned either positively or negatively on a questionnaire. Austin and Draper used the sociometric designations of popular, amiable, isolated, and rejected to analyze the four socialization categories of children. "Popular" children were those frequently named both positively and negatively on the sociometric questionnaire; those only named positively were labeled "amiable;" those named negatively were labeled "rejected;" and those named neither positively nor negatively were named "isolated." Austin and Draper found that children who scored high on academic achievement were more accepted (i.e. "amiable" or "popular") than those who scored low. Children who were rejected were the lower achievers. They concluded that academically able students tended to be more socially accepted. An early large-scale study by Muma (1965) also found that junior and senior high school students who were highly accepted by their peers were more successful academically than other students. Muma used final grades for the school semester during which the study occurred as a measure of academic achievement, and a sociometric test which asked the students to name those individuals whom they most and least wanted to be with in ten situations to measure acceptance. Muma used extremes in peer choice (those in the highest one percentile on the acceptance or rejection data) in their statistical tests. These results were

not corroborated in a recent study done by Brickman (1992) with 114 middle school students in which peer acceptance as measured by a sociometric techniques was not a significant predictor of academic achievement. Perhaps the difference in results might be attributable to the difference in how the data were analyzed - previous researchers compared students at the extremes who were either highly accepted or rejected, while the most recent study correlated overall peer sociometric ratings with academic achievement. One might also consider, however, whether the difference in findings between the earlier and later studies might be due to a change in the attitudes of children toward academic success over the past 25 years. Is academic achievement no longer valued as highly as it once was? This is a question that might be addressed in other research. It should be noted that for the purposes of the current study, the terms "peer acceptance" and "peer status" will be used interchangeably, since the literature indicates that both have been measured using sociometric techniques, and the constructs of high peer status and high peer acceptance are interchangeable.

Rubin (1983) and Asher (1983) offered valuable insights into the research that had been done on peer relationships and social skills in childhood up to that point, and suggested some important ideas to consider when designing research in this area. Rubin noted that many of the correlational studies (e.g. Dodge, Coie, & Brakke, 1982; and Gottman, Gonso, & Rasmussen, 1975) while identifying which specific behaviors were associated with peer rejection or acceptance had failed to establish the underlying causes of popularity or unpopularity. Muma (1965) had also noted that while his study established a relationship between peer choice and academic achievement, it did not establish causality. Asher (1983) explained that the relationship between behavior and

sociometric status could well be bi-directional - a child who has been made to feel socially ostracized and unpopular may behave in ways that confirm his/her low status. One is caught in the "chicken or egg" trap: which came first, the maladaptive behavior, or the low acceptance? Asher also cautioned against confusing the effects of social class and achievement from the effects of social behavior as measured by sociometric techniques. He pointed to a difficulty in doing research on social skills and peer acceptance: the relatively weak relationships between observed behavior and sociometric status. Parker and Asher reaffirmed this distinction in their 1987 article. Asher (1983) offered as a partial explanation for this phenomenon the fact that children react not only to their peers' behavior, but to what they perceive as their goals or intentions. If Asher is correct, this justifies using methods other than behavioral observations to assess children's social skills and the degree of their acceptance by peers, and gives more credibility to the use of self-report measures to assess children's social skills.

Dodge (1983) examined the development of sociometric status in second grade boys, in an effort to determine which behaviors preceded being placed in the different categories of peer status groups (popular, rejected, average, neglected, and controversial). He used observations of peer interactions in 15 pre-determined categories, ratings of physical attractiveness, and sociometric interviews to place the subjects in one of the five categories. Dodge concluded that it was the behaviors exhibited by the boys when they first interacted with their peers that determined their later sociometric status, and that these behaviors were much better predictors of status than physical attractiveness. He found that the boys who exhibited inappropriate, disruptive behaviors such as standing on tables were more likely to be unpopular (i.e. rejected or neglected). These unpopular boys

actually approached their peers to play more often than the popular boys, but were frequently turned down. They tended to exhibit more aggressive behaviors and less cooperative play and social conversation. Even when they exhibited the same behaviors as the more popular boys, they did not receive positive peer responses. Eventually they tended to give up, and these boys became more and more isolated. It may have been this "reputation" as popular or unpopular that resulted in lasting negative or positive reactions from peers. This study also provides evidence for the importance of early intervention.

Gresham and Reschly (1986) looked at social skill deficits and low peer acceptance in a population of 100 mainstreamed learning disabled (LD) children, and compared them to 100 nonhandicapped children. The subjects had an average age of 9.2 years. The LD children all received services in resource rooms. Dependent variables were teacher ratings on the Social Behavior Assessment-Teacher Form (SBA-T), which groups social skills according to four broad behavior categories (environmental, interpersonal, task-related, and self-related behaviors); parent ratings on the Social Behavior Assessment-Parent form (SBA-P), which assesses social skills in the home and groups them according to the same four categories; and three measures of peer acceptance. The peer acceptance measures were the Play with Rating Scale (PWR), the Work with Rating Scale (WWR), and Structured Peer Assessment (SPA). The PWR and WWR are sociometric techniques in which children are asked to rate their classmates according to how much they would like to play and work with each other on a five-point Likert scale, and provide relative standing of the children in their own classroom. The SPA is a structured peer rating scale in which children are asked to rate their peers according to the frequency with which they exhibit 13 behaviors (e.g. smiles at others, helps others, listens to others). Gresham and

Reschly found that LD students had deficits in teacher-, parent-, and peer-rated social skills as well as peer acceptance. These social skills deficits included interpersonal, self-related and task-related behavioral areas. They found that the task-related social skills included behaviors that teachers considered important to classroom success, such as accepting authority and helping others.

In other studies with learning disabled students, Silver and Young (1985) looked at the social competence and social problem-solving skills of learning disabled, normally achieving, and low-achieving but non-learning-disabled eighth grade boys. They measured social problem solving skills using written tasks, behavioral adjustment using both self-ratings of home and school relationships as well as teacher and parent ratings, and peer status using a sociometric instrument. These researchers found similarities between sociometric ratings of low-achieving and learning disabled subjects, even though the low-achieving group had a lower mean I.Q. score than the learning disabled students. Merrell, Johnson, Merz, and Ring (1992) compared the social competence of elementary age students who were learning disabled, mentally retarded, behavior disordered, low-achieving, and average/regular education. They found that the regular education students scored significantly higher on a scale of social competence and school adjustment than all of the other groups, with the behavior-disordered students scoring the lowest. They also found girls to have significantly higher levels of social competence than boys. Another important by-product of this study was the similarity in social competence between students with mild mental retardation and nonhandicapped low achieving students. Other researchers have also found similarities in social skills between learning disabled and nonhandicapped low-achieving students (Merrell & Shinn, 1990; Sater &

French 1989). This research establishes the similarities between learning disabled and low-achieving non-labeled students, and provides a rationale for viewing the studies done on learning disabled students as an indication of how low-achieving students might perform under the same circumstances. Gresham and Elliott, in fact, in their introduction to the Social Skills Rating System (1990), indicate that although social skills deficits are characteristic of many learning disabled children, there is "currently little research to indicate unique social skills deficits in this population" (Gresham & Elliott, 1990, p. 8).

Social Skills and Academic Achievement

The idea that intrapersonal psychological characteristics other than intelligence can impact on school learning is of interest to psychologists as well as educators. Boyle (1987) discussed the powerful influence of such factors as motivation, temperament, and anxiety on achievement. He referred to his own 1983 study with a group of 69 undergraduate students in which he found that particularly in stressful situations, personality characteristics were more important than ability level in determining how much information was retained (Boyle, 1983). Social skills are one of those characteristics that has been found to have an important influence on how well children achieve in school.

Muma (1965) was a pioneer in examining the relationship between academic performance and social skills as measured by peer evaluation. He studied the extremes of peer choice (highly accepted or highly rejected) in junior and senior high school populations using a ten-item sociometric test that he constructed. Students were asked to write the names of individuals they most and least wanted to be with while doing a series of ten activities, ranging from going to a game to keeping secrets. He used the students in the highest one percent of acceptance and rejection to represent extremes of peer choice,

and used students randomly selected from each school to serve as controls. Muma used final grades for the school semester in which the study occurred as a measure of academic performance. He concluded that students who were most highly accepted by their peers were also more successful academically than other students, while students who were highly rejected by their peers were also less successful academically. Muma was careful to point out that causality was not established. He based his study on grades in academic classes, but followed it up with another study using achievement in so-called performance or non-academic classes such as band, chorus, driver education, and physical education. Although the relationship between academic achievement in performance classes and peer acceptance/evaluation as not as strong as in academic classes, it was significant nevertheless.

A 1991 study by Frentz, Gresham, and Elliott looked at social competence and achievement differences among various sociometric groups of adolescents (i.e. popular, controversial, neglected, and rejected). Their sample consisted of almost 1000 students out of an original sample of 1500 who were classified according to the four categories. These researchers pointed out that previous studies in the area of behavioral characteristics of different peer sociometric status groups had used preschool and elementary populations, and had only examined two of the five sociometric categories established by Coie et al., (1982). Frentz and his colleagues were interested in the different behaviors and academic skills exhibited by adolescents who change classes, peers and teachers during the school day, in comparison to elementary-age children who remain with one teacher all day long. Using a peer nomination sociometric assessment, Frentz et al. classified students according to popular (liked most), controversial (liked most and

liked least), neglected (neither liked most nor liked least) and rejected (liked least). The techniques they used for assigning students to categories were outlined by Coie et al. (1982), except in this study the category of "average" was not used since these researchers were interested in the extremes of peer acceptance categories. Social skills in this study were measured using the teacher report and student self-report forms of Gresham and Elliott's Social Skills Rating System (SSRS) (1990). They also used the teacher report of behavior problems in the Revised Behavior Problem Checklist (RBPC) (Quay & Peterson, 1983). The RBPC has four major scales: Conduct Disorder, Socialized Aggression, Attention Problems/Immaturity, and an Anxiety/Withdrawal; and two minor scales: Psychotic Behavior and Motor Excess. In addition, the Self-Control Rating Scale (SCRS) (Kendall & Wilcox, 1979) was used to measure children's level of impulsivity versus self-control; and the Children's Inventory Anger (CIA) (Nelson & Finch, 1978 as cited in Frentz et al., 1991) was used as a self-report measure to assess the subject's ability to control anger. Finally, the Academic Achievement Questionnaire (AQ) (Gresham & Elliott, 1990) which is part of the teacher version of the SSRS was used to measure academic achievement. Frentz et al. grouped the dependent measures into the behavioral categories of social skills (Measured by the SSRS-T and SSRS-S), behavior problems (measured by the RBPC, SCRS, and CIA), and academic achievement (measured by the AQ). They found social skills differences only between popular and rejected adolescents using the SSRS-T, but no differences among sociometric status groups on the student self-report measure of the SSRS. Both popular and controversial adolescents were rated by teachers as having higher academic achievement than the rejected adolescents. No significant differences in academic achievement were established for the neglected adolescents in comparison to the

other groups. The use of the Coie et al. (1982) method of sociometric classification on an adolescent population was supported only for the two extreme categories of popular and rejected. Differences in acting out and externalizing behaviors were also found between the popular and rejected groups, but not between the rejected group and either the controversial or neglected students. Frenzt and his colleagues suggested using standardized measures of achievement in future research to determine if the relationships they established would hold. Brickman's (1992) small-scale study did just that in comparing SSRS-S ratings with academic achievement on a standardized achievement test (the California Achievement Tests [McGraw-Hill, 1985]), and found that the relationship between social skills as measured by a student self-report instrument and academic achievement was highly statistically significant.

An earlier study by Green, Forehand, Beck, and Vosk (1980) examined the relationship among four measures of children's social competence: teacher reports of children's social behavior, sociometric measures, child self-report measures, and behavioral measures; and compared them to measures of academic achievement. Their subjects were 166 third-grade children who completed positive/negative peer nomination questionnaires, and a questionnaire entitled: "My Wishing Star" in which each child checked a wish he/she would like to make on a list of home, school, self, play, and people issues. Behavioral observations were made by undergraduate and graduate psychology students who were trained to code behavioral categories representing withdrawn, assertive, and aggressive behaviors. Teachers completed the Conners Teacher Questionnaire for each child, and academic achievement was assessed using the Metropolitan achievement test. Green et al.

found that children with high academic scores were liked and had more positive interactions with peers.

In a study of the relationship between social competence and academic achievement in third and fourth grade boys, Bursuch and Asher (1986) used a sociometric rating technique in which the children were asked to rate their classmates on a Likert scale of 1-5 according to how much they would like to play with them. The children were then each rank-ordered according to the ratings they received from their classmates, and the top third and bottom third status group in each classroom were identified. The children were chosen from six different urban elementary schools. Students who were labeled learning disabled, behavior disordered, or mildly retarded were not included. Reading scores on the SRA Achievement tests which had been administered ten months previously were examined, and the children were divided into three groups: the low-status boys in the bottom third of their class who also scored below the 40th percentile on the reading achievement test (LA-low achievement) formed one group; the low-status boys who scored above the 40th percentile (HA- high achievement) formed the second group; and the high status boys who scored in the top third of their class as well as above the 40th percentile on the reading test (HA) formed the third group. In addition, each boy's classroom teacher completed two teacher rating scales designed by the researchers. The first was a situation-specific scale developed to measure the social skills of children in situations including either interpersonal conflict, or non-conflict situations involving some aspect of social relationships. The teachers were asked to rate how each child might be likely to respond in particular situations. Based on their ratings, scores were derived for each child according to how they would be likely to behave (positive, negative, or

withdrawn) in each of the two specific situations (conflict/non-conflict). A second teacher rating scale was developed which consisted of twelve situations dealing with socially competent behavior under more general circumstances. Examples of the behaviors included: "is a good sport," "is helpful," and "talks to other children." Children were again rated by their teachers on a scale of 1-5 for each item according to how frequently the child exhibited the behavior in each situation. Each child received a total score for all twelve items, indicating their level of general social skills. An additional measure was administered which consisted of an interview used to assess each child's social knowledge. The children were presented with the same twelve situations that had been depicted in the second teacher rating scale, and were asked "What should you do?" in each of these hypothetical situations. Their responses were rated by judges not involved in the study according to the social goals embedded in the strategies given by the children. These judges also rated whether the children had named positive-, negative-, or withdrawal-type behaviors. These researchers found that achievement was in fact related to social behavior towards peers. There were significant differences between the behaviors ascribed to the low-status, lower achieving children and the low-status higher achieving children. The low-status, low-achieving boys were rated by their teachers as more likely to be negative in situations requiring support for a peer, less positive in situations requiring conflict resolution, and as having fewer social skills on the whole. The low-status, higher achieving group did not differ significantly from the high-status, high-achieving group on any measure, so they concluded that academic achievement was the most significant factor in determining children's social behavior. Bursuck and Asher (1986) pointed out, however, that the exact nature of the role that achievement plays in

social behavior has yet to be determined. Perhaps the low-achievers opted for negative recognition in the classroom since they could not gain recognition for their academic performance. Perhaps they lacked the confidence in their ability to display appropriate social behaviors. Perhaps teachers were biased towards the high achieving students, and so might have rated their behavior as being more socially positive. Bursuck and Asher failed to find differences among the groups on the measure of social knowledge. The complicated nature of the measures administered which required precise judgments on rather imprecise constructs may have affected the outcome here. In addition, the presentation of intricate hypothetical situations to which the children were asked to predict their own responses would seem to be a questionable method for assessing social skills. The authors did not present evidence of the validity or reliability of their instruments, nor of the inter-rater reliability of their judges.

Garmezy, Masten, and Tellegen (1984) examined which risk, competence, and protective factors predicted current and later psychopathology in children. Garmezy had been interested in which factors contributed to stress resistance in children who had been exposed to stressful events. Garmezy et al. (1984) looked at the intercorrelations between several measures of stress, school-based competence (especially academic achievement), and child competence, and their relationships to developmental psychopathology. As measures of stress, they used a Life Events Questionnaire (LEQ) and a series of interviews designed to examine all negative and ambiguous events that had occurred in each family during the two years covered by the LEQ. The interviews took a total of six hours, and both of these instruments were administered to parents of third through sixth graders in three urban samples, two of which included families of children with severe physical

handicaps. Sociometric status of the families was also included as a measure of stress. School-based competence was assessed using two measures of academic achievement: grades obtained from school records, and the standardized individually administered Peabody Individual Achievement Test. In addition, behavioral competence in the classroom was measured using teacher ratings on the Devereux Elementary School Behavior rating scale; and interpersonal competence in school was measured using a peer assessment Class Play technique (not described). Finally, general intellectual ability was estimated using the Vocabulary and Block Design subtests of the WISC-R. An individual child interview was also conducted and extensively analyzed. It revealed three primary factors: factor A, which correlated strongly with global competence; factor B, which correlated with a composite disruptive score; and factor C, which correlated with self-esteem and academic motivation and was labeled "aspiration-motivation." Using multiple regression and multiple correlation methods of data analysis, the authors found that severe stress can be compensated for by personal qualities of competence, including academic achievement. From the intercorrelations, they determined that there is a strong relationship among the different variables which measured engaged classroom behavior, academic achievement, and intelligence. They found that high-IQ children were able to score higher on the PIAT, regardless of level of stress, whereas the PIAT performance of low-IQ children was negatively affected by stress. What is of interest here in addition to the relationships uncovered in the study are the very complicated instruments used to measure the variables being examined, and the years of analysis that were required to explain the data. The hours of interviews of both parents and children which required

painstaking coding of the interview data and factor analysis make them impractical for clinical use in school, and more suitable for use in the laboratory.

Gresham (1992) discussed the causal relationship between social skills deficits and academic deficits. He was particularly interested in determining whether social skills deficits should be considered to be a specific learning disability. Gresham offered three hypotheses for how social skills deficits come about. The first he called the "causal" hypothesis in which social skills deficits are considered to be biological and caused by a central nervous system (CNS) dysfunction. This mechanism is hypothesized to be similar to the neurological dysfunction which is thought to cause the academic problems of learning disabled children (Gresham, 1992). Gresham relied on the research of Semrud-Clikeman and Hynd (1990) and the theories of Myklebust (1975) to support this theory, which he viewed as "weak, highly inferential, and speculative" (Gresham, 1992 p. 351).

The second hypothesis he called the Concomitant Hypothesis, which can be explained via three different possible mechanisms. In the first explanation, the academic deficits of children with learning disabilities lead to social skills deficits. In the second explanation, the social skills deficits lead to academic deficits. In the third explanation, both the social and academic deficits of learning disabled children occur at the same time. Gresham points out, as we have seen earlier, that social skills and academic deficits are clearly not unique to learning disabled students, and, in fact, students with low achievement do not differ significantly in their social skills from children with learning disabilities (Bursuck, 1983).

The third and most likely hypothesis Gresham calls the Correlational Hypothesis, in which there is a relationship between academic skills and social skills, without implying that one causes the other. Children who have better social skills also tend to do better in school. The results of the 1992 study by Brickman found such a relationship in a population of 7th and 8th grade middle schools students: social skills was the best predictor of academic achievement.

A number of researchers have examined the relationships between academic achievement and social skills as evidenced by classroom behavior. Swift and Spivack (1969b) also used the Devereux Elementary School Behavior Rating Scale employed in the Garnezy, Masten, and Tellegen study (1984) to clarify the nature of the relationship between specific classroom behaviors and academic success and failure. They looked at the behavior patterns of both underachieving and achieving fifth grade children using two different measures of academic achievement: the Iowa Test of Basic Skills (IOWA), and teacher assigned report card grades. Swift and Spivack defined "underachievers" as those who either scored below the 45th percentile on the IOWA, or received D's and F's on their report cards. Achievers were defined as those scoring above the 85th percentile on the IOWA, or received A's and B's on their report cards. They found that children who were underachievers on both the group test and report card demonstrated a "general lack of adaptation to the demands of the classroom environment" (Swift & Spivack, 1969b, p. 104). Those who underachieved on one or the other measure demonstrated some maladaptive behaviors, but not as many as those who underachieved on both. Examples of such behaviors included not contributing to class discussion and being inattentive in class. It comes as no surprise to learn that those children who were underachievers on

report cards but not on the standardized test displayed more maladaptive classroom behaviors than those who were underachievers on the standardized test but not on the report card. Those children who received report card grades of A or B exhibited significantly less problem behavior than children receiving grades of D or F. Thus, Swift and Spivack concluded that report card grades, and to a lesser degree scores on a standardized achievement test are reflective of social skills as evidenced by classroom behaviors in addition to what is learned in the classroom.

In another study done that same year, Swift and Spivack (1969b) examined which classroom behaviors and characteristics were judged by teachers to interfere with the academic success of both normal and emotionally disturbed junior and senior high school students. The teachers identified twelve factors for the normal students, and thirteen for the emotionally disturbed students that were clearly related (either positively or negatively) to academic achievement. The 13th factor that was only relevant to the special class group was labeled "Verbal Negativism." Significant correlations were found between the factor scores and academic achievement, even after intelligence was partialled out. Examples of the positive factors identified and the behaviors associated with them were verbal interactions (i.e. asks questions to get more information, participates actively in discussion), and rapport with teacher (i.e. engages the teacher in conversation about subject matter or mutual interests, liked by you as a person). Examples of negative factors include quiet-withdrawn (i.e. very quiet, uncommunicative, lacks social interaction with peers), and poor work habits (i.e. comes in late to class, has work poorly organized, fails to turn in assignments on time). Grade point average was used to measure academic achievement. It is quite clear here that academic success in school is highly related to the

behaviors that the students exhibited (or did not exhibit) in the classroom. Swift and Spivack concluded that the behaviors related to academic success or failure were the same for students in the regular classes as they were for students in special classes for the emotionally disturbed. They also concluded that when a student exhibits qualities that are unattractive to the teacher, or causes a management problem in the classroom, the student is more likely to be academically unsuccessful as evidenced by receiving lower grades. Many of the positive behaviors identified by Swift and Spivack are included in Elliott and Gresham's Social Skills Intervention Guide (1991) which is the basis for the social skills training utilized in this dissertation study.

McKinney, Mason, Perkerson, and Clifford (1975) also studied the relationship between classroom behavior and academic achievement. Their subjects were second grade public schools students, both boys and girls. They coded classroom observations according to twelve target behaviors that they included in The Schedule for Classroom Activity Norms, and collected observations in both the fall and spring using trained observers. Examples of the twelve behaviors observed included attending, task-oriented peer interaction, and teacher interaction. McKinney et al. measured achievement in the fall and spring using five subtests of the California Achievement Test in reading, mathematics, and language skills. They concluded not only that classroom behavior is a determinant of current academic progress, but can predict progress later in the school year. Like Swift and Spivack, they also found that behavior data could predict achievement independent of ability. They found that a child who is attentive in class, works independently, and is task oriented is more likely to be academically successful than a child who is distractible, dependent on others, and does not interact actively with peers.

Perhaps these findings are self-evident, but the idea that these beneficial classroom behaviors might be taught has not been widely put into practice, certainly not in a preventive manner.

Social Skills and Self-Concept

Haynes, Comer, Hamilton-Lee, Boger, and Rolock (1987) analyzed the relationship between children's self-concept as measured by the Piers-Harris Children's Self-Concept Scale (1984) and their teachers' assessment of their behavior. Their hypothesis was that teachers' assessments of nonacademic behavior would be significantly related to how the children viewed themselves. These assessments were based on teacher ratings on the Conners Teacher Questionnaire (1969) in three areas: classroom behavior, group participation, and attitude toward authority. The researchers concluded that the teacher ratings of children's attitude toward authority accounted for the largest amount of variance in self-concept, while the second largest amount of variance was accounted for by teachers' ratings of the children's classroom behavior. The least amount of variance was accounted for by teacher ratings of group participation. Thus, children's social skills as evidenced by their classroom behavior and interactions with teachers strongly effects how they feel about themselves.

There has been considerable interest in the literature in the academic, social, and general self-concepts of learning disabled and other handicapped children. Durrant, Cunningham, and Voelker (1990) studied perceived competence in 60 children between the ages of eight and thirteen who were divided into four behavioral subgroups: non-learning-disabled, non-behavior-disordered (i.e. "normal"); learning disabled,

non-behavior-disordered; learning disabled with externalizing symptoms; and learning disabled with externalizing and internalizing symptoms. Durrant and his colleagues based their research on the premise that because of their lack of success in school, learning disabled children perceived themselves as less competent than their peers. Children were categorized as learning disabled in their study if there was a discrepancy of one or more standard deviations between their scores on their Verbal I.Q. on the Wechsler Intelligence Scale for Children-Revised (WISC-R), and their scores on the Reading and/or Spelling sections of the Wide Range Achievement Test-Revised (WRAT-R); or between their Performance I.Q. on the WISC-R and their score on the Arithmetic section of the WRAT-R. The designations of "Externalizing" and "Internalizing" were based on the Externalizing and Internalizing scales of the Child Behavior Checklist (CBCL, Achenbach & Edelbrick, 1983). They concluded that social self-concept was related to behavior variables more than to cognitive variables, while cognitive self-concept was primarily related to WRAT-R Arithmetic scores, and scores on the Internalizing Scale of the CBCL. More importantly, perhaps, the children who were not behavior disordered scored higher on all sections of the Piers-Harris than those who were behavior disordered. Thus, it appeared that it was the social skills (evidenced by their behavior) of the children that determined their self-concept, more than the fact of whether or not they were learning disabled.

Gresham, Evans, and Elliott (1988) studied differences in perceived competence among mildly handicapped, gifted, and nonhandicapped students. They based their concept of perceived competence on Bandura's (1977a) self-efficacy theory, which proposes that people base their sense of how competent they are on how they perform in

particular situations, and the degree to which they have control over events in their lives. Gresham and Evan operated under the same premise that Durrant, Cunningham, and Voelker had, but explained their assumption according to Bandura's theory: handicapped children had experienced failure and so would have a low sense of self-efficacy. They hypothesized that these children would initiate tasks less frequently and stay with them for a shorter period of time because they anticipated failure (Gresham, Evans, & Elliott, 1988).

In their study, Gresham et al. used public school children in grades three through five who were categorized as either mildly handicapped, gifted, or nonhandicapped. The mildly handicapped students had been classified as either learning disabled, mildly mentally handicapped, or behavior disordered according to state guidelines. These students spent part of each day in a resource room program but received most of their schooling in a regular classroom. Gifted students had I.Q.'s of 130 or above, and academic achievement in reading and mathematics that was a minimum of two standard deviations above the mean. Nonhandicapped students were those that had never been referred for special education services. The researchers combined items from two behavior checklists: the Walker Problem Behavior Identification Checklist (Walker, 1976), and Gresham and Elliott's Social Skills Rating Scale, which was then in preparation. They called the resultant instruments the Academic and Social Self-Efficacy Scale (ASSESS) with student, parent, and teacher forms.

As they predicted, Gresham, Evans, and Elliott (1988) found that mildly handicapped students reported lower academic and social self-efficacy than nonhandicapped and gifted students. An unexpected finding was that there were no

differences in perceptions of academic self-efficacy between the gifted and nonhandicapped students. They were unable to explain this finding, but suggested that there may be subtle differences between the constructs of "self-efficacy" and "self-concept." Another unexpected finding was that gifted students reported themselves to be lower in social self-efficacy than handicapped students, and suggested this as a topic for future research. Gresham, Evans, and Elliott found that teacher reports of self-efficacy were more compatible with student self-reports than the parent reports were. This finding calls into question the use of parents forms of behavior rating scales as the sole basis for making educational decisions for children. Since, as Bandura (1977a) stated, judgments of efficacy are based on experiences of personal mastery, these authors suggested that teachers provide such experiences for their mildly handicapped students as a means of enhancing their academic self-efficacy.

Wanat (1983) was interested in improving the self-concept and academic achievement of learning disabled adolescents by implementing a social skills awareness program. His subjects were high school students in grades ten through twelve who were classified as learning disabled and placed in a resource room program. Classification was based on scores on a standard battery of psychoeducational tests (i.e. Bender Motor Gestalt Test, WISC-R or WAIS-R, Detroit Test of Learning Aptitude, Peabody Individual Achievement Test, and the Wide Range Achievement Test). The study did not specify what criteria had been used for labeling these students learning disabled. All students were pre- and post- tested on the Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1969), and the Fundamental Interpersonal Relations Orientation-Behavior (FIROB, Schutz 1978). Grade point averages were used to measure academic

achievement. Students in the experimental group met for 16 weeks, 55 minutes per day, in a social skills awareness/improvement program entitled Innerchange Human Development program which used primarily verbal discussion about specific social situations and how to handle them. Wanat concluded that although no significant difference was found between experimental and control groups in their GPA following the program, there were significant differences in their scores on both the Piers-Harris and the FIROB. He attributed the lack of difference in academic achievement between the two groups to the relatively short duration of the program. Wanat suggested that a social skills program should be a part of the curriculum for all learning disabled high school students. It should be noted that since the control group received no intervention at all, not even a placebo discussion group, it is possible that part of the effects obtained in this study could have been due to the extra attention paid to the experimental group subjects.

Early Adolescence

The research presented so far has provided ample evidence of the interrelationships among children's social skills and their peer acceptance, academic achievement, and self-concept. These factors have particular relevance to middle school (early adolescent) students). At no other time in a child's life is the impact of the peer group and concern with how one is viewed by one's peers as important as in the early adolescent years (ages 11-13) (Damon & Hart, 1982; Elias, Gara, & Umbriaco, 1985; Simmons, Blyth, Van Cleave, & Bush, 1979), but it is also these years that are often overlooked by researchers and program planners (e.g., Camper, 1992).

Damon and Hart (1982) constructed a model for the development of the social and psychological self. In their discussion of the mechanism by which self-understanding takes place, Damon and Hart (1982) examined the emergence of self-awareness that occurs in early adolescence, and the concomitant self-consciousness of this age group. In the model that they have developed which is based on the empirical studies of numerous researchers, early adolescence is characterized by a new social sensitivity and the development of social skills as the child moves from the physical self in infancy and early childhood, through the active self in middle and late childhood, and eventually to the psychological self and the development of a personal philosophy in late adolescence. Damon and Hart propose that in order to measure self-esteem (using an instrument such as the Piers-Harris, 1984) a developmental model of self-understanding is required. They also propose that self-esteem cannot be assessed independently from self-understanding.

Damon and Hart depict the early adolescent years (approximately between the ages of 11 and 13) as the time during which social personality first begins to become important. It is not until this period of development that the young adolescent realizes that one can consciously reflect on one's own self-experience. They attribute the increased self-consciousness of the young adolescent to this phenomenon. A new method of self-control becomes possible based on the "mental powers of self-reflective self-awareness" (Damon & Hart, 1982, p. 855). It is not until later adolescence that the notion occurs of unconscious levels of experience of which one may be unaware. The authors draw upon the writings of Selman (1980) to explain the emerging self-understanding of the early adolescent who sees him/herself as being able to self-reflect and actively control his/her conscious experience. Broughton (1980) also

proposed a two-level model of self-awareness in adolescence that Damon and Hart drew upon for their developmental model. Broughton viewed early adolescence as the first time during which the child is able to distinguish between mental and physical reality. The young adolescent, according to Broughton, for the first time views his/her mind as being capable of making judgments, of processing information, and as being self aware and knowing itself. The young adolescent is capable of introspection and can both evaluate him/herself and control his/her thoughts.

Damon and Hart also based their developmental model of self-understanding on Secord and Peevers' (1974) study of self-understanding in children and adolescence in which they interviewed children of different ages and asked them to describe themselves. During childhood, the description tended to include specific characteristics and focus on the immediate present. Secord and Peevers reported a shift in the young adolescent who had begun to describe him/herself using abstractions and to include both the past and future selves. For the first time self reflection occurred.

The complicated multidimensional model that Damon and Hart developed contains four aspects of what they call the "Me" which include the physical self, active self, social self, and psychological self; the development of self-understanding which culminates in self-reflection; and the four developmental levels of infancy and early childhood, middle and late adolescence. Only early adolescence is viewed as the age of social sensitivity, with a focus on "communicative competence" and other related social skills.

Brion-Meisels and Selman (1984) focused on an area of adolescent social competence that they referred to as "interpersonal negotiation strategies" and described

implications for assessment and intervention. These researchers described early adolescence as a time during which there is a change in every aspect of personal growth: physical (i.e., hormonal), emotional, and cognitive. In addition, there are changes in every important social relationship, including those with family and friends, teachers, and employers. They suggested that by examining the pattern of social interactions during this developmental phase, the development of social competence can be understood and interventions for social skill development will emerge. They proposed that it is during this time that the early adolescent can first take the perspective not only of another person, but can understand how each person's behavior affects the others. This capacity to reflect, described earlier by Damon and Hart (1982), affects peer relationships. Brion-Meisels and Selman propose an integration of the early adolescent's emerging cognitive understanding of self and others, which they refer to as the "structure," with their ability to use this understanding and develop functional strategies for making decisions and dealing with interpersonal problems (Brion-Meisels & Selman, 1984).

Brion-Meisels and Selmen (1984) developed a program for young adolescents ages 12-15 who were in a special school because of their significant psycho-social problems. The purpose of the program was to help the students improve the strategies they used to deal with social situations involving peers and adults. The Interpersonal Negotiation Strategies these researchers described involved the adolescent's meeting his/her own needs through social interactions with another. They analyzed the strategies in terms of their structural, functional, and contextual aspects. The structural aspects were broken down into "perspective-coordination," and "interpersonal orientation" (Brion-Meisels & Selman, 1984, p. 281). Perspective orientation is the ability to view her/himself in broader social

relationships. Interpersonal orientation refers to the extent to which the adolescent feels he/she is able to effect change in her/himself or others. As the adolescent moves to a more sophisticated level of negotiation strategy, he/she becomes more able to integrate his/her own needs with those of others. Brion-Meisels and Selmen described the functional aspects of negotiation strategies in terms of four social skills components: the adolescent's ability to label the interpersonal problem; the ability to think of alternative solutions; the ability to predict consequences for both her/himself and others; and the ability to evaluate the results. The contextual aspects are defined as the sociological and situational factors in which the relationship is embedded.

Brion-Meisels and Selman (1984) viewed the negotiation strategies as taking place on one of four levels, ranging from impulsive and egocentric to mutual and collaborative. The steps of the interpersonal negotiations strategy (labeling, generating alternatives, anticipating consequences, and evaluating results) can occur at any of the four levels described above, becoming progressively more sophisticated at each level. The clinician can analyze an adolescent's strategy, determine on which level he/she is operating, and then devise an intervention to help the child grow to the next level. These authors suggest that even though their work was done with handicapped students, their techniques are applicable to all adolescents and has relevance in school settings. They also propose that assessment of intervention strategies take place in such informal activities as group discussions, classroom meetings, and observations of student interactions.

Additional evidence of the many social, emotional, and physical demands placed upon children during this period is found in a relatively early study done by Simmons, Van Cleave, and Bush (1979) who examined the impact that the stressful transition into early

adolescence has on the self-esteem of children. They looked at which children had the most difficulty during this transitional period.

Simmons et al. (1979) interviewed 798 children during the period of entry into 7th grade from 6th. The interviews took place over a three-year period, and included questions related to self-esteem (dependent variable) and early dating behavior (independent variable). Puberty was determined by menstruation in girls, and height as well as a variety of secondary sexual characteristics in boys including underarm hair growth and voice change. These researchers were interested in the extent to which self-esteem changed between sixth and seventh grade, as well as the effects of the nature of the school environment, level of pubertal development, and extent of involvement in social activities with the opposite sex.

Simmons and his colleagues determined that boys and girls respond very differently to the demands of this transitional period. Girls appeared to be more sensitive to the changes in school environment, while boys reacted more to the physiological changes of puberty. According to their findings, the self-esteem of girls was negatively affected by the change in schools, while boys' self-esteem was raised in response to the effects of puberty. In addition, they found that girls who begin to menstruate earlier were more likely than other girls to score lower on (unspecified) standardized achievement tests and to have lower grade point averages (GPA's). Girls who began to date earlier also had lower GPA's and rated themselves as causing more behavior problems in school. Simmons et al. depicted early adolescence as a period of role transition, and determined that girls were at greater risk of damage to their self esteem than boys. It would be interesting to repeat this study now with the new emphasis on equal opportunities for

women and sensitivity to the sexism that has been prevalent in our society. One might wonder whether the nature of the questions asked during the interview were more geared toward the interests and needs of boys, or reflected a more negative attitude toward women. This dissertation study has in fact used gender as one of the independent variables.

Elias, Gara, and Ubriaco (1985) also presented evidence to suggest that when children enter middle school, it is a particularly challenging and stress-inducing time that requires the accomplishment of a number of social, cognitive, and personal tasks, along with the physical and biological changes that accompany puberty. They also looked at the social supports available during this period. Elias et al. (1985) discussed how the students leave behind their previous school-based support system while they encounter pressures from teachers, administrators, parents, and a variety of peer subgroups. Middle schools may either ease or worsen those pressures. The purpose of their study was to identify both the stressors and available supports during the period of transition into middle school from the perspectives of both the school administrators and the students. Elias and his colleagues did this via questionnaires that they wrote and distributed to 41 school administrators and 158 6th graders four weeks after entering into middle school. The administrators were able to divide the stressors that the students identified into three groups or "Prototypes" according to whether they were more likely to be a problem early in the school year, throughout the year, or at the end of the year. Examples of stressors with maximum potency early in the year in Prototype 1 included missing friends from elementary school, having trouble making new friends, and being bothered by older kids. Examples of stressors from Prototype 2 included arguing with teachers, coming to class

with wrong materials, and getting things stolen. Examples from Prototype 3 included smoking cigarettes and dating members of the opposite sex.

Elias et al. found that the school administrators tended to overestimate the problem that academic demands caused for the children. They also tended to discount the importance of parents, siblings, and out-of-school friends in providing support in comparison to teachers, guidance counselors, and friends in school. Elias, Gara, and Ubriaco (1985) suggested that the following areas should be focused on for clinical intervention: strategies for dealing with being teased by peers or older students, strategies for handling peer pressure, and strategies for becoming involved in social activities. An additional finding that they identified was the importance of dealing with the stressors of transition into middle school in a preventive manner.

Eccles, Midgley, Wigfield, Miller Buchanan, Reuman, Flanagan, and Mac Iver (1993) also examined the stress associated with the move into junior high or middle school and the "problematic changes associated with early adolescent development." They refer to a previous study (Eccles, Lord, & Midgley, 1991) that showed the early adolescent years to be the beginning of a decline for some students that leads to academic failure and even school dropout. Eccles, Lord, and Midgley (1991) described the early adolescent years as characterized by a "gradual decline in various indicators of academic motivation, behavior, and self perception . . . to make one wonder what is happening" (Eccles et al., 1991, p. 522). They attributed these declines in motivation to the occurrence of two major transitions occurring simultaneously: the changes accompanying puberty, and changes in school. Either one of these alone would cause stress, but together they often prove to be more than the young adolescent can handle.

In their "person-environment fit theory," Eccles, Midgley, Wigfield, Miller Buchanan, Reumen, Flanagan, and Mac Iver (1993) discuss how in order for the students to do well in school and be motivated, the social environment of the school must meet the psychological needs of the students. They also assert that some of the motivational problems that occur at this stage of development may be due to the negative changes in the school environment rather than the particular changes that occur during early adolescence. Eccles and her colleagues explain that a number of changes occur in junior high and middle school classrooms that are inappropriate to the developmental needs of early adolescence including a greater emphasis on teacher control and discipline, fewer opportunities for students to participate in decision making, less personal and positive teacher-student relationships, whole-class rather than small-group instruction, higher standards in grading, and classwork which requires lower level cognitive skills (Eccles et al., 1993). They also assert that these changes are particularly detrimental to students that are struggling academically, and that it is difficult for teachers to develop the close relationships that are characteristic of elementary schools because of the larger number of students with whom they come in contact each day. In their article on priorities for research on adolescent development, Zaslow and Takanishi (1993) also discuss the transition from small, neighborhood-based elementary schools to the larger more anonymous middle or junior high schools and the concomitant declines in self esteem and academic motivation. In an earlier study, Feiner, Ginter, and Primavera (1982) had examined a program to reduce the academic and personal difficulties associated with the move from middle to high school. These researchers provided social support from teachers and peers by means of a primary prevention Transition Project in which entering

freshmen were assigned to special homerooms with teachers who acted as liaisons between students, school, and home. In addition, the students were grouped with other students in the program for their major academic subjects. Feiner and his colleagues found that at the end of ninth grade, "project" students had significantly higher grade point averages, self concept (as measured on a Self- Appraisal Inventory), and had more positive perceptions of the school environment (as measured on a High School Environment Scale). They concluded that participation in such a primary prevention project effectively prevented the academic and personal problems often accompanying the change from middle to high school.

In keeping with the person-environment fit theory (Eccles et. al., 1991), Mac Iver and Epstein (1991) proposed a number of programs to ease the transition from elementary to middle or junior high school. Among their suggestions was the use of group advisory programs to provide social and emotional development activities, and to facilitate a relationship with a teacher to whom the students could turn for support. Mac Iver and Epstein found lower dropout rates in schools that provided such support. It is through such an advisory group program that this proposed dissertation study will be carried out.

These articles discussed above provide additional justification for supplying preventive services during the early adolescent years, and suggest the format in which the services can be provided. Their findings also suggest that there are benefits to providing opportunities for the small group meetings that are part of the social skills training program proposed here that go beyond merely learning the specific skills.

Social Skills Training and Preventive Programs: Theoretical Models

A number of researchers have undertaken the design and implementation of social skills training programs on the preschool, elementary, and secondary levels, with both "normal" and "disturbed" populations. This section is meant to provide the theoretical models for such programs, rather than a comprehensive review. The emphasis here will be on preventive programs, and in particular the work of Gresham and his colleagues whose Social Skills Intervention Guide (1991) provides the curriculum for the study proposed here.

In his 1985 article on primary prevention of school maladjustment, Durlak defined *primary prevention* as a "population-oriented" approach that seeks to reduce the future incidence or prevalence rate of maladaptive behaviors in currently "nondysfunctional groups;" while *secondary prevention* was defined as "prompt intervention for early detected maladaptation" (Durlak, 1985, p. 623). His article, which focused on programs for elementary school children, divided the programs into two types: those that are child-focused and work directly on skill building with children; and those that are "ecologically oriented" and work indirectly by making changes in the school environment. The program proposed in this dissertation study works in both ways, by focusing on individual social skills with children, and affording students the opportunity to meet in small groups and develop close relationships both with each other and the group leader.

The content of the child-focused programs that Durlak discussed can be divided into three basic categories: affective education to improve the children's emotional development, social problem-solving training to improve cognitive development, and academic programs. While the affective education programs are geared to helping children become more aware and accepting of their feelings and attitudes and the

connection between feelings and behavior, Durlak asserted that the social training programs are important to improve current adjustment to school and prevent future problems by teaching children social skills to more effectively deal with interpersonal problems. Durlak included classroom organization (i.e., open classrooms and an emphasis on informal small-group interactions between teachers and students), interdependent or cooperative learning groups, and peer tutoring as the three most prevalent types of ecologically-based programs. Since his article was geared to elementary students, he did not include the use of advisory groups or other transition programs that are applicable here. He also indicated that primary prevention programs involving parent education and teacher variables such as helping teachers deal with personal or professional stressors have not sufficiently been examined. Durlak asserted that in order for a primary prevention school program to be successful, both immediate and long-term prevention of problems must be demonstrated across behaviors, settings, and students.

An early study by McClure, Chinsky and Larcen (1978) also examined social problem-solving training in elementary schools students as a primary prevention mental health strategy. Their purpose was to identify the theoretical and actual relationship between social problem solving, social performance, and social competence in elementary school children. The models on which they based their program included a problem-solving component devised by D'Zurilla and Goldfried (1971), and a classroom training procedure devised by Shafiel and Shafiel (1967). The problem-solving component included the establishment of both a problem-solving orientation, and problem identification. The problem-solving orientation component included three parts: an expectation that problems are normal occurrences, an expectation that children are capable

of solving their own problems, and an awareness of feelings as a signal that a problem exists. Problem identification included teaching the abilities to distinguish the important from non important parts of the problem, to specify the problem, and to set both long- and short-term goals. The classroom training procedures included an alternative solutions component in which students are encouraged to think of as many solutions as possible to each problem; a considerations-of-consequences component in which the children are taught to first think of the possible positive and negative outcomes of each solution before choosing one; and an elaborations component that taught the specific step-by-step plan that would make the solution come about. In the final step, an integrations component presented the entire set of problem-solving strategies as a total package. The social problem-solving process was presented via videotapes using same-age child actors who modeled each component. McClure and his colleagues used incomplete social problems that were presented to the children in story form, and gave them the opportunity to role play and practice the techniques in small groups. They found that the children were better able to come up with effective solutions to hypothetical social problems following the training. They also found that children trained with their method were better able than a control group to solve actual problems presented to them in a "Friendship Club" interaction set up for the purposes of monitoring their problem-solving strategies in vivo. It should be noted that the children who participated in this study were regular third and fourth grade children in a suburban elementary school, not children identified as having social problems.

Ladd and Mize (1983) in their article on a cognitive social learning model of social skills training based their methodology on Bandura's (1977a, 1977b, 1982) social learning

theory of how and why social skills are learned and maintained. Bandura's work is described below in connection with Elliott and Gresham's (1991) Social Skills Intervention Guide and as part of the theoretical rationale for this proposed dissertation study. Ladd and Mize (1983) discussed an assumption underlying the then current research in this area that children do not display proper social behavior because they do not have the necessary social skills. They identified three types of social skills deficits that were addressed in the training programs available at that time. First was the lack of knowledge of appropriate social behavior, or the presence of social concepts that were abnormal or atypical for the peer group. The three forms of social knowledge considered necessary for effective social functioning were: knowledge of suitable goals for social interaction, knowledge of appropriate strategies to reach those goals, and knowledge of when (i.e., in what contexts) to apply those strategies (Ladd & Mize, 1983). Second was the lack of social skills because of inadequate opportunities to practice those skills. Third was children's difficulty in giving themselves accurate feedback on their interpersonal behavior. This might include both difficulty in being able to assess how their behavior affects others, and difficulty knowing which behaviors lead to successful outcomes and determining the reasons for the success. Ladd and Mize proposed three training objectives each with specific training procedures that were intended to address all of the deficits outlined above and would form the basis for a comprehensive and effective social skills training program. The training objectives included enhancing skill concepts, promoting skill performance, and fostering skill maintenance/generalization (Ladd & Mize, 1983, p. 131). They also identified what they called "training variables" that made up the training procedures. These variables included *instruction*, both verbal and modeled; *rehearsal*, both overt/behavioral and

covert or thinking about/imagining a response; and *feedback*, either evaluative which does not compare the learner's behavior to some criterion or standard, or informative feedback which does make that comparison.

Examples of how the first training objective (Enhancing Skill Concepts) would be achieved include helping the student understand the purpose of learning a particular skill, providing examples of the concept, and rehearsing the concept with the student.

Promoting Skills Performance would be accomplished by encouraging the learner to match his behavior to that of the concept just learned by rehearsing the skill with adult assistance and feedback. The performance standards would gradually be made more stringent.

Finally, Skill Maintenance and Generalization would be facilitated by encouraging the children to use their new skills in their day-to-day interactions with their peers, and to give themselves feedback on their performance. Ladd and Mize (1983) specified the details of how their training sessions would be conducted and over what time period, but did not specify which particular skills should be included in a social skills training program. Their model provides the foundation for Elliott and Gresham's (1991) program, and is incorporated within it.

One of the researchers who, along with Gresham and Elliott is most often associated with the development of both primary and secondary preventive social skills training programs is Maurice Elias of Rutgers University. Elias and Branden (1988) presented the conceptual basis for primary prevention efforts. They formulated an equation in which they hypothesized that the likelihood of behavioral and emotional problems increases as children experience greater stress and as they have greater physical problems, either inherited or developed. The acquisition of coping skills, social supports,

and/or positive self-esteem can counteract some or all of the risks associated with the stress or physical vulnerability. He also developed a second equation that specified how systems-level factors can affect behavioral and emotional problems and specified how the environment can either exacerbate or reduce the stressors in the system. Programs which reduce the stressors such as transitional programs or availability of support groups are examples of primary prevention programs that are both environmentally based and person centered (Elias & Branden, 1988). These researchers discuss how schools can be very isolating, which exacerbates the already stressful transition from elementary to middle or junior high school. They recommended coordinating middle and high school transition programs with a competence-enhancement program begun at the elementary school level.

Elias and Allen (1991) compared instructional methods for teaching different preventive social decision making and problem solving programs to elementary school children. They looked at the effects of programs on three types of children: those determined to be at risk for future social problems, children with average levels of social adjustment, and those with high levels of social competence. Elias and Allen asserted that many behavioral and emotional problems of children and adolescents can be attributed to deficits in social decision making and problem solving skills. They presented two approaches to interventions: the directed approach, and the inductive approach. In the directed approach, self control and task control are learned as children imitate the behavior modeled by adults, verbally rehearse the strategies that the model uses, and eventually internalize the strategies. This approach applies primarily to self-control training, and is attributed to the work of Meichenbaum (1977). In the inductive approach, cognitive strategies are learned according to the processes of assimilation and accommodation that

the authors attribute to Piaget. These programs are labeled by the authors as examples of "discovery" learning. The authors used three methods for improving social competence which they called a "directed," a "discovery," and a "standard" approach which is a combination of the two and included games, role playing, practice exercises, and discussion. Among their hypotheses was that the directed method would yield the greatest improvement in social competence, the discovery method the least, and the standard method would be in the middle. The six content units covered in all conditions included a positive orientation to solving problems, goal setting, possible actions, specific steps to reach goals, integration of all the skills, and application to skills in practice sessions and in vivo problems. Elias and Allen found that all three methods produced positive gains in social skills in all types of children. They did not find the differences expected among the three methods. The benefits they found included improved self-concept, as measured by the Piers-Harris (1984) as well as improved peer acceptance as measured sociometrically. They suggested using such programs in classroom-wide preventive interventions.

Elias, Friedlander, Robinson, and Tobias (1991) outlined their social decision making and problem-solving program that is designed to help children develop self-awareness and interpersonal skills as well as improve social decision making. Their program uses an eight-step strategy for thinking through problems, and includes practice applying the strategies to various situations (Elias & Clabby, 1989). Although their original program was designed for use in elementary schools, it has been extended for use with middle and high school students.

Goldstein, Sprafkin, Gersham, and Klein's (1980) program entitled Skill-Streaming the Adolescent: A Structured Learning Approach to Teaching Prosocial Skills is a

cognitive-behavioral program that was designed to teach adolescents social skills, planning skills, skills for dealing with feelings, skill alternatives to aggression, and skills for responding effectively to stress. It uses modeling, role playing, performance feedback, and real-life reinforcement to facilitate transfer of training and teaches fifty specific skills in the categories listed above. Their program is geared toward preventing aggressive, acting-out behaviors in adolescents identified as being at risk for anti-social behavior, and so is a secondary prevention program.

Goldstein and his colleagues termed their psychoeducational training approach Structured Learning, and described its four components: modeling, role playing, performance feedback, and transfer of training. They have based their program in part on Bandura's theories on the transmission of aggression through imitation of aggressive models (Bandura, Ross, & Ross, 1961 as cited in Goldstein et al., 1980). Goldstein et al. explain how modeling is more effective when the model is presented as an expert, has high status, has control over the rewards that the student wants, is of the same sex and similar in age and social status to the student, appears friendly and helpful, and receives rewards for the behavior(s) exhibited. In addition, they specify that the modeling is also more effective when the behaviors to be copied are displayed clearly and in detail, from simple to more complicated, with unimportant details eliminated, and by more than one model. The student who observes the model should be instructed to imitate the model, should be similar in background to the model or have a similar attitude toward the skill to be learned, should be friendly to and like the model, and should be rewarded for performing the behavior. The performance feedback component of this program emphasizes social reinforcement such as praise, approval, and encouragement. Self-reinforcement, the

student's positive evaluation of his/her own behavior, is also used. Such reinforcements when provided in real life help to facilitate the transfer of training.

After an introductory session, the format in each subsequent session is similar: the trainer presents an overview of the skill, the trainer and a helper model the skill to be learned in live vignettes, the trainer facilitates a discussion of the skill, each student is given the opportunity to practice/role play the skill with the trainer, the trainer gives each student feedback on his/her performance, the trainer gives a homework assignment to provide opportunity to practice the skill in real-life settings and asks the student to complete a Homework Report form.

Elliott and Gresham (1991) have developed a cognitive-behavioral social skills training program which builds upon many of the features of previous programs, and incorporates the findings of their own research which led to the development of the Social Skills Rating System (1990). The techniques of the program (discussion, modeling, rehearsal, and follow through) are based on Bandura's theories of social learning and his conception of how human behavior is learned through observing others and then modeling their own behavior (Bandura 1977a, 1977b, 1986). According to Bandura, children conceptualize behavior according to information they get from their own experience. This information might come from observing a model or listening to instructions given verbally. The child might use the information learned to guide his/her own subsequent behavior. Bandura further theorized that children's perceptions of their own ability to accomplish a task (perceived self-efficacy) affects their motivation, perseverance, and achievement (Bandura 1977a, 1982; Schunk, 1984). Perceived self-efficacy, according to Bandura, are judgments of how well people expect to be able to deal with particular situations

(Bandura, 1982). His theory specifies four ways in which people form opinions about their levels of self-efficacy: self-performances, vicarious experiences, verbal persuasion, and physiological indices. Self-performances provide dependable means to assess self-efficacy- when one is successful, self-efficacy is increased, while failures result in lowered self-efficacy. The second means of providing self-efficacy information is through the vicarious experiences of watching peers perform a task (i.e, modeling). Bandura (1977b) lists several factors that contribute to the effectiveness of learning social skills through modeling. First, the more similar the observers are to the models, the greater the effect the modeling has. Second, if the modeling is narrated and each step required for the performance of the behavior is verbalized, the modeling is also more effective. Third, viewing the model receiving reinforcement for his/her behavior is more effective than if no reinforcement is received. Vicarious experience is not as reliable as self-performance, since experiencing failure directly can counteract the effect of watching a peer perform successfully. The third means of receiving information about self-efficacy is through the verbal suggestion or encouragement, particularly from teachers or parents, that the child is capable of successful performance. Again if the student experiences failure the encouragement is likely to be discounted. The fourth and weakest source of self-efficacy information, according to Bandura, is through physiological indices such as sweating or increased heart rate that might be a sign that the child cannot accomplish a task (Bandura, 1982; Schunk, 1984).

Another theory that is central to the way in which Gresham and Elliott's program works is Vygotsky's theory of the role of the "zone of proximal development" in facilitating social learning. Vygotsky proposed the idea that higher mental functions

(including social skills) develop as children first can perform a task with adult assistance, and later incorporate what they have earned from the adult in their own independent functioning. He distinguished between social interaction that occurs first at the level of "interpsychological functioning," and then the independent problem solving that occurs at the "intrapsychological" level (Wertsch, 1979). This process occurs throughout the child's development on progressively more complicated levels. The social skills that the child first exhibits with adult help in Elliott and Gresham's program eventually can be performed independently.

Elliott and Gresham (1991) propose a model of variables that affect deficient social skills functioning, that is also based on Ladd and Mize's cognitive-social learning model of social skills training (1983). In Elliott and Gresham's model, there are five factors that lead to poor social skills: a lack of cues or opportunities to learn or perform prosocial behaviors, a lack of knowledge, a lack of enough practice or feedback, and/or lack of reinforcement for performing socially skilled behaviors. The social skills training in their Social Skills Intervention Program addresses these five factors, and provides training utilizing the four variables of instruction, rehearsal, feedback/reinforcement, and reductive processes that are hypothesized to underlie the training techniques (Ladd & Mize, 1983). Their program has four objectives: promoting the acquisition of skills, enhancing the performance of skills, removing interfering problem behaviors, and facilitating the generalization of skill behaviors (Elliot & Gresham, 1991). The objectives and how they are related to the steps of the social skills program are listed in Appendix A.

Rationale of Study

The literature review has examined research that has found relationships between social skills and peer acceptance, between social skills and academic achievement, and between social skills and self-concept, as well as interrelationships among these variables. Bandura's construct of self-efficacy analyzes the mechanism by which children's perceptions of their ability can affect achievement. His theories of social learning explain the ways in which social behavior is learned. The studies reviewed have shown that the development of social skills is central to the interpersonal and emotional adjustment of children and adolescents, and that social skills deficits can result in long-term negative consequences. Additional studies have examined the particular relevance of social skill development during early adolescence, especially during the transition from elementary to middle school when a number of unique stressors are operating. In addition, researchers have shown that primary prevention of social problems in school is important both to improve current adjustment to school as well as to prevent more serious interpersonal problems later (Durlak, 1985; Elias & Branden, 1988). Although supportive programs have been proposed to ease the transition from elementary to middle school, there has been no study to date that has implemented a social skills training program in the context of a primary preventive small-group advisory program with middle school students.

The purpose of this study is to explore the impact of a cognitive-behavioral social skills training program (Elliott & Gresham, 1991) on middle school students' self-esteem, sociometric status, perceived social competence, and academic achievement when the program is implemented in a primary preventive advisory group setting. This study builds upon previous research to further explore the connection between middle school children's

perceived social competence and other factors related to social and academic performance in school.

It is expected that 7th grade students who participate in the Social Skills Intervention Program (Elliott & Gresham, 1991) will show greater improvement in their self-esteem, peer acceptance, and perceived social competence than students who participate in placebo discussion groups which focus on the topics of the mental health portion of the New York State 7th grade health curriculum. In addition, it is expected that implementation of the preventive social skills program will have a positive effect on children's academic performance.

Hypotheses

1. Seventh grade students in advisory groups who receive social skills training in the Social Skills Intervention Program (Elliott & Gresham, 1991) will show significantly greater improvement in the following three areas:

- a. their self-esteem, as measured by the Piers-Harris Children's Self-Concept Scale (1984);
- b. peer acceptance, as measured on a sociogram scored using norms from the Behavior Rating Profile-2 (Brown & Hammil, 1990); and
- c. perceived social skills as measured by The Social Skills Rating System-Student Form, Secondary Level (Gresham & Elliott, 1990).

in comparison to similar students in a control group who do not receive cognitive-behavioral social skills training.

2. The academic performance of 7th grade students receiving social skills training, as measured on the California Achievement Tests, Fifth Edition (MacMillan/McGraw Hill,

1992) will be significantly higher than the academic performance of similar students not receiving such training

In addition, the interaction effects between sex and each of the dependent variables will be examined.

CHAPTER III

METHOD

Subjects

The subjects are the 89 7th-grade middle school students enrolled in a small rural/suburban Northeastern public school system. The mean age of the girls was 12.21 and the standard deviation was 5; the mean age of the boys was 12.40 and the standard deviation was 5. Seven of the students were classified as learning disabled, and received support one time per day in the resource room. The population is primarily middle socioeconomic white children, but contains some lower-middle and upper-middle socioeconomic children as well. All of the subjects were ranked according to their pretest scores on the Social Skills Rating Scales, and then were evenly distributed into nine small advisory groups. The groups were then randomly assigned to advisory leaders and to treatment conditions. The leaders were comprised of part of the guidance department staff (one middle school guidance counselor and the guidance director), the middle/high school social worker, the middle/high school psychologist (the investigator), and the two health teachers assigned to the 7th grade. All of the groups met with their advisory leaders once every six school days for 40 minutes for a total of 12 sessions over a period of 20 weeks. Four of the advisory groups were randomly selected to serve as the control group and met in informal discussions related to topics which the leaders presented associated with the mental health portion of the New York State 7th grade health curriculum (Appendix B). The other five groups were assigned to the experimental condition and received the social skills training program. They also met once every six school days for 40 minutes with their leaders. The groups ranged in size from 9 to 11

students. All children were pre- and post-tested on the Piers-Harris Children's Self-Concept Scale (1984); the Social Skills Rating System- Student Form, Secondary Level (Gresham & Elliott, 1990); a peer nomination sociometric assessment (taken from The Behavior Rating Profile, 1990); and The California Achievement Tests. Pretest scores for academic achievement were obtained from the California Achievement Test (1985) (CAT/4) which had been administered in June, 1992. The academic achievement posttest was assessed near end of the school year (June, 1994) using scores obtained from the California Achievement Test- Fifth Edition (1992) (CAT/5) which is routinely administered to the entire 7th grade population.

Instruments

Instruments used to measure the dependent variables for this study were based on those used in previous research in this area. All instruments are standardized norm-referenced tests. With the exception of the BRP-2 Sociogram (described below) which was normed on the students' target classes, the other instruments were normed using large national samples. A description of the individual instruments that were used as pre- and post-test measures follows.

Social Skills

The Social Skills Rating System- Student Form, Secondary Level (Gresham & Elliott, 1990) is a standardized, norm-referenced scale designed to measure student social behaviors that can affect teacher-student relations, peer acceptance, and academic performance. The items have been factor analyzed into four subscales: Cooperation,

Assertion, Self-Control, and Empathy; and yield a standard score, percentile rank, behavior level (more, average, or fewer), and standard error of measurement for the total social skills scale; and a behavior level for each of the subscales. Three separate forms are provided (Parent, Teacher, and Student self-report) on two levels, elementary and secondary. Parent and Teacher forms are also available on the pre-school level. The Student Form, Secondary Level is a self-report measure of perceived social skills which contains 38 items. For each item, students are asked to indicate how often they do the behavior described (never, sometimes, or very often) by circling 0, 1, or 2 on their answer sheet; and then to decide how important they view that behavior to be to their relationship with others (not important, important, or critical) again by circling 0, 1, or 2. The responses can either be hand or computer scored using The Automated System for Scoring and Interpreting Standardized Tests (SSRS-ASSIST) (Gresham & Elliott, 1991). Appendix C provides sample factors assessed in the SSRS-Student Form, Secondary Level. Extensive statistical evidence is provided for the reliability and validity of the SSRS. Internal consistency (Coefficient alpha) ranges from .67 to .77 on the individual subscales, and .83 for the total scale. Test-retest reliability coefficients were provided for the elementary forms only, and were estimated to be .68 for the total scale after four weeks. A criterion validity study which was done with the Piers-Harris Children's Self-Concept Scale (Piers, 1984) is of particular interest in this study since the Piers-Harris was administered to all of the subjects before and after the training program to examine the effects on self-concept. In addition, a correlation was recently performed between the two measures in preliminary research by Brickman (1992). In their validation study, Gresham and Elliott obtained an overall correlation of .30 between the SSRS, student forms and the

Piers-Harris, indicating that self-concept is a significant component of effective social skills functioning. The results obtained by Brickman (1992) using a smaller sample, but one taken from the same population as the proposed study, yielded even stronger results ($r = .54, P > .001$).

Self Concept

Self-concept was assessed using the Piers-Harris Children's Self-Concept Scale-Revised (subtitled "The Way I Feel About Myself") (Piers, 1984). The Piers-Harris is a nationally standardized 80-item self-report questionnaire designed to measure self-concept in children and adolescents. Self-concept is defined as "a relatively stable set of self-attitudes reflecting both a description and an evaluation of one's own behavior and attitudes (Piers, 1984 p. 1). Children are asked to indicate whether each of the 80 statements apply to them by circling either "yes" or "no". The responses can be either hand or computer scored (hand scored in this study using the template provided) and a total raw score is calculated which yields both a percentile score and a stanine score with conversions to normalized T-scores. In addition, the scores can be combined to form six "cluster scales" which include Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, and Happiness and Satisfaction. These scales were not utilized for this study.

Test-retest reliability with a retest interval of four months was found to be .77. Internal consistency estimates range from .88 to .93. The authors report that content validity was built into the scale by defining the construct to be measured as the areas in which children reported qualities that they liked or disliked about themselves. Significant

relationships have been found in studies investigating the relationship of performance on the Piers-Harris to teacher and peer ratings (Piers, 1984).

Peer Acceptance

Sociometric assessment of peer acceptance was accomplished using the Behavior Rating Profile Second Edition (BRP-2) (Brown - Hammill, 1990). Within each health classroom, students were asked to select from the students in the room the three peers they would most like to have as a friend, and the three peers they would least like to have as a friend and to list them on the questionnaire provided (Appendix D). In order to insure anonymity of both raters and students being rated, students were instructed not to put their names on their papers. In addition, a list of all students in the class with their respective birthdates were listed on the blackboard, and the students were requested to identify classmates by birthdate, not by name. Except for the use of birthdates instead of names (Brickman, 1992), the format to be used is the one outlined in the Examiner's Manual of the Behavior Rating Profile, Second Edition (Brown & Hammill, 1990). Reliability information was not provided for this instrument. Construct validity was measured by correlating student's ranks with the Index of Children's Personality Characteristics (IPC). All correlations were significant, and ranged from .50 to .87.

Academic Achievement

The California Achievement Tests (Fifth Edition (CAT/5) (MacMillan/McGraw Hill, 1992) were used as posttests of academic achievement. They are norm-referenced

tests for kindergarten through Grade 12 designed to measure the basic skills commonly found in state and district curricula (CAT/5, 1992).

The seven basic content areas measured by the CAT Form A are reading, spelling, language, mathematics, study skills, science, and social studies. Levels 14 through 21/22, which cover grade level content from grades 3.6 to 12.9 are routinely administered by the school district to selected grades including grades 5 and 7 in the spring of each school year. Level 17, which can be administered to grades 6.6-8.2 was administered to grade 7 in May, 1994. Results of the CAT/5, which is computer scored, were made available to the investigator by the school district. Statistical tests involving the CAT/5 were performed using the Total Battery Score provided for each student.

Extensive reliability and validity data are provided by the publishers of the CAT/5 in the Technical Report (1992). Internal consistency for individual sections (Calculated using Kuder-Richardson formula 20) ranges from .83 to .98. Content validity was built in during the development of the tests, and methods to ensure the accuracy, currency, and curricular relevance of the materials in the CAT/5 Form A are described in detail in the Technical Report.

Procedures

At the beginning of the school year, the students were pretested on the assessment instruments during their seventh grade health classes. The investigator administered all of the instruments to one section at a time (a total of four sections), and read the instructions on the record form of each test out loud to the students. When the first form was completed by everyone, the next form was distributed. Students were assured of the confidentiality of the information, and were invited to meet with the investigator (i.e., the

school psychologist) to discuss any of their individual protocols. Participation was voluntary. Each of the students was given a Tootsie Roll Lolly Pop in return for participating. The study was treated by the school district as part of curriculum development for the 7th grade advisory and health programs, so written permission from parents was not required. The school board and superintendent had been informed of the study via a written proposal and had given approval.

Each of the instruments was scored according to instructions in their respective manuals. The SSRS was computer scored. The sociograms were scored, one for each health class, according to the steps outlined in the BRP-2 Manual. An alphabetical list of all of the students in each class was prepared; the number of acceptances and rejections for each member was computed and recorded; the rejections were subtracted from the acceptances to calculate a difference score. All students were then ranked in order of the magnitude of their difference scores, and ranks were assigned to the scores. If more than one student had the same difference score, a three-step procedure was followed to determine rank order. Each student was assigned a rank. Using Table D in the Appendix of the BRP-2 Manual, each raw score was converted into a percentile rank and standard score. Percentile scores were used for the statistical analysis.

Individual responses to the SSRS were analyzed for the frequency of negative responses by all the students to each item. The items were then ranked in order of those receiving the most to least negative responses. The 10 items receiving the most negative responses were chosen for inclusion as target skills for the social skills training program for the experimental groups.

The advisory group leaders of the experimental groups were informed of the training objectives and trained by the investigator in the intervention strategies and treatment procedures of the Social Skills Intervention program (Elliott & Gresham, 1991). Guidelines for using modeling, behavior rehearsal, coaching, social problem-solving, and reinforcement-based strategies were presented. The general instructional model for the skills units was presented (Tell Phase, Show Phase, Do Phase, Follow Through and Practice Phase, Generalization Phase). The teaching guide for each of the 10 individual skills identified by the students as being most deficient was provided to the group leaders (please refer to Appendix E for sample lesson). One new skill was presented each week (please refer to Appendix F for list of skills).

In separate analog sessions each of the experimental group leaders were required to demonstrate proficiency according to Elliott and Gresham's sample protocol. The sessions were observed and independently rated for agreement and non-agreement by two objective independent raters (members of the staff at the school who were not associated with the study). Agreement of 80% was obtained which constituted an acceptable criterion for compliance with Elliott and Gresham's procedures.

Leaders of the control groups were provided with topics from the mental health portion of the 7th grade health curriculum (Appendix B). They were instructed to present information related to the topics beginning with the first topic, and to permit students to engage in informal discussion related to the topic.

At the conclusion of the program, the students were all post-tested on the dependent measures.

Treatment Integrity

Twenty-five per cent of the sessions were randomly selected and observed, and rated by two independent raters (administrators at the school not associated with the study) for compliance with the treatment protocols. Each rater checked for adherence to the treatment procedures of Elliott and Gresham's Social Skills Intervention Program using a protocol provided by the investigator (please see Appendix G). The reliability estimates for compliance with the treatment protocols were calculated using Cohen's coefficient Kappa. Agreement with the treatment protocols averaged .96.

CHAPTER IV

RESULTS

Statistical Analyses

Four multiple regression analyses were performed in order to determine the effect of the Social Skills Training Program on each of the dependent measures (academic achievement, social skills, self concept and peer acceptance), while controlling for pretest scores on all of these measures. For each dependent variable (the four posttest scores), the four prescores were entered together with a binary treatment variable which was coded to indicate group membership. Subjects in the experimental group were coded as "1" which represented the treatment variable, "0" otherwise. The significance of the regression weight for the treatment variable was tested for each of the four dependent variables. In addition, the interaction of gender by group was examined in order to determine if the effect of training varied as a function of gender for each of the dependent variables. Finally, difference scores were calculated and examined using an analysis of variance to determine if there was a leader effect.

Table 1A presents means, standard deviations, and ranges of pretest scores for the self-concept, social skills, peer acceptance, and academic achievement of the subjects in the treatment groups. It should be noted that of the 89 students in the 7th grade who participated in the study, complete scores were only available for 79 (45 in the treatment groups, and 34 in the control). Ten students moved into the district after the California Achievement Tests had been administered at the end of the 5th grade. Table 1B presents the summary statistics for pretest scores of the subjects in the control groups. Table 2A

presents summary statistics for posttest scores of the subjects in the treatment groups, and Table 2B presents summary statistics for posttest scores of the subjects in the control groups.

Table 1A
Means, Standard Deviations, and Ranges of Pretest Scores
Treatment Subjects N=45

<u>Measure</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>Range of Scores</u>
Academic Achieve	80.18	21.64	12-99
Self Concept	62.64	28.86	2-99
Social Skills	52.4	26.74	6-98
Peer Acceptance	51.67	30.47	2-98

All scores are reported in terms of percentiles.

Table 1B
Means, Standard Deviations, and Ranges of Pretest Scores
Control Group Subjects N=34

<u>Measure</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>Range of Scores</u>
Academic Achieve.	79.24	16.74	25-99
Self Concept	66.27	23.52	18-99
Social Skills	55.79	28.26	8-98
Peer Acceptance	49.24	24.94	9-98

All scores are reported in terms of percentiles.

Table 2A
Means, Standard Deviations and Ranges of Posttest Scores
Treatment Subjects N=45

<u>Measure</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>Range of Scores</u>
Academic Achieve.	77.58	21.57	14-99
Self Concept	57.29	33.14	1-99
Social Skills	41.6	29.53	3-98
Peer Acceptance	57.29	33.14	1-99

All scores are reported in terms of percentiles.

Table 2B
Means, Standard Deviations, and Ranges of Posttest Scores
Control Subjects N=34

<u>Measure</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>Range of Scores</u>
Academic Achieve.	77.94	17.57	42-99
Self Concept	65.09	26.1	12-99
Social Skills	46.38	26.94	3-98
Peer Acceptance	54.53	23.93	9-98

All scores are reported in terms of percentiles.

Table 3A contains intercorrelation coefficients of the pretest scores for all subjects; Table 3B contains intercorrelation coefficients of the posttest scores for all subjects. Table 3C presents intercorrelations of the pretest and posttest scores with each other.

Table 3A
Pearson Correlation Coefficients
Pretest Scores N=79

	<u>Ac.Ach.1</u>	<u>Self.Con.1</u>	<u>SSRS1</u>	<u>Peer.Accept.1</u>
<u>Ac.Ach.1</u>	1.00	-.087 p=.488	.057 p=.616	-.151 p=.183
<u>Self.Con.1</u>		1.00	.440 p=.001*	.258 p=.022*
<u>SSRS.1</u>			1.00	.305 p=.006*
<u>Peer.Accept.1</u>				1.00

* significant at the .05 level or greater

Table 3B
Pearson Correlation Coefficients
Posttest Scores N=79

	<u>Ac.Ach.2</u>	<u>Self.Con.2</u>	<u>SSRS2</u>	<u>Peer.Accept.2</u>
<u>Ac.Ach.2</u>	1.00	-.062 p=.593	.049 p=.668	-.048 p=.678
<u>Self.Con.2</u>		1.00	.456 p=.001*	.174 p=.126
<u>SSRS.2</u>			1.00	-.037 p=.746
<u>Peer.Accept.2</u>				1.00

* significant at the .05 level or greater

Table 3C
Pearson Correlation Coefficients
Pretest with Posttest Measures

	<u>SSRS 1</u>	<u>Ac. Ach. 1</u>	<u>Self Con. 1</u>	<u>Peer Acc. 1</u>
<u>SSRS 2</u>	.571 p=.001*			
<u>Ac. Ach. 2</u>		.890 p=.001*		
<u>Self Con. 2</u>			.569 p=.001*	
<u>Peer Acc. 2</u>				.558 p=.001*

*significant at the .05 level or greater

The Pearson correlation coefficients reported in Table 3A indicate a positive relationship between self-concept at the beginning of the school year as measured by the Piers-Harris, and social skills as measured by the student self-report version of the SSRS. This relationship was also examined in the validation studies for the SSRS, and the results obtained here are consistent with those in the much larger sample. In fact, the .44 correlation obtained here is even stronger than the .30 correlation reported by Gresham et al. (1990). A positive relationship is also evident between pretest social skills and pretest peer acceptance as measured by the sociogram in the BRP-2. A significant correlation was also found between self-concept and peer acceptance. No significant relationships were in evidence between academic achievement and self concept, social skills, or peer acceptance. In looking at the posttest scores in Table 3B, the only significant positive

expected, there were very strong relationships between each of the pretest measures with their corresponding posttest scores.

The results of the multiple regression analyses are presented in Tables 4, 5, 6, and 7.

The results of the multiple regression for Hypothesis 1a (that students in groups receiving social skills training would show significantly greater improvement in their self concept than students in a control group who did not receive such training) are presented in Table 4. The effect of the social skills training program on self esteem is being examined in the context of the premeasures listed. It should be noted that in each table, pre and post measures are distinguished by the numbers "1" for pre and "2" for post.

Table 4
Results of the Overall Multiple Regression
Piers Harris 2 = Dependent variable

R Square = .34 F (5,73) = 7.61 P = .0001

Variable Entered	B	T	P
academic achieve. 1	.162	1.074	.2864
self esteem 1	.662	5.391	.0000
peer acceptance 1	.019	.018	.8618
social skills 1	-.031	-.251	.8028
program	-5.706	-.980	.3303

As can be seen from the regression weights and their significance levels, being in the treatment group did not significantly effect self esteem. Hypothesis 1a was not supported: when given a social skills training program, self esteem was not significantly

improved among normal 7th grade students in comparison to a control group who did not receive the program.

The next analysis that was conducted was a multiple regression with self concept as the dependent variable in order to test Hypothesis 1b (that students who receive social skills training would show significantly greater improvement in their peer acceptance). All of the pretest scores were again entered together. A summary of results of the multiple regression analysis for Hypothesis 1b are reported in Table 5.

Once again the Beta weight associated with program is not statistically significant, so there is no effect of program on peer acceptance. Consequently, Hypothesis 1b is also not supported.

Table 5
Results of the Overall Multiple Regression
Sociogram 2 = Dependent variable

R Square = .35 F (5, 73) = 7.8 P = .0001

Variable Entered	B	T	P
academic achieve. 1	.254	1.843	.0693
social skills 1	-.081	-.725	.4709
self esteem 1	.023	.206	.8374
peer acceptance 1	.599	5.920	.0000
program	-5.907	-1.11	.2708

A summary of the results of the multiple regression analysis for Hypothesis 1c (that students who receive social skills training would show significantly greater improvement in their perceived social skills) are reported in Table 6.

Table 6
Results of the Overall Multiple Regression
SSRS 2 = Dependent variable

R Square = .46 F (5, 73) = 12.57 P = .0001

<u>Variable Entered</u>	<u>B</u>	<u>T</u>	<u>P</u>
academic achieve. 1	-.121	-.952	.3443
self esteem 1	.369 -	3.554	.0007
peer acceptance 1	-.251	-2.68	.0091
social skills 1	.517	5.009	.0000
program	-1.014	-.206	.8372

In examining the significance of the Beta weights, it is again apparent that being in the treatment group and receiving the social skills training program did not significantly effect perceived social skills. Hypothesis 1c is not supported.

The final analysis was a multiple regression for Hypothesis 2 (that the academic performance of 7th grade students receiving social skills training would be significantly higher than the academic performance of similar students not receiving such training). A summary of these results are reported in Table 7.

Table 7
Results of the Overall Multiple Regression
CAT 2 = Dependent variable

R Square = .80 F (5,73) = 57.05 P = .0001

<u>Variable Entered</u>	<u>Beta</u>	<u>T</u>	<u>P</u>
self esteem 1	-.054	-1.205	.2321
peer acceptance 1	.045 -	1.108	.2716
social skills 1	.022	.491	.6248
academic achievement 1	.949	16.626	.0000
program	.092	.043	.9657

As before, the Beta Weight associated with program failed to reach statistical significance. Hypothesis 2 is not supported as well: when given a social skills training program, academic achievement is not improved among normal 7th graders in comparison to a control group of students who participated in a placebo discussion group.

Additional Findings

Although no hypotheses were stated, the effect of program was examined separately for boys and girls in each of the 4 dependent variables. In 7 of the 8 analyses, the same nonsignificant results were found as was the case for the pooled group. Only in the case of the peer acceptance dependent variable was a significant result obtained. The boys in the control group scored significantly higher than boys in the experimental group. The adjusted mean difference for Sociogram 2 between the experimental and control groups for boys was -13.67. The results of the multiple regression analyses by gender are listed in Appendix H.

In addition, the difference between pre and post test scores were examined in an Analysis of Variance to examine if there was a leader effect within each treatment level. There was no effect attributable to leader for any of the 4 difference scores.

SUMMARY

The present study hypothesized that seventh grade students in advisory groups who received social skills training in the Social Skills Intervention Program (Elliot & Gresham, 1991) would show significantly greater improvement in self esteem, as

measured by the Piers-Harris Children's Self-Concept Scale (1984); peer acceptance, as measured on a sociogram scored using norms from the Behavior Rating Profile-2 (Brown & Hammil, 1990); and perceived social skills as measured by The Social Skills Rating System -Student Form, Secondary Level (Gresham & Elliott, 1990) in comparison to similar students in a control group who did not receive this cognitive-behavioral program. In addition, it was predicted that the academic performance as measured on the California Achievement Tests, Fifth Edition (MacMillan/McGraw Hill, 1992) of those students receiving the program would be significantly higher than that of similar students not receiving such training

Pearson correlation coefficients indicated a positive relationships between: pretest self concept scores and pretest social skills; between pretest peer acceptance and pretest social skills; and between pretest peer acceptance and pretest self concept. A positive relationship was also found between posttest self concept and posttest social skills. As expected, strong positive relationships were also found between each of the pretest measures and their corresponding posttest scores.

Four multiple regression analyses were performed comparing the experimental and control groups on posttest measures of each of the personality tests as well as on the achievement test, while controlling for pretest scores on all of the variables. In each analysis, the effect of program in context with each of the pre measures was not significant, and each of the hypotheses was not supported. There was no significant effect shown for the treatment program on self esteem, perceived social skills, peer acceptance, or academic achievement. In addition, multiple regression analyses were performed to examine whether the program had an effect by gender on the dependent variables. The

only significant result was that for the male group for peer acceptance, the control group scored higher than the experimental group. Finally, difference scores were calculated and examined using an ANOVA to determine if there was a leader effect. No such effect was found.

CHAPTER V

DISCUSSION

This study examines the effect of a preventive social skills training program on the self esteem, social skills, peer acceptance, and academic achievement of a population of 7th grade students in a small rural/suburban middle school. It was hypothesized that seventh grade students in advisory groups who received social skills training in the Social Skills Intervention Program (Elliott & Gresham, 1991) would show greater improvement in their self-esteem, peer acceptance, perceived social competence, and academic achievement than students who participated in placebo discussion groups which focused on the topics of the mental health portion of the New York State 7th grade health curriculum. The results of the multiple regression analyses do not support the hypotheses. Suggested reasons for these results will be discussed below as each aspect of the hypotheses is reexamined and compared to previous studies.

Hypothesis 1a predicted that students who received the social skills training would show significantly greater improvement in their self esteem than students in discussion groups who did not receive the training. This hypothesis was not supported. There was in fact a small but non-significant decline between mean pre- and posttest self-concept scores for subjects in the treatment group. Scores for the control subjects also declined slightly. Damon and Hart (1982) in their model for the development of the social and psychological self discussed the period of development during early adolescence as being one of "increased self-consciousness." Simmons et al. (1979) examined the impact that the stressful transition from childhood into early adolescence has on the self-esteem of children in this age group. The results of the current study suggest that indeed the period

of early adolescence is not only one of increased self-consciousness but also one of increased self criticism.

The review of the literature on social skills and self-concept reveals that these two constructs are closely related (Brickman, 1992, Piers, 1984). The Pearson correlation coefficients performed in this study found significant relationships between perceived social skills and self-concept for the both the pretest and posttest scores, which is consistent with those previous findings. Although this study confirms the relationship between self-concept and social skills, the social skills program did not result in an improvement in self-concept. Wanat (1983) in an effort to improve the self-concept and academic achievement of learning disabled adolescents implemented what he termed a social skills awareness/improvement program. The subjects in his experiment (learning disabled high school students) met for 55 minutes per day for 16 weeks in a program which used verbal discussion about how to handle specific social situations. His subjects showed significant improvement in their scores on the Piers-Harris Children's Self-Concept Scale (although not on measures of academic achievement) in comparison to a control group. Although there were many differences in methodology and subjects between this previous study and the current one which limit the similarities between them, some important information can be gained from making the comparison. Wanat's (1983) subjects were older, had been labeled learning disabled, and met daily for 55 minutes versus 40 minutes in the current study and for 16 weeks rather than 12. Perhaps the greater frequency and duration of Wanat's program were beneficial. Perhaps as Simmons and his colleagues suggested (1979), younger adolescents are more subject to stresses that can damage self esteem than their older counterparts. In addition, Wanat's treatment

consisted only of discussion rather than the specified program including modeling, rehearsal, and practice used here. More importantly, the control group in Wanat's study received no intervention at all. The control group in this study participated in a placebo discussion group. It is possible that Wanat's experimental subjects benefited primarily from receiving extra attention while they discussed social situations. The students in the control group in this study in fact participated in discussion groups, and may in fact have received some benefit from their relationship with the leader and the other students. The "placebo discussion" may have functioned as an effective alternative treatment which affected the internal validity of the experiment. Furthermore, the role of the learning disabilities of Wanat's subjects might also be important. If the self-concept of learning disabled students is lower than that of nonhandicapped students as suggested by Gresham, Evans, and Elliott (1988), than these students might be affected differently by programs designed to improve it.

This study also predicted in Hypothesis 1b that students receiving the social skills training would show greater improvement in their peer acceptance than students in the placebo discussion groups. This hypothesis was not supported. It is apparent that it is difficult to implement programs to effectively improve peer acceptance. Previous studies, in fact, present conflicting results regarding the relationship between peer acceptance and social skills. Some researchers have found positive relationships between peer acceptance as measured using sociometric ratings and social behavior (Cowen et al., 1973; Parker & Asher, 1987). Asher (1983), on the other hand, found a relatively weak relationship between observed behavior and sociometric status, and suggested using methods other than behavioral observations to assess children's social skills. The Pearson correlation

coefficients performed here found a positive relationship between pretest sociometric scores and self-report social skills, but no such relationship existed for the post test scores. The students who reported themselves to be socially competent before the treatment was implemented were also better accepted by their peers, but the relationship did not hold up after the treatment was completed. It is difficult to account for this difference. Gresham and Reschly (1986) found deficits in social skills as well as low peer acceptance in learning disabled students in comparison to nonhandicapped students. Parker and Asher in their extensive literature review discussed the lack of studies which examined children's own perceptions of their social behavior and peer relationships. They suggested social skills training as a means to improve long-term personal adjustment. How students rate their social behavior, how others rate them, and how they are accepted by their peers are complicated issues. Carey and Stoner (1994) in a very recent article bring up the difficulty of bridging the gap between social skills training programs to the "real world of peer interactions." They state: "how we might build these bridges and whether they are necessary in the first place are questions that need to be addressed" (Carey & Stoner, 1994 p. 138). They discuss the difficulty that existing social skills training programs have in taking into consideration the social relationships or social environments where social skills are called into play, and suggest a contextual approach to behavior analysis and treatment. The current study implemented the social skills training in advisory groups, and then measured its effects on peer acceptance in the classroom. Perhaps, as Carey and Stoner suggest, there needs to be a closer match between instructional strategies and outcome measures.

It was also hypothesized that the social skills training program would significantly improve self-reported social skills for students in the treatment group. The results did not support this prediction- whether or not students received the training did not affect perceived social skills, while controlling for the premeasure on this variable. In fact, the mean scores for both treatment and control groups declined from pretest to posttest. The current study implemented Elliott and Gresham's (1991) cognitive-behavioral social skills training program in a primary preventive manner on the students in the 7th grade health classes in a small public school. Their program was designed as a secondary preventive program to treat students identified as having deficient social skills. Elias and Branden (1988), among others, provide the rationale for implementing a primary preventive social skills program, especially during the stressful transition from elementary to middle or junior high school. They suggest using such a program not only for those determined to be at risk for future social problems, or even for those with average levels of social skills, but even for those with high levels of social competence (Elias & Allen, 1991). In the current study, the entire 7th grade was pretested on the student self-report form of the Social Skills Rating Scale (SSRS) (Gresham & Elliott, 1990), and the 10 skills that were most frequently listed as deficient were selected for inclusion in the program. Perhaps results would have been significant if each individual advisory group which averaged 10 students had been pretested on the SSRS, and a specific treatment program had been designed for each group.

Hypothesis 2 predicted that the 7th grade students receiving social skills training would also score significantly higher on the California Achievement Tests, Fifth Edition (MacMillan/McGraw Hill, 1992) than students who did not receive the training. This

hypothesis was not supported. The fact that the students who participated in the study had pretest academic achievement test scores that were much above average before the study began (mean pretest CAT score = 80.18%ile for treatment subjects, and 79.24%ile for control subjects) could have accounted for this result. Previous studies have focused on establishing the relationship between social skills and academic achievement, rather than trying to improve academic performance by improving social skills. Green et al. (1980) in their study of third grade children found that children who scored high on a standardized achievement test were better liked and had more positive peer interactions. They used behavioral observations to rate positive interactions; the current study used self-report social skills rating forms. Bursuch and Asher (1986) also found a relationship between academic achievement and social behavior. They used a sociometric rating technique, teacher rating scales of how children were likely to behave in specific social situations, and an interview to assess children's social knowledge. The interviews were rated by judges according to whether the children named positive, negative, or withdrawal behaviors. Gresham (1992) discussed the relationship between academic skills and social skills in what he called the "Correlational Hypothesis," without implying that one causes the other. This study failed to confirm previous evidence of a correlation between academic skills and social skills (Brickman, 1992) with either the pretest or posttest scores. Students who scored higher on the CAT/5 did not necessarily rate themselves as being more socially competent. The explanation for the discrepancy in results may lie in part in the operational definition of social skills, as well as in how academic achievement is defined. Whether the researcher uses a student self-report instrument to measure social skills, as was employed here, or instead uses teacher ratings,

parent ratings, or behavioral observations will have an impact on the results. Academic achievement might also be measured by a variety of standardized achievement tests or by classroom grades. Swift and Spivack (1969b) in their study of underachieving and achieving fifth grade students looked at their behaviors in the classroom. They found that report card grades were more closely related to social skills than were scores on a standardized achievement test. It is possible that had academic achievement been measured using report card grades, and had social skills been measured using teacher observations on a rating scale, the results might have been significant. There are clearly more efficient methods for improving academic achievement than implementing a social skills training program. The current study looked for an improvement in academic achievement as a byproduct of the social skills program.

In a recently published study, DuPaul and Eckert (1994) discussed the benefits (or lack thereof) of employing social skills training programs in contrived settings such as the advisory groups employed in this study, versus programs in the natural environment. They discuss such programs as they apply to students who have been identified as having social or behavioral problems, rather than the primary preventive program designed in this study. They conclude that few studies with published social skills training curricula have demonstrated generalization or maintenance of obtained treatment effects. They discuss the importance of environmental variables and their role in the success of a social skills program. DuPaul and Eckert suggest that if the desired outcome of a social skills training program is to increase the likelihood that prosocial behaviors will occur in the child's natural environment (e.g., in the classroom, during recess, in the lunchroom), then the training is less effective if it occurs in contrived settings. DuPaul and Eckert (1994) state

that "intervening in a training environment may not produce the desired effects, particularly for those children exhibiting deficits in the performance of prosocial behaviors" (DuPaul and Eckert, 1994, p. 130). They recommended that the practitioner's time would be better spent in working on social skills training in the child's natural environment such as the classroom or playground rather than in contrived settings. Gresham (1994) in a response to DuPaul and Eckert's article, suggests that there may in fact be some benefits to specific social skills training within contrived settings, particularly for children having social skill acquisition deficits.

Although no hypothesis was stated, the study briefly looked at the interaction of gender by group to determine if the effect of training varied as a function of gender. The one significant result consisted of a detrimental effect on peer acceptance for boys; after treatment, the boys in the treatment group were less popular with their peers than those in the control group. It is difficult to explain what might account for these results. One might infer that children prefer boys who behave in less socially acceptable ways, but more likely these results apply only to this particular population under these treatment conditions. No studies were found which looked at peer acceptance for boys versus girls, but Simmons and his colleagues (1979) in a three-year study of the self esteem, physical development, and early dating behavior of 6th and 7th grade children found that girls were more sensitive to changes in the school environment, while boys seemed to react more to the physiological changes of puberty. They found that the self esteem of boys who had reached puberty was in fact higher than that of boys who had not. Simmons et al. also concluded that girls were at greater risk of damage to their self esteem than boys. The

results of this study do not support their conclusions regarding girls- there was no difference between the self esteem of girls versus boys during the period of the study.

There were a number of factors which were operating during the course of this experiment that may well have affected its internal validity. The pretesting was done at the end of September, deficient social skills were identified, and leaders were trained in the social skills program. The program began in mid-October. There are many school holidays in the fall, and because the winter was unusually harsh and school had to be closed due to snowstorms much more frequently than usual, the program was interrupted on a number of occasions. Since the students met once every six school days, every time school was closed it caused an interruption in the program of a whole week. According to the teachers, this had a detrimental effect on academic instruction and very likely had a negative effect on the social skills training program as well. In addition, some of the group leaders met in regular classrooms and used the blackboard to list the skill steps in the programs. Occasionally they would not erase the board at the end of the class period, and students from other classes could read about the social skills. Many of these students were in the control groups, and so in fact received information about the treatment. Doing research in a natural setting such as a school limits the control that the investigator has on all aspects of the experiment, and could easily influence the results.

Although this study failed to demonstrate the benefits of this particular social skills training program as implemented in a primary preventive manner in the setting of the small advisory groups, there is evidence to suggest that social skills training could still be implemented effectively in school. As Gresham (1994) suggests, children with social skills acquisition deficits might benefit most from a social skills training program in a

contrived setting such as the one employed here. In addition, Feiner, Ginter, and Primavera (1982) demonstrated that ninth grade students entering higher school showed higher grade point averages, self concept, and more positive perceptions of the school environment by participating in a primary prevention project in which they were grouped with teachers who acted as their liaisons between students, school, and home. There may well be benefits to students during the transition periods from elementary to middle school, and from middle to high school, of providing the opportunities for small group meetings such as were provided here that go beyond merely learning specific social skills.

Recommendations for Future Research

The results of the present study point to several areas for future research. First, it would be valuable to examine the benefits of small discussion groups for students making the transition from elementary to middle school, and from middle to high school, independent of the effects of a specific social skills training program. It might also be interesting to compare the effects on self esteem and academic achievement of co-educational versus same-sex discussion groups.

Second, this study failed to find significant results in a population consisting of an entire grade level. A study might be done using only students who have been identified as having deficient social skills. A combination of measures might be used including teacher observations, parent reports, and student self reports to identify the participants. If the study were done in a school, permission would have to be obtained to establish a control group of similar subjects who receive no treatment. The duration and frequency of the training might also be altered. In this study, the students met once every six school days which effectively meant one time per week for six weeks, followed by a one week

intermission. This schedule was necessitated by the six-day cycle of classes in this particular district. It would be valuable to explore different schedules. Wanat (1983), for example, met with his subjects every day for 55 minutes over 16 weeks. A comparison might be made between students receiving social skills training for the entire school year, with those receiving training for only part of the year.

It would also be valuable to explore the effect of Gresham and Elliott's (1991) program on a group of learning disabled students in comparison to nonhandicapped students. Does one group benefit more than the other from participation in a social skills training group? Another comparison might be done using training in the regular classroom environment with the participation of the classroom teacher compared with training in special groups.

Carey and Stoner (1994) suggest that school environments be "reprogrammed" in order to promote and change social behavior. Durlak (1985) also discussed "ecologically oriented" programs that work indirectly by making changes in the school environment. It might be beneficial to compare the social skills of students who have the opportunity to interact in cooperative learning groups which include informal discussions between group members, and between teacher and students; with the skills of students taught in more traditional classrooms. A trainer could be part of the treatment program who could reinforce the occurrence of the targeted positive social behaviors (e.g., raising hand before speaking, not interrupting another speaker).

Another area for research might be a comparison of different social skills programs. DuPaul and Eckert (1994), for example, discuss a social skills curriculum with the acronym ACCEPTS (A Curriculum for Children's Effective Peer and Teacher Skills;

Walker et al., 1983) which also included coaching, modeling, and practice of specific social skills in small groups similar to Elliott and Gresham's (1991) Social Skills Training Program. It would be interesting to compare the effects of these two programs on similar populations. Behavioral observations by teachers could be added in addition to student self-reports. In addition to group differences, individual differences for each student participating in the study could be looked at. Does the program benefit certain types of students as opposed to others? Each participants might also be interviewed to find out their subjective reaction to participation in the program.

In order to increase the external validity of the results, future studies might be done on different populations. This small rural/suburban school district has a relatively homogeneous population, other larger, more heterogeneous schools with more racially, ethnically, and socio-economically diverse students would provide subjects whose results could be more validly generalizable.

Educational Implications

The present study failed to show significant positive effects of a cognitive-behavioral social skills training program when it was implemented in a primary preventive manner with a population of regular 7th grade students. No gains were demonstrated in the self-concept, perceived social skills, peer acceptance, or academic achievement of the subjects in the treatment group. The training took place in small advisory groups separate from the regular classroom, but the outcome measures dealt with behaviors and attributes that take place in the regular classroom. This finding suggests that for schools wishing to implement primary preventive social skills programs, the training should take within the context of the regular school program. It might be most effective if the classroom teacher

could participate in the training with the school psychologist or counselor. In an "ecologically oriented" model such as the one suggested by Durlak (1985), the trainer could be present in the classroom with the teacher in a cooperative learning arrangement, where the trainer reinforces naturally occurring positive behaviors. Teachers could also be involved in the pre- and post-testing of the students. Their behavioral observations might be useful outcome measures along with students' own self-reports. Involving teachers in social skills training might also serve to sensitize them to the positive behaviors desired, so they could reinforce such behaviors as they occur throughout the school day. This might be more beneficial to the general student population than training for specific social skills in an isolated training environment.

There still remains a place for specific social skills training for those students with social skills deficits- both handicapped and nonhandicapped. As Gresham (1994) noted, such students need to be able to incorporate the desired behavior into their repertoire before they can be reinforced for it in the natural environment. In anecdotal discussions that occurred during the Summary and Review of Skills in Week 12 of the program, some of the students commented on the fact that they had derived benefit from the program and had in fact used several of the skills they had learned. As the school psychologist and school social worker organize their counseling groups, students with deficient social skills could be included with more competent students to serve as role models, but the training could be geared specifically to the deficiencies of the less competent students. Students might be recommended for such groups by their classroom teachers, or from the results of a general social skills screening such as the one conducted as a premeasure for this study.

Finally, there is also a need for small discussion groups for those students going through the transition from elementary to middle school, and from middle to high school. Students can benefit from the opportunity to have a close relationship with a teacher or counselor, and to interact with their peers in a less structured, more intimate atmosphere than is provided within the regular classroom. Such groups might focus on topics related to the transition and adjustment to the new environment, rather than the acquisition of specific social skills. The long-term benefits to students participating in such groups have been documented by previous researchers (Feiner et al., 1982), which justify the time and effort involved for school personnel.

APPENDICES

Appendix A

SOCIAL SKILLS TRAINING MODEL

Promoting Skills Acquisition

- Modeling
- Coaching
- Behavior Rehearsal
- Social Problem Solving

Enhancing Skill Performance

- Peer Initiation Strategies
- Cuing and Prompting
- Reinforcement-based Strategies
- Group-oriented Contingency Systems
- Behavioral Contracts
- School-Home Notes

Removing Interfering Problem Behaviors

- Differential Reinforcement Techniques
 - Differential Reinforcement of Other Behavior
 - Differential Reinforcement of Low Rates of Behavior
 - Differential Reinforcement of Incompatible Behavior
- Response Cost
- Positive Practice
- Timeout
- Systematic Desensitization

Facilitating Generalization

- Training Diversity
 - Using Sufficient Stimulus Exemplars
 - Using Sufficient Response Exemplars
- Teaching Relevant Behaviors
- Teaching Functional Mediators
 - Program Common Social Stimuli
 - Self-Mediated Generalization

Elliott, S.N. and Gresham, F.M. (1991). Social Skills Intervention Guide, Circle Pines, MN: American Guidance Service, p. 32.

Appendix B

Objectives of 7th Grade Mental Health Curriculum

- 1. To understand basic human needs and their importance to our mental health.**
- 2. To define what emotion is and to identify some common emotions.**
- 3. To explore ways of dealing with our emotions.**
- 4. To examine how our personality is formed.**
- 5. To understand how personality and mental health are interrelated.**
- 6. To define self concept and explore its effect on our well being.**
- 7. To understand what values are and the importance of values in our life choices.**
- 8. To understand the importance of goals and the steps in goal setting.**
- 9. To understand what stress is and what a stressor is.**
- 10. To understand the effects of prolonged stress n the body.**
- 11. To explore ways of coping with stress.**
- 12. To understand what peer pressure is and how to deal with it.**
- 13. To learn the words most commonly associated with mental illness and types of treatment**

Appendix C

Items by Factor for the Student Form, Secondary Level, SSRS

ITEM	FACTOR
	<u>Cooperation</u>
17	Finish classroom work
13	Do homework
35	Follow teacher's directions
9	Ask before using things
31	Use free time in a good way
36	Use nice voice
14	Keep desk clean
6	Listen to adults
11	Avoid trouble
37	Ask friends for favors
	<u>Assertion</u>
33	Get attention of opposite sex
4	Confident on dates
26	Start conversation with opposite sex
20	Ask for date
23	Compliment opposite sex
1	Make friends
38	Start talks with class members
16	Active in school activities
30	Invite others to join activities
3	Ask adults for help
	<u>Self Control</u>
27	Accept punishment from adults
34	Take criticism from parents
32	Control temper
22	End fights with parents
18	Compromise with parents or teachers
10	Disagree without fighting
19	Ignore classmates' clowning
7	Ignore children's teasing
11	Avoid trouble

15 Do nice things for parents

Empathy

5 Understand how friends feel
21 Listen to friends' problems
8 Ask friends for help with problems
12 Feel sorry for others
24 Tell others when they've done well
28 Tell friends I like them
29 Stand up for friends
2 Say nice things to others
39 Talk over classmates' problems
25 Smile, wave, nod

Gresham, F.M. and Elliott, S.N. (1990), Social Skills Rating System Manual, American Guidance Service, Circle Pines, MN, p. 136.

Appendix D

Sociogram

Health Class _____

Instructions: Here are two questions about your classmates. Please read the questions and then write in the birthdates of 3 students in this class from the ones listed on the board who would apply to each question. Remember to give only the birthdates of people who are in this class. If any of your classmates have the same birthdate, please use the letters "A" or "B" to differentiate them as listed on the board. Your answers will be kept completely confidential and since your name does not go on this sheet no one will know who chose whom. Thank you very much for your help with this project!

1. Which of the students in your class would you most like to have as your friend?

1. _____

2. _____

3. _____

2. Which of the students in your class would you least like to have as your friend?

1. _____

2. _____

3. _____

adapted from Brown, L. & Hammill, D.D. (1990) *Behavior Rating Profile*, Second Edition, Examiner's Manual. Austin, TX: Pro-ed.

Appendix E

Sample Skill: Nonverbally greeting or acknowledging others

Tell 1. Introduce the skill and ask questions about it.

Today we're going to talk about ways to greet other people without saying anything.

2. Define the skill and discuss key terms.

3. Discuss why the skill is important.

-Lots of times you can say "hi" to others by smiling, waving, and/or nodding.

-Nonverbal communication is a good way of letting others know you recognize them.

-Waving, smiling, or nodding at others shows that you are friendly.

4. Identify these skill steps; have students repeat them.

A. Establish eye contact with the other person.

B. Nonverbally communicate by smiling, waving, and/or nodding.

C. Notice how the other person reacts.

D. IF the other person doesn't notice you, try again to nonverbally communicate.

Show Using one of the following situations, model and role-play the situation. For negative modeling, respond in one of the following ways: frown, ignore the person you recognize, and so on.

Situations:

-You're walking to lunch, and a group of your friends on the playground call your name.

-You see your best friend riding by in a car with his parents while you're playing in the driveway.

-You come in from recess and see a friend sitting on the other side of the room.

-You're at the skating rink, and a group of friends call your name.

Do Ask the students to:

-Define the skill

-Tell why the skill is important.

-State the skill steps. read them aloud together, and think of cues to help them remember.

-Practice the skill in situations from the Show phase and situations they suggest.

Follow Through and Practice

1. Review periodically

2 Practice being nonverbal

3. Have a Guest Speaker.

Generalization

- 1. Brainstorm alternatives**
- 2. Generate situations**
- 3. Use football signals.**
- 4. Play charades.**

Elliott, S.N. and Gresham, F.M. (1991). Social Skills Intervention Guide, American Guidance Service, Circle Pines, MN. pp. 165-166.

Appendix F

Social Skill Units

Week 1. Introduction - overview of program and introduction of group members.

Week 2. Ignoring distractions from classmates who are clowning around in class-p. 96 (*Skill 19- I ignore classmates who are clowning around in class*).

Week 3. Responding appropriately when pushed or hit by other children -p. 200 (*Skill 3 I ask adults for help when other children hit me or push me around.*).

Week 4. I talk things over with classmates when there is a problem or argument (*Skill 39*).

Week 5. I ask friends for help with my problems (*Skill 8*).

Week 6. Controlling temper in conflict situations with adults -p. 191 (*Skill 10 I disagree with adults without fighting or arguing. Skill 22 I end fights with my parents calmly. Skill 27 I accept punishment from adults without getting mad*).

Weeks 7-8. Responding to teasing from peers appropriately- p. 188 (*Skill 32 I control my temper when people are angry with me*).

Week 9. Compromising in conflict situations with peers or adults by changing ideas to reach agreement -p. 185 (*Skill 18 I compromise with parents or teachers when we have disagreements*).

Week 10. Receiving criticism well- p. 194 (*Skill 34 I take criticism from my parents without getting angry*).

Week 11. I let friends know I like them by telling or showing them. (*Skill 28 I let friends know I like them by telling or showing them*).

Week 12. Summary and Review of all skills.

Appendix G

- _____ Treatment Group ACE
- _____ Treatment Group BDF
- _____ Discussion Group ACE
- _____ Discussion Group BDF

Checklist of Instructional Model for Social Skill Units

_____ Tell Phase

- _____ Introduce the skill and ask questions about it.
- _____ Define the skill and discuss key terms.
- _____ Discuss why the skill is important.
- _____ Identify the skill steps; discuss the skill steps; have students repeat the steps.

_____ Show Phase

- _____ Model skill by using one of the situations specific to the skill unit.
- _____ Model the skill using *negative* modeling.
- _____ Role play a situation with a student.

_____ Do Phase

- _____ Ask students to define the skill.
- _____ Ask students to tell why skill is important
- _____ Ask students to identify the skill steps.
- _____ Invite pairs of students to practice the skill- provide performance feedback.

_____ Follow Through and Practice

- _____ Discuss ways to observe skill being used during the week (e.g. in school, on T.V., at home.)
- _____ Assign homework activity if applicable.

_____ Generalization Phase

- _____ Students relate the skill to their own lives and activities.
- _____ Brainstorm alternatives if applicable.

Appendix H
Multiple Regression Analyses by Gender

Results of the Overall Multiple Regression for Girls
Piers Harris 2 = Dependent variable

R Square = .49 F (5,32) =6.21 P = .001

<u>Variable Entered</u>	<u>B</u>	<u>T</u>	<u>P</u>
academic achieve. 1	.240	1.042	.3052
self esteem 1	.8548	3.987	.0004
peer acceptance 1	.2816	1.631	.1126
social skills 1	-.1575	-.695	.4922
program	-1.949	-.221	.8262

Results of the Overall Multiple Regression for Girls
Sociogram 2 = Dependent variable

R Square = .26 F (5,32) =2.20 P = .001

<u>Variable Entered</u>	<u>B</u>	<u>T</u>	<u>P</u>
academic achieve. 1	-.0740	-.328	.7454
self esteem 1	.2929	1.387	.1749
peer acceptance 1	.4903	2.884	.0070
social skills 1	-.2410	-1.080	.2884
program	4.161	.480	.6345

Results of the Overall Multiple Regression for Girls
Social Skills 2 = Dependent variable

R Square = .4798 F (5,32) =5.892 P = .001

<u>Variable Entered</u>	<u>B</u>	<u>T</u>	<u>P</u>
academic achieve. 1	.1034	.508	.6149
self esteem 1	.3013	1.590	.1217
peer acceptance 1	-.1764	-1.156	.2562
social skills 1	.5167	2.578	.0147
program	-1.980	-.254	.8008

**Results of the Overall Multiple Regression for Girls
CAT 2 = Dependent variable**

R Square = .8283 F (5,32) = 30.879 P = .001

Variable Entered	B	T	P
academic achieve. 1	1.017	12.355	.0001
self esteem 1	-.053	-.686	.4977
peer acceptance 1	.0761	1.234	.2261
social skills 1	.0429	.529	.6004
program	-.527	-.167	.8680

**Results of the Overall Multiple Regression for Boys
Piers Harris 2 = Dependent variable**

R Square = .49 F (5,35) = 2.86 P = .001

Variable Entered	B	T	P
academic achieve. 1	.0362	.173	.8638
self esteem 1	.5910	3.431	.0016
peer acceptance 1	-.1697	-1.102	.2780
social skills 1	-.0600	-.375	.6972
program	-10.435	-1.291	.2050

**Results of the Overall Multiple Regression for Boys
Sociogram 2 = Dependent variable**

R Square = .26 F (5,32) = 2.20 P = .001

Variable Entered	B	T	P
academic achieve. 1	.4599	2.687	.0109
self esteem 1	.0062	.044	.9650
peer acceptance 1	.7244	5.750	.0000
social skills 1	-.1199	-.917	.3653
program	-13.6677	-2.068	.0461

Results of the Overall Multiple Regression for Boys
Social Skills 2 = Dependent variable

R Square = .4747 F (5,35) =6.326 P = .001

<u>Variable Entered</u>	<u>B</u>	<u>T</u>	<u>P</u>
academic achieve. 1	.3017	-1.700	.0980
self esteem 1	.3895	2.666	.0115
peer acceptance 1	-.3413	-2.612	.0132
social skills 1	.5419	3.996	.0003
program	-17881	-.261	.7957

Results of the Overall Multiple Regression for Boys
CAT 2 = Dependent variable

R Square = .7799 F (5,35) =324.009 P = .001

<u>Variable Entered</u>	<u>B</u>	<u>T</u>	<u>P</u>
academic achieve. 1	.8728	9.938	.0001
self esteem 1	-.0789	-1.187	.2433
peer acceptance 1	.0167	.280	.7810
social skills 1	-.0055	-.0869	.9318
program	-.2197	-.069	.9455

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