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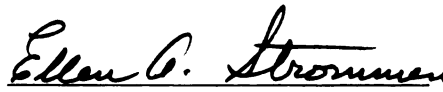
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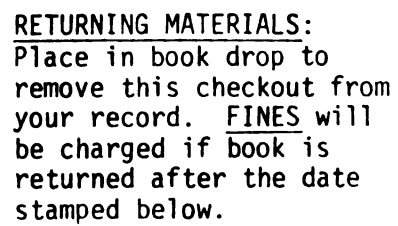
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CHILDREN'S PERCEIVED COMPETENCE AND SELF-ESTEEM AS A FUNCTION OF
SELF-EVALUATIONS, PERCEIVED EVALUATIONS, AND SOCIOMETRIC STATUS

By

Judith Claire Meister

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ABSTRACT

CHILDREN'S PERCEIVED COMPETENCE AND SELF-ESTEEM AS A FUNCTION OF SELF-EVALUATIONS, PERCEIVED EVALUATIONS, AND SOCIOMETRIC STATUS

By

Judith Claire Meister

The study reported here examined the nature of the relationships between children's social status--based on peer, self, and perceived ratings of social effectiveness--and children's perceived competence and self-concepts. Subjects were 299 third and fifth grade boys and girls who were identified as belonging to one of five social effectiveness groups: popular, aggressive, shy, unpopular, or average. Multivariate analyses of variance revealed main effects of grade, gender, and social effectiveness group. Subsequent univariate analyses suggested that third graders both view themselves, and believe their peers view them, as more anxious/immature than fifth graders. Third graders also believe their peers view them as more socially extroverted than fifth graders believe their peers view them. Gender differences indicate that boys rate themselves, and believe their peers rate them, as more aggressive than girls. Boys also had higher scores than girls both overall, and in four subareas, of perceived competence. Planned comparisons of social effectiveness differences revealed that popular and aggressive children assess their social effectiveness similarly to the way peers rate them. Additionally, scores on the perceived competence and self-concept factors varied according to social

effectiveness. Generally, popular and average children manifest positive perceived competence and self-concept compared to internalizing and externalizing peers. Contrary to expectation, internalizing children did not evidence higher perceived competence and self-concept than externalizing children, with scores on the component factors of these constructs varying within and between the aggressive, shy, and unpopular groups. Finally, post-hoc path analyses indicated that the models providing the best fit for predicting perceived competence/self-concept employed peer evaluations of social effectiveness as exogenous variables, and perceived evaluations of social skill as mediating variables. Implications of the results for social comparison processes, self-esteem and psychological adjustment, prediction of self-esteem, and intervention strategies, were discussed.

DEDICATION

To my husband, who sparked my original interests in this area of research, and who fostered in me the discipline and drive to undertake this and various other projects throughout my graduate career. His love, support, encouragement, and pride in my accomplishments were invaluable in pushing me onward when it seemed that the light at the end of the tunnel would never come!

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INTRODUCTION

This study was designed to examine the nature of the relationship between children's social status as determined by peer evaluation, children's perceived social competence, and children's self-concepts. The theories upon which the procedures utilized in the present study were based were those of social comparison and social cognition.

Recent developments in the area of social cognition have focused on social comparison in children's evaluations of competence among their peers as well as in children's self-evaluations of competence. Researchers in this area have examined the development of self-evaluative standards through social comparison on achievement tasks (e.g. Hartup, 1983; France-Kaatrude & Smith, 1985), as well as examining children's use of social comparison for evaluating their academic abilities (e.g. Nicholls, 1978; Phillips, 1984; Aboud, 1985). An additional component of some of these studies has been an interest in the relationship between children's self-evaluations of a variety of competencies and self-concept (e.g. Bohrnstedt & Felson, 1983; Waters, Noyes, Vaughn & Ricks, 1985). One area of social development which has received relatively little attention, but which would seem particularly pertinent to child development and social adjustment, is that of self-evaluation of social competence in relation to peer group status and self-concept. The present study attempts to address this issue through use of techniques designed to tap perceived competence, self-concept, peer status, and self-evaluated peer status. Of

particular interest are: (1) The ability of elementary school-aged children to use their peer group as a reference group for their self-evaluations of social competence and social status; (2) Whether or not children become increasingly accurate in their self-evaluations of peer status and/or social competence with increasing age, such as that which occurs when children use social comparison to evaluate their own academic skills; (3) The nature of the relationship between children's perceptions of their social skills, using the peer group as a comparison base, and their self-concepts; and (4) Whether or not this relationship differs substantially for children who are potentially at-risk for later psychological adjustment difficulties and children who are not at risk. Prior to a more detailed discussion of the ways in which the present study addresses these issues, relevant literature is reviewed.

Social comparison among children: developmental issues.

It has been suggested that children use social comparison as a means of attaining cognitive clarity about their own abilities (Pepitone, 1972; Levine, 1983; Ruble, 1983). That is, social comparison may be used as a means of accurately assessing how good one is at various behaviors—i.e. social comparison for self-evaluation (Ruble, 1983; Pepitone, 1972); or it may be used as a means of learning how one is to behave in various situations—i.e. social comparison as a normative calibrator (Ruble, 1983). Researchers examining developmental trends in the use of social comparison have primarily focused on the self-evaluative goal as opposed to the normative goal, perhaps because it is easier to create objective measures for self-evaluation than it is for normative evaluation. In addition, the

majority of the research focusing on developmental changes in social evaluation is confined to the domain of academic ability evaluation.

The impetus for this research interest appears to stem from two sources. First, Festinger's (1954) theory of social comparison, which was defined as comparing oneself with others for self-evaluation, set the stage for examining the importance and usefulness of social comparison among adults. Second, Veroff's (1969) seminal work in social comparison among children suggested developmental changes in children's use of social comparison processes which had implications for educational settings. Veroff (1969) and others (Suls & Mullen, 1982) demonstrated that social comparison strategies are not generally used by children much younger than seven years of age, and that the use of social comparison for self-evaluation increases during the elementary school years.

It has been suggested that this increase in social comparison for self-evaluation during the elementary school years in part stems from the focus of school systems on social comparison processes in evaluating children's relative abilities. This may be facilitated by classroom settings which create a ready-made reference group for children to use in evaluating their own abilities vis-a-vis others (Pepitone, 1972; Levine, 1983). In addition, the increased prevalence of social comparison for self-evaluation during the elementary school years may be related to children's increased cognitive abilities which facilitate their ability to use acquired information to draw more abstract inferences about their own and others relative skills and attributes (Feldman & Ruble, 1977; Levine, 1983; Suls & Sanders, 1979; Ruble, 1983).

Support for the contention that developing cognitive abilities contribute to children's increased use of social comparison for self-evaluation is demonstrated in two studies completed by Nicholls (1978, 1979). In these studies, Nicholls had children between the ages of five and thirteen estimate their achievement in reading in comparison to their classmates, make causal attributions about success and failure on reading tasks, and had teachers provide scores reflecting the children's actual reading attainments. In both studies, younger children (five and six year olds) estimated their reading achievement at levels which were higher than those reported by teachers, while estimates of reading achievement for older children were more in line with teachers' reports of actual achievement. Thus, it appears that children's accuracy in assessing their own academic performances increases rather dramatically with age.

Extrapolating from these findings, one might expect that children would use social comparison for self-evaluation in other domains of everyday experience, and that their expertise in making such evaluations would vary with age as well as other factors. Ruble (1983), in fact, suggests that children learn about the appropriate ranges of behaviors and characteristics for other areas of social development by comparing themselves with their peers and by making comparisons among their peers.

In addition, one might expect that the results of the comparison process would affect children's self-concept. That is, if the results of the comparison are favorable, the child is likely to have a better view of him/herself than if the results of the comparison find the child lacking in some domain. The outcome of the evaluation is likely

to affect how the child feels about him/herself, the criteria he/she uses in future self-evaluations, and the child's interpersonal relationships (Levine, 1982; Ruble, 1983).

These hypothesized relationships between self-evaluation, self-concept, and interpersonal relationships have received some attention, primarily from researchers interested in the effects of labeling and mainstreaming on academically handicapped children's self-concepts and peer adjustment. The general finding has been that mainstreamed handicapped students often have lower self-concepts and suffer more peer rejection than handicapped children who are maintained in special classrooms (Bryan, 1974, 1976; Bruininks, 1978; Coleman, 1983a, 1983b; Gottlieb & Leyser, 1981; Perlmutter, Crocker, Cordray, & Garstecki, 1983; Strang, Smith, & Rogers, 1978). For example, Coleman (1983a) found that children who received special education services through self-contained classrooms for learning disabled (LD) students had significantly higher self-concepts than children who were mainstreamed in regular classrooms and who received special education services on a one or two hour resource basis each day. Additionally, Coleman (1983a) found that children identified by their teachers as having academic difficulties severe enough to warrant special education services, but who were not currently receiving such services, also had lower self-concepts than the children who received services in the self-contained classrooms. Thus, in the case of self-concept, it appears that academically handicapped children who have at their disposal a relatively homogenous social comparison group which consists of children having similar abilities (i.e. the handicapped children in the self-contained classroom) are likely to have higher self-concepts

than children, identified as handicapped or not, who must rely on a heterogenous comparison group in which most of the other group members are consistently performing at a higher level than the identified children (Coleman, 1983a).

Although the relationship between self-evaluation, self-concept, and social status has received the above described attention by educators interested in the effects of labeling and mainstreaming on academically handicapped children's self-concepts and social adjustment, the application of these findings to the more general, regular education classroom environment has not been made. This gap in the research would appear to be crucial since the majority of children in school systems do not fall within the confines of the special education system, and therefore, they must learn to cope with the varying degrees of ability and skill which are manifested by themselves and their peers.

Peer adjustment and self-evaluation of sociometric classification.

There is a small body of research which suggests that self-evaluation of sociometric status and social adjustment are also related. In particular, a number of researchers have shown that among adolescent and preadolescent LD students, accuracy of social status perceptions varies with sociometric status (Ausubel, Schiff, & Gasser, 1952; Bruininks, 1978; Bryan, 1974, 1976; Perlmutter, et al., 1983; Serafica & Harway, 1979). In one such study, Perlmutter et al. (1983) administered a sociometric questionnaire to a group of tenth graders, about one-third of whom were identified as LD students. The sociometric questionnaire involved each class member rating the extent to which he/she liked or disliked the remaining class members.

Participants were also asked to indicate how they believed each of their classmates rated them on the sociometric (a measure of perceived social status), as well as to rate each of his/her classmates on an instrument designed as an adolescent peer rating of a number of factors including anxiety, withdrawal and aggressiveness (Prinz, Swan, Liebert, Weintraub, & Neale, 1978).

Results of the study indicated that LD students were generally less well liked than their non-LD peers, although there was a subgroup of LD students who received higher sociometric ratings than their remaining LD peers. The LD subjects were generally seen as more aggressive and more disruptive than their non-LD peers, with the more popular LD subjects also being evaluated as more withdrawn and less anxious than the less popular LD subjects. In addition, the more popular LD subjects were more aware than the less well-liked LD students that they were liked; and the more popular LD students knew how their peers felt about them, as indicated by their more accurate assessments of how other peers rated them on the sociometric measure (Perlmutter, et al., 1983).

These data have implications for the use of social comparison-based measures among non-academically handicapped children and among children who may be at risk for later psychological adjustment difficulties, particularly in these children's self-assessments of peer status and its relationship to self-concept. The relationships of these variables for non-academically handicapped individuals have not yet been directly explored; however, this issue has been explored among children who may be at-risk for later psychological adjustment difficulties.

Self-concept and peer adjustment among children at-risk for psychopathology.

Some evidence suggests that a relationship exists between social comparison, perceived social status, and level of self-concept among children who are at-risk for later adjustment problems and/or psychopathology, and that this relationship is evident in at-risk children's self-evaluations of their peer status. In particular, at-risk children tend to rate themselves in significantly more negative terms on sociometric rating measures than do their peers who are not-at-risk for later psychopathology (Rolf, 1972, 1976), and at-risk children have significantly lower self-concepts than do their not-at-risk peers (Piers, 1972). In addition, Cowen, Pederson, Babijian, Izzo, and Trost (1973) found peer judgements to be the most powerful predictors of later behavior disorders and the need for psychiatric treatment.

Rolf (1976) suggests that in addition to peer ratings of social competence, the directionality of a child's rated difficulties is a powerful predictor of outcome for children at-risk for adjustment difficulties. Specifically, children who are withdrawn and exhibit excessive avoidance behaviors (internalizers), and children who exhibit aggressive, impulsive, and excessive approach behaviors (externalizers) are likely to experience poorer psychological outcomes than their peers who do not demonstrate excessive behaviors in either direction. The prognosis for the externalizing children seems especially poor.

Several studies would appear to support these speculations. In particular, Campbell and Paulauskas (1979) examined the perceived social adjustment of hyperactive children, as rated by both teachers

and parents, and found that both parents of hyperactive children and these children's teachers perceived the children as having greater difficulties in peer relations than parents of non-hyperactive children, particularly when it came to the children's abilities to get along with peers and to maintain friendships. Specifically, these children were viewed as exhibiting aggressive and provocative behaviors which interfered with social relations and other areas of functioning, and which predisposed these children to later adjustment and/or psychiatric difficulties.

Rolf (1972, 1976) used peer, self, and teacher ratings to study the social and academic competence of children at risk for later psychopathology. Four groups of children--externalizers, internalizers, children of schizophrenic mothers, and children of neurotic internalizing mothers--were compared to control children matched for age, grade, IQ, socioeconomic status, intactness of home, and previous standard achievement test scores. Significant differences resulted as a function of sex and type of rater (i.e. peer vs. teacher). Overall, deviance from social and academic competence was more sharply differentiated by peers than it was by teachers. While teachers failed to noticeably differentiate between children of schizophrenic mothers and children of neurotic mothers, peers consistently made a behaviorally-based distinction between these groups of children. More specifically, results indicated that male externalizers were perceived by all raters as the least competent group of children. Male and female externalizers, as well as male internalizers, were rated by peers as significantly less competent than their control groups, and peers ranked externalizers and internalizers

significantly lower than their control groups on positive class play roles (Bower, 1969), regardless of sex. Externalizing boys and girls were targeted significantly more often for externalizing roles, while internalizers and girls whose mothers were known schizophrenics were most frequently targeted for internalizing roles. Finally, children's self ratings indicated externalizers perceived themselves more negatively than the other groups of children, and all groups except the internalizers felt that their peers' perceptions of them were more negative than their perceptions of themselves; i.e. the targeted children felt that their peers would choose them for more negative roles than they would choose for themselves.

There is some evidence which suggests that the ability of peers to identify children who are at-risk for later psychopathology, as well as to understand the behavior and emotional difficulties of the at-risk peers, increases with age. In particular, Marsden and Kalter (1976; Kalter and Marsden, 1977) have studied fourth- and sixth-grader's abilities to discriminate the behavior of normal children from that of emotionally disturbed children. In these studies, descriptions of five fictitious children were provided, including descriptions of a "normal" child, a school phobic, an antisocial character disorder child, a passive-aggressive child, and a psychotic/borderline psychotic child. Participants were interviewed about the difficulties of these fictitious peers. Findings indicated that both fourth-grade and sixth-grade subjects were able to distinguish the varying degrees of disturbance exhibited by the target peers. These distinctions were based on behavioral descriptions as opposed to the children's overall perceptions of the disturbances.

All subjects were also able to articulate their perceptions of the etiology of the disturbed behavior for the target peers; however, it was easier for subjects to explain the etiology of the passive-aggressive and antisocial target peers' problems than it was for them to explain the etiology of the psychotic target peer. The clarity of the explanations was significantly better among sixth-graders than among fourth-graders as the older children were better able to conceptualize the targets' disturbed behaviors as a function of prior circumstances. In addition, sixth-graders had significantly more clearly articulated views of the etiological factors in the target peers' disturbances than did the fourth-graders. Finally, sixth-graders showed greater consistency than fourth-graders in their descriptors of the development of the disturbances and the persons responsible for the etiology of the disturbances.

These results suggest that as children develop, not only are they able to identify the behavioral and emotional disturbances of their peers which might put these children at risk for later psychopathology, but also, their abilities to understand these problems and explain the etiology of the problems become more clear and more consistent with age. These data appear to be consistent with the current literature on the development of social cognition and children's friendship expectations which demonstrates that with age, children's perceptions of and attributions about their peers become more psychologically oriented and less dependent upon externally observable characteristics (Bigelow, 1977; Forbes, 1978; Furman & Bierman, 1981; Shantz, 1975).

Although each of the reviewed areas of study is important in its own right, there appeared to be several gaps in the literature which

warranted attention. First, although the developmental aspects of social comparison processes have been examined in relation to children's academic abilities (Levine, 1983; Nicholls, 1977, 1978; Pepitone, 1972; Ruble, 1983; Suls & Mullen, 1982; Suls & Sanders, 1979; Veroff, 1969), the developmental aspects of children's use of these processes for social competence, and particularly for social skills, have not been specifically examined. In addition, these studies were based on non-clinical populations. Children's self-evaluations of social skill among clinical populations has not yet been specifically addressed. The current study attempts to fill this gap by including children's self and perceived evaluations of both academic and social skills, as well as including a sample of children, potentially at risk for later adjustment difficulties, who may differ from "average" and "well-liked" children in their self evaluations of social skills and self-concept.

Second, the primary sociometric instruments used in studies examining the differences between self-perceived and other-perceived sociometric classification among clinically identified populations (e.g. Rolf, 1972, 1976) have been questionnaires based on children's ratings of the extent to which they like or dislike their classmates, and the extent to which they perceive their peers as liking or disliking them (Bryan, 1974, 1976; Bruininks, 1978; Coleman, 1983a, 1983b; Perlmutter, et al., 1983). In these studies, it is unclear whether children rated one another solely on the basis of the liking-disliking dimension, or whether other factors such as social skills and other abilities were also being considered in these evaluations. The class play (Bower, 1969), and its adaptations used in

the current study help to clarify this issue by including positive and negative social skills and academic roles rather than relying on non-elaborated dimensions of liking and disliking.

Finally, research focused on the relationship between self-concept and sociometric placement has typically relied upon a general conception of self-concept as measured by an overall score on the Piers-Harris Children's Self-Concept Scale (cf. Coleman, 1983a, 1983b) or has relied upon parents' or teachers' evaluations of childrens' self-concepts (Piers, 1972; Quay, 1977; Rolf, 1972, 1976). Although these studies provide information about the relationship between overall self-concept and peer adjustment among academically handicapped children or clinically identified children, many do not provide any information about sub-areas of self-concept and peer status, and others do not include the children's own perceptions of their abilities and their feelings about such abilities. This problem is addressed in the current study by including a factor-based measure of perceived competence designed to assess children's self perceptions of their competencies in the cognitive, social, and physical domains, along with general self-worth (Harter, 1979), as well as using the factor analytic structure of the Piers-Harris Children's Self-Concept Scale (Piers, 1969, 1977) in assessing self-concept.

Three major hypotheses were tested. First, a body of developmentally based literature which suggests that social comparison processes begin to emerge around age seven, and become increasingly more sophisticated with age, (Veroff, 1969; Masters, 1971; Mullener & Laird, 1971; Montemayor & Eisen, 1977; Suls & Sanders, 1979; Ruble,

1983), provided the basis for expecting that older children would be more accurate in estimating their own social competence and social status, as they believe their peers perceive them, than would younger children. Specifically, it was hypothesized that third-graders would be less accurate than fifth-graders in estimating their own social competence and status within the peer group. Fifth-graders were expected to exhibit greater accuracy in these areas since their developmental level should allow them to better assess their peers' personality styles and their own likes and dislikes.

The second hypothesis focused on the abilities of children at risk for later psychological adjustment problems to accurately assess their own social competence and social status as well as on the relationship of these assessments with these children's self-concepts. Research findings based on studies of LD and at-risk children's perceptions of peer status and self-concept (Rolf, 1972, 1976; Bryan, 1974, 1976; Bruininks, 1978; Strang, et al., 1978; Gottlieb & Leyser, 1981; Coleman, 1983a, 1983b; Levine, 1983; Perlmutter, et al., 1983; Ruble, 1983) made it reasonable to expect that discounting age, the accuracy of children's assessments of how their peers perceive them would increase as peer status increased. More specifically, children exhibiting behavioral excesses of an aggressive nature would be least accurate in assessing their peer status as perceived by their classmates, followed by children exhibiting excessive avoidance behaviors, average children, and well-liked children. Additionally, it was expected that well-liked and average children would have higher self-concepts than the other groups of children, and that the self-concepts of the externalizing children would be significantly

lower than the self-concepts of the internalizing children.

Although same-sex peer nominations were used in the present study, previous research using cross-sex peer nominations (Rolf, 1972, 1976) provided the basis for the third hypothesis: boys would be more frequently viewed as exhibiting externalizing behaviors than would girls, and girls would be more frequently perceived as manifesting internalizing behaviors. Finally, given the diversity of competencies and self-evaluative statements tapped by the perceived competence and self-concept measures, along with the failure of researchers to report sex differences for these measures (e.g. Harter, 1979, 1981, 1982), no specific sex differences in self-concept and perceived competence were predicted although it seemed reasonable to expect that some differences would occur.

METHOD

Subjects

Subjects for the present study were recruited from the third and fifth grades of three suburban midwestern elementary schools. An incentive system was used in each school as a means of encouraging children to return to school, as quickly as possible, the letters which indicated whether or not their parents wished to have them participate in the study (See Appendix A for parent permission letter and children's informed consent). The first classroom at each grade level, in each school, to have 90% of the permission letters returned, regardless of whether or not permission to participate in the study was granted, received a 25 dollar prize. The second and third classrooms to achieve the 90% return rate each received a 10 dollar prize. This incentive system had previously been shown to increase the rate of permission letter returns (Juenemann, 1985; Meister, 1983), and helped to insure that no child was excluded from the study because he/she forgot to obtain parental consent.

The use of the incentive system resulted in the participation of 299 children, including 72 third grade boys, 84 third grade girls, 73 fifth grade boys, and 70 fifth grade girls. Children were identified as belonging to one of five sociometric groups on the basis of the class play sociometric procedure described below. These groups were utilized in the development of all analyses.

Procedure

The procedures for the present study involved the completion of a questionnaire packet by each participating child. The packet consisted of five separate measures, including Bower's (1969) class play, two adaptations of Bower's (1969) class play, the Perceived Competence Scale for Children (Harter, 1979), and the Piers-Harris Children's Self-Concept Scale (Piers, 1977, Piers & Harris, 1964).

The questionnaires were group administered in the classroom setting by the investigator and several undergraduate research assistants. The investigator read each item aloud to the children, and the undergraduate research assistants monitored individual children's progress, answering individual questions as they arose, and aiding children who had difficulty maintaining the pace of the remainder of the class.

Measures

Class Play sociometric. This instrument was used to assess the social competence/social effectiveness of each child in the subject pool. Each participating child was asked to pretend that he/she had been chosen as the director for a class play in which he/she was to typecast his/her same sex classmates into seventeen roles for the play. In order to assist children in making their choices and to minimize the amount of time spent completing the nominations, each play role was printed on a separate piece of paper along with an alphabetized roster

of the children's same-sex participating classmates. Children were simply required to circle the name of the classmate whom they wished to nominate for each particular role (see Appendix B.).

The children's responses to this section of the questionnaire packet were coded and tallied for use in defining the social effectiveness groups upon which analyses were based. This procedure involved several steps. First, the frequency tallies for each of the 17 class play roles were submitted to a confirmatory factor analysis as a means of reducing the variable-to-subject ratio, and to establish factors which could be used in developing social effectiveness groupings. As shown in Table 1, three factors with good internal consistency, as measured by coefficient alpha, were derived. A frequency score on each of the three factors was then calculated for each subject by adding the frequencies for each of the variables making up the individual factors. These factor frequency scores were then standardized by grade and gender for each subject.

Next, five social effectiveness groups were conceptually derived and statistically developed. The five groups are labelled and described below, while Table 2 depicts the number of children represented in each category. Of the 299 participating children, 273 of them were identified as fitting into one of the five social effectiveness groups.

1. Popular - Children in this group are rated highly positively by their peers (high score on prosocial social factor), and receive few if any nominations for negatively perceived roles (low score on aggressive factor). In addition, these children are not rated highly on roles related to immature and/or anxious behaviors (average score on anxious/immature factor).
2. Aggressive - These children are frequently rated by their peers as representing aggressive roles which result in their being rejected by the group (high score on the aggressive factor). Although they may receive a few nominations for more positive behaviors, these children are generally viewed in a negative manner (low score on the prosocial factor). Similar to the popular children, these children have average scores on the anxious/immature factor.
3. Shy - Children who fit this group are frequently rated as exhibiting anxious or immature behaviors (high score on the anxious/immature factor). Additionally, they are viewed as being neither highly aggressive nor highly social (average scores on both the prosocial and aggressive factors).
4. Unpopular - These children receive few, if any, nominations for roles which represent positive social behaviors (low score on prosocial factor). However they differ from the aggressive children in that they are not perceived as exhibiting unacceptable aggressive behaviors (average score on aggressive factor). These children are also not perceived as being immature or anxious (average score on anxious/immature factor). It appears that these children are simply not liked.
5. Average - This group encompasses the majority of children, and involves the perception that these children do not engage in behavioral extremes in either the positive, negative, or anxious/immature directions (average scores on all three factors).

Table 1

Factor analysis internal consistencies & item content for class play

<u>Role</u> <u>Factor</u>	<u>Items</u>	<u>Internal consistency</u>
Prosocial	Loyal friend Class president Friendly/helpful Team captain Smart/knows answers Sense of humor Nice	<u>a</u> = .776
Aggressive	Tough/bad kid Mean cruel boss Bad temper/fights Bully Gets in trouble	<u>a</u> = .811
Anxious/Immature	Afraid/easily frightened Acts like a little kid Lazy Shy/few friends	<u>a</u> = .692
Residual	Stuck-up	

Table 2

Breakdown of social effectiveness groups by grade & sex

<u>Grade</u>	<u>Sex</u>	<u>Social effectiveness group</u>				<u>Average</u>
		<u>Popular</u>	<u>Aggressive</u>	<u>Shy</u>	<u>Unpopular</u>	
3	Boys	10	9	6	5	39
	Girls	11	4	3	2	56
5	Boys	8	8	3	2	43
	Girls	11	6	2	6	39
	Total	40	27	14	15	177
	Total N = 273					

Adapted Class Plays. Two additional class play measures were used as a means of determining children's self perceptions of their sociometric status. Two types of perceptions were involved: a child's ratings of his/her own social skill, and his/her perceptions of peers' ratings. The first adaptation involved the children rating their own social effectiveness as reflected by the class play roles. Here, the children were provided with a list of the seventeen roles beside each of which a five point rating scale was printed. Each child was asked to determine how well he/she could portray each role by circling a number on the scale from zero to four. A rating of "0" indicated that the child judged the role as definitely not one which he/she could portray, and a rating of "4" indicated that the child judged the role as one which he/she could portray very well.

The second class play adaptation represented the children's perceptions of how peers perceive their social competence. This adaptation included a list of the seventeen class play roles, each of which was again accompanied by a five point rating scale. Children were asked to rate themselves in terms of the roles they thought most of their same-sex classmates would choose for them. A rating of "0" indicated the child's feeling that none of his/her classmates would choose him/her for the role, while a rating of "4" indicated that the child believed all of his/her classmates would choose him/her for the role (see Appendix C).

Perceived Competence Scale for Children. This scale was designed by Harter (1979) and represents a measure of children's feelings of

competence and self-esteem in four domains. These domains include cognitive competence, social competence, physical competence, and general self-worth. Its use in the present study involves an attempt to determine the influences of children's self-concepts, as a function of the competence domain considered, upon perceived social standing, as well as the influences of self-concept on actual social effectiveness.

The Perceived Competence Scale for Children (Harter, 1979) consists of 28 items each of which involves two choices. The child is presented with two descriptions for each item, and is asked to first decide which of the two descriptions is most like him/her. Once the child has made this decision, he/she must decide if the choice made is "really true" or "sort of true" for him/her (see Appendix D). Harter (1979) suggests that this format limits the extent to which children respond in a socially desirable manner since the implication is that each of the choices is equally acceptable—i.e. the two descriptions for each item suggest that half of the children in a particular environment view themselves in one way while the other half view themselves in the opposite way.

Each item is scored on a scale ranging from one to four. A score of one indicates lowest perceived competence and a score of four indicates highest perceived competence. Children's total scores, which may range from 28 to 112, were recorded, and were then standardized by grade and gender prior to use in the various analyses. In addition, children's scores for each of the four competence factors were recorded and standardized by grade and gender prior to use in the analyses. Table 3 depicts the coefficient alpha internal consistency estimates on each of the four competence factors for the present sample.

Table 3
Factor analysis internal consistencies: Perceived competence
scale for children

<u>Factor</u>	<u>Internal consistency</u>
Cognitive competence	<u>a</u> = .725
Social competence	<u>a</u> = .706
Physical competence	<u>a</u> = .754
General self-worth	<u>a</u> = .677

Piers-Harris Children's Self Concept Scale. The Piers-Harris Children's Self-Concept Scale (Piers, 1969; Piers, 1977; Piers & Harris, 1964) is a measure of children's feelings about themselves across a wide range of abilities. It was included in the questionnaire packet as a second measure assessing the influence of children's self-concepts on their evaluations of their own social competence, as well as the influences of children's self-concepts on actual social effectiveness.

This instrument consists of 80 declarative statements relating to children's feelings about themselves. Children respond to each item by circling "yes" if the statement is true of themselves, and by circling "no" if the statement is not true of themselves. The items in the Piers-Harris Children's Self-Concept Scale are approximately equally divided into positive and negative statements so as to reduce the possibility that children will respond in a socially desirable manner (see Appendix E).

Each item is scored as either true or not true of the child, and scores may range from 0 to 80 for the index of self concept. The items

may also be grouped into six clusters based on factor analysis, including dimensions of behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness/satisfaction (Coleman, 1983a; Piers, 1977). Children's total and factor scores were recorded and standardized by grade and gender prior to use in analytic procedures. Table 4 lists the coefficient alpha internal consistency estimates on each of the six self-concept factors for the present sample (see Appendix F for a listing of fifth graders' mean factor scores and the national norms for these scores).

Table 4
Factor analysis internal consistencies: Piers-Harris children's
self-concept scale

<u>Factor</u>	<u>Internal consistency</u>
Anxiety	$\underline{a} = .661$
Behavior	$\underline{a} = .704$
Popularity	$\underline{a} = .793$
Appearance	$\underline{a} = .745$
Intelligence	$\underline{a} = .771$
Happiness/satisfaction	$\underline{a} = .714$

RESULTS

Analyses were completed in two phases. First, multivariate analyses of variance (MANOVAs) and subsequent univariate analyses of variance (ANOVAs) were completed as a means of addressing the specific predictions made in the three major hypotheses. Grade, gender, and actual social effectiveness represented the independent variables. Dependent variables included children's self ratings on the three class play factor scores upon which social effectiveness was based (cf. Table 1, Methods section), children's perceived ratings on these same scores, the four factor scores plus a total score from the Perceived Competence Scale for Children (PCSC) (Harter, 1982), and the six factor scores plus a total score from the Piers-Harris Children's Self-Concept Scale (P-HCSCS) (Piers, 1977).

The second phase of analyses involved a post-hoc examination of the predictive relationships between peer ratings, perceived competence, self evaluations of peer competence, and perceived evaluations of peer competence. Rather than addressing the predictions in the major hypotheses, these analyses were completed in order to determine which of the variables used in the present study best predicted children's concepts of general self-worth or self esteem. These analyses were also completed as a means of comparing models based on two different measures of self-esteem represented by the Perceived Competence Scale for Children (Harter, 1982) and the Piers-Harris Children's Self-Concept Scale (Piers, 1969, 1977).

Structural equation methods were used to compare several causal models based on Bohrnstedt and Felson's (1983) theoretical and empirical work. Predictor variables included the three peer rating factor scores upon which social effectiveness groups were based; mediating variables included perceived and/or self evaluations on the three class play factor scores, and depending on the model used, the variables from the PCSC and P-HCSCS most closely related to perceived social competence also served as mediating variables. Predicted variables included the general self-worth factor from the PCSC and/or the happiness/satisfaction factor from the P-HCSCS.

Prior to beginning the analyses, an ANOVA was completed to determine whether or not counterbalanced presentation of the self ratings and perceived ratings on the modified class play measures affected the way children made their ratings. This analysis was completed using the raw score responses. Order of questionnaire presentation was not significant for 14 of the 17 items. The three items for which order of presentation was significant were as follows (for all three, self ratings presented prior to perceived ratings resulted in a higher self rating):

item 6—"Someone who acts like a little kid"-- $F(1,288) = 5.36$, $p < .02$, self rating ($M = 1.25$) $>$ perceived rating ($M = .90$)

item 7—"Someone who is friendly and helpful"-- $F(1,288) = 7.79$, $p < .006$, self rating ($M = 3.32$) $>$ perceived rating ($M = 3.00$)

item 10—"Someone who would be a good team captain"-- $F(1,288) = 4.58$, $p < .03$, self rating ($M = 3.04$) $>$ perceived rating

(M = 2.76)

Item 6 fell in the anxious/immature factor, while items 7 and 10 fell in the prosocial factor. Although these items might have been eliminated from the factors for the analyses, it was felt that the costs of doing so outweighed the advantages of retaining them in the factor structure for the analyses. In particular, eliminating items from internally consistent factors may reduce the factors' validities and internal consistencies since the chance of error increases as the number of items in a factor is reduced. In addition, since these items were grouped with several other items in each factor, it was felt that their individual contributions and effects upon results would be counteracted by the more general factor effects. Thus, the effects of the order of presentation for these three items would appear to be minimized by the overall factor grouping.

Multivariate and univariate analyses of variance

MANOVAs revealed main effects for grade, gender, and social effectiveness group, with no significant interactions among the independent variables. Subsequent univariate analyses for grade were completed to address the hypothesis related to differences between third and fifth graders in actual and perceived evaluations of social effectiveness and social competence. Means from the univariate analyses for grade— $F(18,236) = 2.36, p < .002$ —are depicted in Table 5. These results indicate that the third graders rated themselves as significantly more anxious/immature than fifth graders. In comparison to the fifth graders, third graders also believed that their peers

Table 5

Univariate grade effect means and standard deviations

<u>Factor</u>	<u>Grade</u>	<u>M</u>	<u>SD</u>	<u>F(1,253)</u>
SRProsocial	3	.15	1.06	NS
	5	-.08	.83	
SRAggressive	3	-.05	1.13	NS
	5	.05	.87	
SRAnxious/Immature	3	.15	1.18	8.88**
	5	-.20	.72	
PRProsocial	3	.16	1.07	4.04*
	5	-.08	.87	
PRAggressive	3	-.12	1.00	NS
	5	.05	.94	
PRAnxious/Immature	3	.21	1.11	7.07**
	5	-.20	.79	
HTPC	3	.05	.99	NS
	5	.10	.96	
HCognitive	3	.10	1.00	NS
	5	.01	.98	
HSocial	3	-.01	.98	NS
	5	.14	.99	
HPhysical	3	-.01	.97	NS
	5	.12	1.00	
HGeneral Self-Worth	3	.08	.99	NS
	5	.03	.96	
PTSC	3	.04	.90	NS
	5	.11	1.01	
PAnxiety	3	.03	.92	NS
	5	.07	1.03	
PBehavior	3	.08	.94	NS
	5	.03	1.03	
PPopularity	3	-.00	.88	NS
	5	.18	1.02	
PAppearance	3	.09	.93	NS
	5	-.00	1.03	
PIntelligence	3	.03	.94	NS
	5	.07	1.05	
PHappiness/ Satisfaction	3	.04	.86	NS
	5	.12	1.04	

*p < .05, **p < .01, ***p < .001

Note: SR prefix = self-rating; PR prefix = perceived rating; H prefix = PCSC factors; P prefix = P-HCSCS factors.

perceived them as both more outgoing in a prosocial manner and more anxious/immature.

Significant MANOVA gender differences— $F(18,236) = 4.81, p < .0001$ —indicated that univariate analyses were necessary to address the predictions of sex differences in social interaction behaviors. Table 6 contains the means from the univariate analyses for the main effect of gender. Boys rated themselves, and perceived their peers as rating them, as manifesting aggressive social behaviors, while girls perceived their peers as rating them more highly on anxious/immature behaviors. These results support the hypothesized sex differences, and suggest that boys are perceived as exhibiting more externalizing behaviors than girls, while girls are perceived as manifesting more internalizing behaviors than boys.

Boys' scores on all of the PCSC factors, as well as the total perceived competence score were higher than girls' scores, although the difference between girls and boys on the cognitive factor was not significant. Finally, boys scored higher than girls on the anxiety factor of the P-HCSCS. Although the differences on the other P-HCSCS factors were not significant, boys scored higher than girls on all of them with the exception of the behavior factor. These results support the suggested hypothesis that differences in self-concept and perceived competence might exist.

Significant MANOVA social effectiveness differences— $F(72,930) = 1.58, p < .002$ —suggested that univariate analyses and planned comparisons of the effects of social effectiveness on perceived

Table 6

Univariate gender effect means and standard deviations

<u>Factor</u>	<u>Gender</u>	<u>M</u>	<u>SD</u>	<u>F(1,253)</u>
SRProsocial	M	.05	1.12	NS
	F	.04	.80	
SRAggressive	M	.23	1.15	14.19***
	F	.05	.87	
SRAnxious/Immature	M	-.07	1.17	NS
	F	.04	.83	
PRProsocial	M	.10	1.13	NS
	F	-.00	.82	
PRAggressive	M	.21	1.10	17.51***
	F	-.28	.76	
PRAnxious/Immature	M	-.15	1.11	3.79*
	F	.08	.84	
HTPC	M	.32	.92	20.19***
	F	-.17	.97	
HCognitive	M	.15	.97	NS
	F	-.03	1.00	
HSocial	M	.21	.92	7.28**
	F	-.09	1.02	
HPhysical	M	.43	.89	46.17***
	F	-.31	.93	
HGeneral	M	.20	.96	6.83**
	F	-.09	.97	
Self-Worth	M	.12	.91	NS
	F	.03	.99	
PTSC	M	.12	.91	NS
	F	.03	.99	
PANxiety	M	.24	.85	11.56***
	F	-.14	1.04	
PBehavior	M	-.05	1.03	NS
	F	.15	.92	
PPopularity	M	.14	.94	NS
	F	.02	.96	
PAppearance	M	.08	.97	NS
	F	.02	.99	
PIntelligence	M	.05	.98	NS
	F	.04	1.01	
PHappiness/ Satisfaction	M	.13	.91	NS
	F	.03	.98	

*p < .05, **p < .01, ***p < .001

Note: SR prefix = self-rating; PR prefix = perceived rating; H prefix = PCSC factors; P prefix = P-HCSCS factors.

competence and self-concept were warranted. Results of the univariate analyses are presented in Table 7. Differences between social effectiveness groups for fourteen of the eighteen comparisons were significant. Planned comparisons among the five social effectiveness groups for the significant effects were made using Scheffe's F-test (Ferguson, 1981), and are noted in Table 7 with letter subscripts.

When required to make self-evaluations of social skill as tapped by the three class play (Bower, 1969) factors, popular children rated themselves as less aggressive and less anxious than the other groups, with the exception of perceiving themselves as more aggressive than the shy children. Aggressive children's perceived ratings of aggression were higher than the perceived ratings of all other groups on the aggression factor. Similarly, unpopular children rated themselves as manifesting more anxious/immature behaviors than all other groups. These results provide both partial support and partial disconfirmation of the hypotheses related to the accuracy of children's ratings of perceived status as a function of actual status.

On the perceived competence and self-concept factors for which significant main effects of social effectiveness occurred, planned comparison tests indicated that popular children scored higher than any other group. Aggressive children scored higher than shy children on total perceived competence, social competence, anxiety, popularity, and happiness/satisfaction. Aggressive children also had higher scores than unpopular children on total perceived competence and cognitive competence. In contrast, however, aggressive children ranked

Table 7

Univariate social effectiveness means and standard deviations

<u>Factor</u>	<u>Status</u>	<u>M</u>	<u>SD</u>	<u>F(4,253)</u>
SRProsocial	1	.31	.83	NS
	2	.36	1.61	
	3	.15	1.04	
	4	.15	.70	
	5	-.08	.86	
SRAggressive	1	-.40	.60	4.58***
	2b	.64	1.72	
	3	-.30	.76	
	4k	.16	.93	
	5	-.00	.92	
SRAnxious/Immature	1	-.36	.85	2.55*
	2	.18	1.75	
	3	.04	.97	
	4c	.48	.60	
	5	-.01	.90	
PRProsocial	1	.23	.75	NS
	2	.37	1.78	
	3	.08	1.18	
	4	.14	.57	
	5	-.05	.86	
PRAggressive	1	-.21	.80	3.32*
	2b	.57	1.55	
	3	-.42	.50	
	4k	.04	.62	
	5g	-.07	.92	
PRAnxious/Immature	1	-.51	.77	3.91**
	2	.21	1.81	
	3	.14	.67	
	4j	.38	.68	
	5	-.01	.86	
HTPC	1a	.59	.86	4.23**
	2e,f	.09	.88	
	3	-.16	.85	
	4	-.21	.60	
	5	-.01	1.02	
HCognitive	1a	.64	.84	4.77***
	2f	.08	.99	
	3	-.02	.80	
	4d	-.27	.83	
	5	-.04	1.01	
HSocial	1a	.53	.75	3.23*
	2e	.04	.86	
	3	-.21	1.05	
	4	-.13	.78	
	5g	-.01	1.03	

Table 7 (cont.)

<u>Factor</u>	<u>Status</u>	<u>M</u>	<u>SD</u>	<u>F(4,253)</u>
HPhysical	1	.14	.98	NS
	2	.32	.82	
	3	-.24	.56	
	4	.04	.93	
	5	.01	1.03	
HGeneral Self-Worth	1a	.56	.86	4.15**
	2	-.18	.84	
	3	-.01	1.16	
	4	-.28	.60	
	5h,i	.01	1.00	
PTSC	1a	.65	.43	5.56***
	2	-.22	1.06	
	3	-.36	1.13	
	4j,k	-.07	.78	
	5g,i	.03	.97	
PAnxiety	1a	.51	.72	3.30*
	2e	.12	.83	
	3	-.26	.87	
	4k	.02	.58	
	5g	-.04	1.05	
PBehavior	1a	.57	.47	5.29***
	2	-.48	1.11	
	3	-.18	1.17	
	4j	-.01	.78	
	5g,h	.04	1.00	
PPopularity	1a	.63	.47	5.32***
	2e	-.09	1.10	
	3	-.47	.86	
	4j,k	.12	.83	
	5g	.03	.98	
PAppearance	1	.35	.84	NS
	2	.02	1.20	
	3	.03	.87	
	4	.09	1.01	
	5	.02	.97	
PIntelligence	1a	.53	.63	3.47**
	2	-.16	1.18	
	3	-.30	1.40	
	4	-.21	.74	
	5h	.02	.99	
PHappiness/ Satisfaction	1a	.49	.42	4.05**
	2e	-.16	1.07	
	3	-.41	1.20	
	4	-.26	.85	
	5g,h,i	.09	.97	

*p < .05, **p < .01, ***p < .001

Table 7 (cont.)

Note 1: Order of social effectiveness

- 1 = popular
- 2 = aggressive
- 3 = shy
- 4 = unpopular
- 5 = average

Note 2: a = popular > all other groups, $p < .01$

b = aggressive > all other groups, $p < .01$

c = unpopular > all other groups, $p < .01$

d = unpopular < all other groups, $p < .01$

e = aggressive > shy, $p < .01$, PCSC & P-HCSCS factors only

f = aggressive > unpopular, $p < .01$, PCSC & P-HCSCS factors only

g = average > shy, $p < .05$ or better

h = average > unpopular, $p < .01$

i = average > aggressive, $p < .01$

j = unpopular > aggressive, $p < .01$

k = unpopular > shy, $p < .01$

Note 3: SR prefix = self-rating; PR prefix = perceived rating; H prefix = PCSC factors; P prefix = P-HCSCS factors.

behind average children on the general self-worth factor, and aggressive children had lower scores than unpopular children on total self-concept and on the popularity self-concept factor. Average children ranked higher than shy children on perceived peer ratings of aggressive behavior, as well as on perceived social competence, total self-concept, and self-concept for anxiety, behavior, popularity, and happiness/satisfaction. Finally, average children had higher scores than unpopular children on perceived cognitive competence, general self-worth, and self-concept for behavior, intelligence, and happiness/satisfaction.

Similar to the results on the PCSC, children in the popular group had the highest factor scores on the P-HCSCS factors. Average children ranked second on the total score and on all factors with the exception of the anxiety and popularity factors. The position of the aggressive children varied across the factors. Their total self-concept and popularity factor scores were lower than all other groups except the shy children. Aggressive children had the second highest score on the anxiety factor, while having the lowest scores on the behavior factor. Finally, aggressive children ranked third highest on the intelligence and happiness/satisfaction factors.

The P-HCSCS factor scores for children in the unpopular social effectiveness group also varied across the factors, although they were more consistent in ranking than aggressive children's scores. In particular, unpopular children ranked third out of five on total self-concept, and on the anxiety and behavior factors. They scored

second highest on the popularity factor, and next to last on the intelligence and happiness/satisfaction factors. Finally, children in the shy group consistently had the lowest scores on the P-HCSCS with the exception of the behavior factor where they ranked second lowest, above the aggressive children.

These data generally support the contention that well-liked children and children of average social effectiveness would have higher self-concepts than children who exhibit either internalizing or externalizing behaviors. However, the prediction that internalizing children would evidence more positive self-concepts than externalizing children was not supported by these results.

Post-hoc path analyses

Following the examination of data through MANOVAs, a post-hoc attempt to explain the relationships between actual social effectiveness and perceived and self-evaluated social skill, perceived social competence, and self-evaluated happiness/satisfaction was made. This attempt to predict the relationships between the above noted variables was based upon Lisrel VI (Joreskog & Sorbom, 1984), a method of structural analysis which generates maximum likelihood estimates for path models. The Lisrel VI method allows for the testing of the goodness of fit between the theoretical model and the actual observations as represented by the data through use of a chi-square goodness of fit test.

Two sets of models were tested. These models were based on the premise that authority evaluations of social interaction behaviors (Minton, 1979) (in this case peer evaluations using the class play factors) influence self-esteem as mediated by perceptions of the

ability being evaluated (Bohrnstedt & Felson, 1983). Exogenous variables in both sets of models were the three peer nomination factors used in determining social effectiveness--i.e. prosocial, aggressive, anxious-immature. Endogenous mediating variables in the first set of models were either the perceived ratings on the prosocial, aggressive, and anxious-immature factors, or the self-ratings on these factors. Varying the mediating variables between perceived social skill and self-rated social skill in the first set of models allowed for a comparison between the traditional model, which posits that actual ability affects children's perceptions of their skill, which in turn influences their self-concepts (Bohrnstedt & Felson, 1983), and a model which had not previously been considered. This latter model substitutes self-evaluations of social skill for perceived ratings of social skill as the mediating variable. Therefore, one goal of the first set of models was to determine whether children's perceptions of how their peers view their social skills or children's self-evaluations of their own social skills was the better predictor of general self-concept or self-worth.

A second goal of the first set of models was to determine what measures of self esteem fit best in the process of predicting the relationships between actual social effectiveness, perceived and self evaluated social effectiveness, and general self worth/self esteem. In order to accomplish this outcome, two different but correlated variables were used as the endogenous latent (i.e. predicted) variables in the first set of models. These variables were either a measure of general self-esteem as represented by the general self-worth factor from the PCSC (Harter, 1982) (see Figures 1 and 2) or the

happiness/satisfaction factor from the P-HCSCS (Piers, 1969, 1977) (see Figures 3 and 4). Use of these two variables as the endogenous latent variables allowed for a comparison between two widely used measures of children's self-concepts.

The second set of models was similar to the first set of four models, with the exception of the addition of another mediating variable. In this latter set of models, the fourth mediating variable was a measure of perceived social competence as represented by children's scores on either the social factor of the PCSC or the popularity factor from the P-HCSCS. In this set of models, it was reasoned that self-esteem related to social competence was one of the primary variables of interest in the present study. In addition, as it has been shown that perceived physical and academic ability influence self-esteem (Bohrnstedt & Felson, 1983), it stood to reason that perceived social competence, as measured either by the perceived social competence factor on the PCSC or the popularity factor on the P-HCSCS, might have a similar influence on self-esteem. Therefore, the second set of models allowed for the testing of this theory, while providing a further means of comparing both the goodness of fit between models using factors from the PCSC and the P-HCSCS and models using perceived and self evaluations of social skill as mediating variables in the prediction of self concept (see Figures 5-8 for the second set of models).

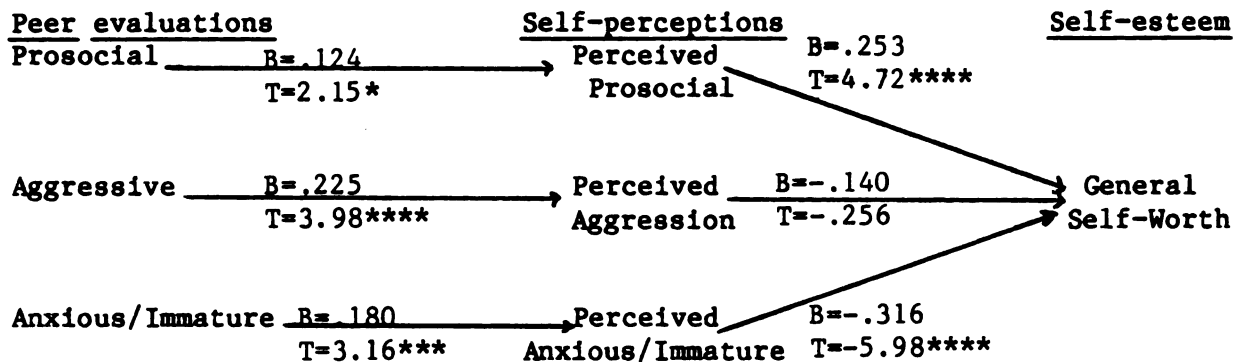
The fit of each of the models was evaluated separately, and results were compared to determine which model best fit the data. Values of interest included the chi-square goodness of fit (with smaller values indicating a better fit), as well as the t-values for

the beta weights for each path in the model. Results of the first set of models are presented in Figures 1-4. An examination of the chi-square values indicated that the model using perceived social skill ratings from the perceived class play measure as mediating variables, and the general self-worth factor from Harter's (1982) scale best fit the data (see Figure 1). The model in Figure 3 provided the next best fit, and again utilized the perceived social skill ratings from the perceived class play measure as mediating variables.

Results from the second set of models are presented in Figures 5-8. Overall, examination of the chi-square values indicates that this set of models fit the data less well than the first set of models. However, similar to the first set of models, those models which include the perceived social skill ratings from the perceived class play measure as mediating variables provide a better fit to the data (see Figures 5 & 7) than do the models whose mediating variables are the self-evaluations of social skill as measured by the class play self-ratings (see Figures 6 & 8).

A comparison of T-values in all of the models demonstrates a significant relationship between authority evaluation and both perceived social skill ratings and self-evaluated social skill ratings. In turn, both perceived prosocial skill ratings and self-rated prosocial skill ratings influence self-esteem, regardless of which

Models representing the hypothetical influence of authority evaluations
of sociometric status on self esteem: Set 1

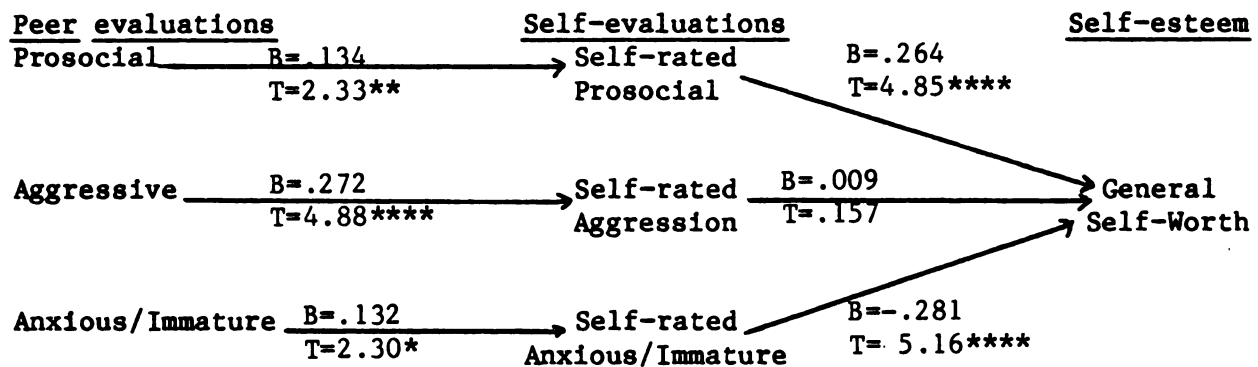


X = 107.90
AGOF = .783

DF = 12
GOFI = .907

p < .001

Figure 1. Causal model 1a

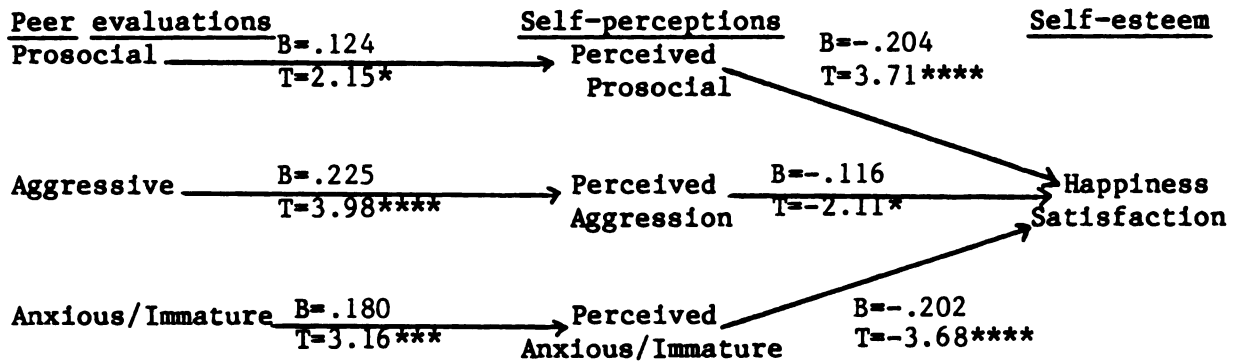


X = 137.25
AGOF = .737

DF = 12
GOFI = .888

p < .001

Figure 2. Causal model 1b

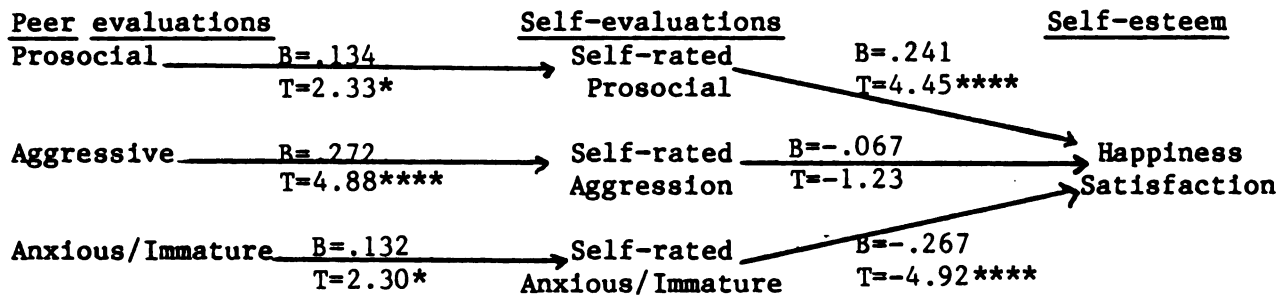


$X = 118.61$
 $AGOF = .766$

$DF = 12$
 $GOFI = .900$

$p < .001$

Figure 3. Causal model 1c



$X = 145.44$
 $AGOF = .726$

$DF = 12$
 $GOFI = .882$

$p < .001$

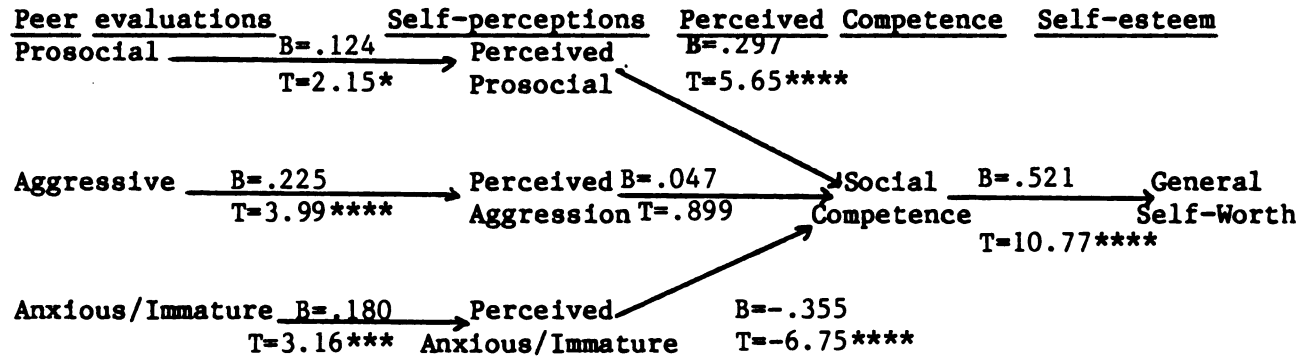
Note: Significance of T-values: $*p < .05$; $**p < .01$; $***p < .005$; $****p < .0005$
 AGOF = Adjusted goodness of fit; GOFI = Goodness of fit index

Figure 4. Causal model 1d

measure is used--i.e. the Harter or Piers-Harris scale. In addition, although the addition of a social self-concept mediating variable reduces the overall goodness-of-fit in the second set of models, it is shown that this variable is highly related to general self-concept and perceived competence, and that perceived and/or self-rated prosocial skill is positively related to perceived competence in the social domain.

In contrast, examination of the individual paths within the separate models demonstrates that while an authority evaluation of aggression is positively related to both perceived ratings and self-evaluations of aggression, the influence of perceived or self-rated aggression on perceived social competence and/or general self-worth varies. In particular, perceived ratings of aggressive behavior were positively related only to the happiness/satisfaction variable when no other mediating variables were present (compare Figure 3 with Figures 1, 5, and 7). Self-ratings of aggressive behavior were positively related to general self-worth when further mediated by perceived social competence (compare Figure 6 with Figures 2, 4 and 8). Finally, perceived ratings and self-ratings of anxious/immature behavior were consistently negatively related to general self-worth and happiness/satisfaction, regardless of whether or not the perceived social competence mediating variable was included as an additional path (compare the perceived and self rating paths of the anxious/immature variable in all models).

Models representing the hypothetical influence of authority evaluations
of sociometric status on self esteem: Set 2

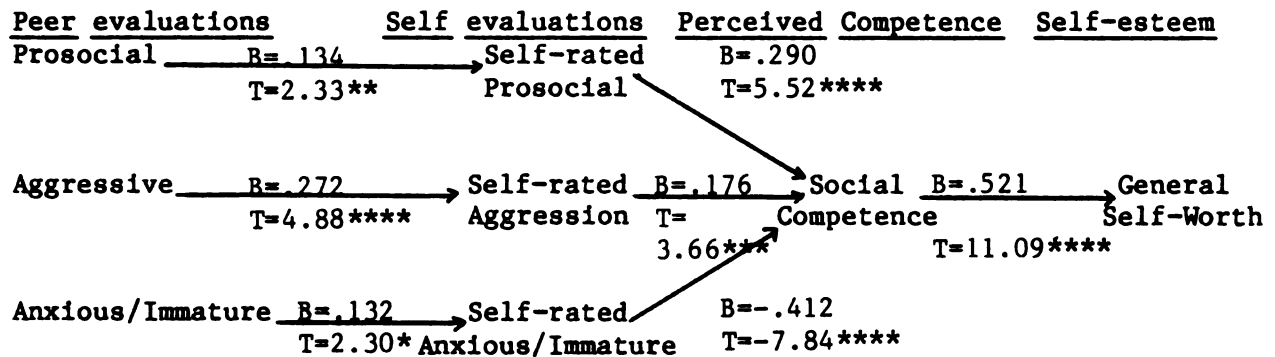


$X = 133.28$
AGOF = .802

DF = 18
GOFI = .901

$p < .001$

Figure 5. Causal model 2a



$X = 160.23$
AGOF = .773

DF = 18
GOFI = .886

$p < .001$

Figure 6. Causal model 2b

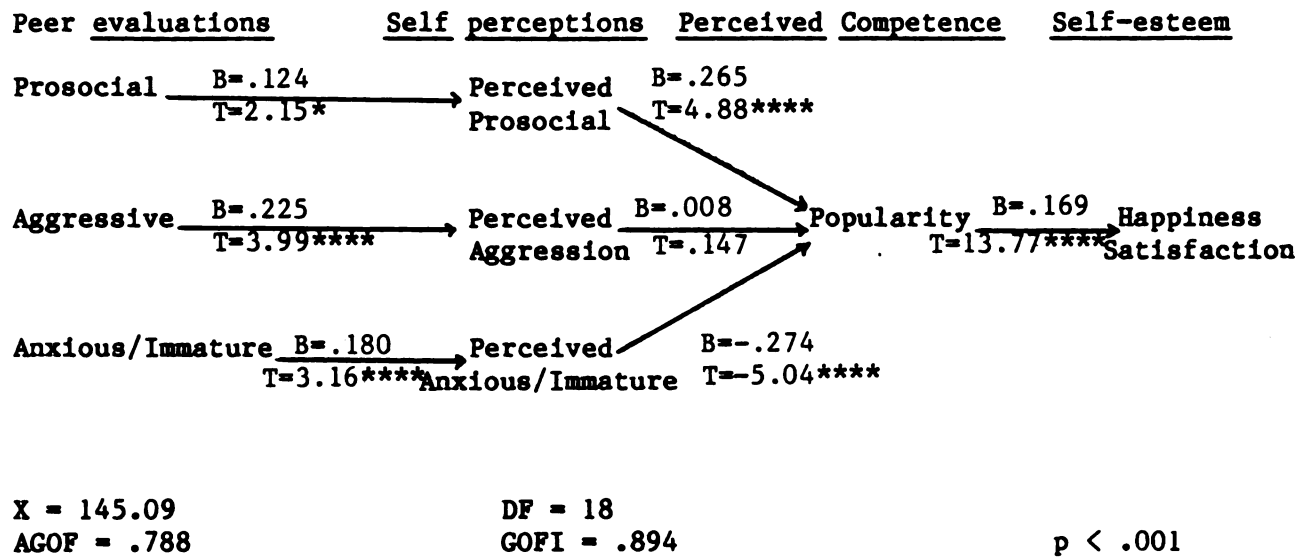
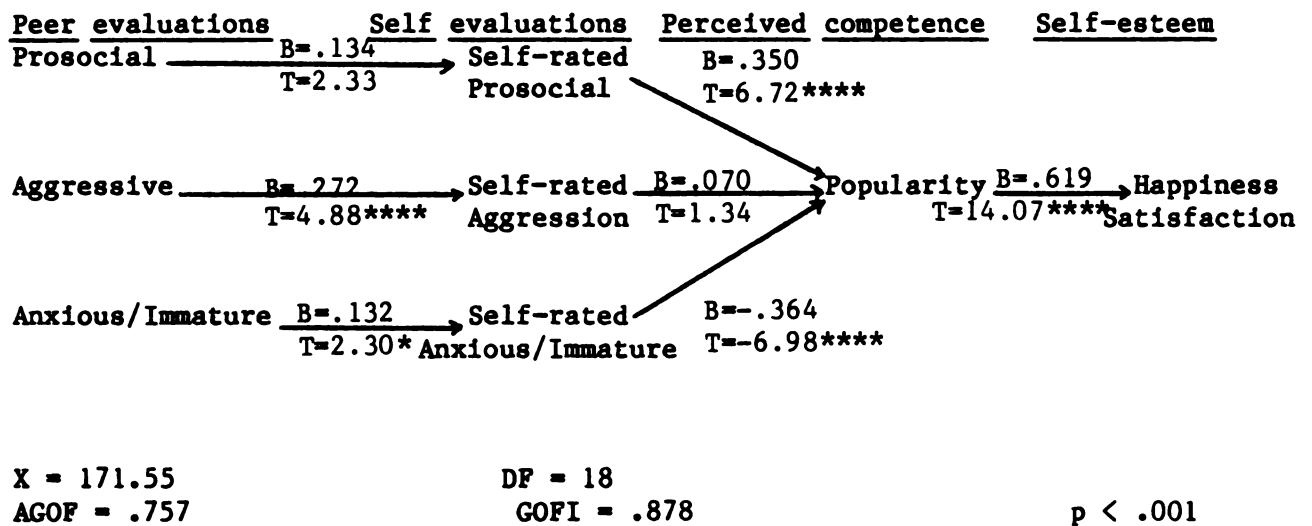


Figure 7. Causal model 2c



Note: Significance of T-values: *p < .05; **p < .01; ***p < .005; ****p < .0005
 AGOF = Adjusted goodness of fit; GOFI = Goodness of fit index

Figure 8. Causal model 2d

Discussion

The results of the multivariate analyses in the present study indicate that children's self-ratings and perceived-ratings of social skill vary by grade, gender, and social effectiveness. Younger children rate themselves, and perceive themselves as being rated, as more anxious/immature than do older children, as well as perceiving themselves as being rated more highly on positive social behaviors than do older children. However, there was no support for the hypothesis that younger children would be less accurate than older children in their estimation of their social competence/social skill, when accuracy is defined as a correspondence between actual social effectiveness and either perceived or self ratings of social skill.

Support for the hypothesis that boys would be perceived as more frequently exhibiting externalizing behaviors, while girls would be perceived as manifesting internalizing behaviors was provided. Boys rated themselves, and perceived themselves as being rated, more highly on aggressive dimensions than girls, while girls rated themselves as being perceived as anxious/immature. Boys also had higher perceived social and physical competence, as well as more positive feelings of general self-worth than girls. Girls' self-concepts of anxiety were more negative than were boys'. These latter results confirmed the suggestion that differences in self-concept would occur, although no predictions as to the specific nature of these differences were made.

The results also suggest that children's perceived competence and

self-concept may vary by gender and social effectiveness, but not by grade. Similar to the age comparisons, when accuracy is defined as a correspondence between actual social effectiveness and self ratings of social effectiveness, popular children appear to be more accurate than their peers in evaluating their social skill on three different dimensions, as well as in their perceptions of how their peers would evaluate them on these dimensions. Popular children's perceived competence and self-concept are also more positive, and conceptually fit better with actual and perceived social skill, than do those of other children. Thus, confirmation for the predictions that well-liked children would be more accurate in assessing their peer status and would have higher self-concepts than other social effectiveness groups was provided.

Similar to popular children, aggressive and unpopular children, who may be at risk for later psychological adjustment difficulties, appear to be accurate in their perceptions of their peers' evaluations of their aggressive behaviors. However, on some measures of perceived competence, aggressive children had unexpectedly higher scores than did children of average social effectiveness. Conceptually, this suggests that aggressive children may have unrealistic or overly optimistic views of themselves. In addition, these results disconfirm the prediction that children manifesting aggressive behaviors would be least accurate in assessing their social standing. However, these results are consistent with work by Dodge and Frame (1982) which suggests that, at least for aggressive boys, their perceptions are based in the realities of their behavior. More specifically, aggressive boys expect aggression from others and tend to provoke

aggression themselves. This results in a "self-fulfilling prophecy" where peers are expected to aggress toward them, and the aggressive boys react with aggression in turn, regardless of whether or not the peers' actions were intentionally aggressive.

Unpopular children, in contrast to the aggressive children, had characteristically low perceptions of competence. These children's self-concepts were also generally low, although they had more positive total self-concepts, as well as more positive concepts related to the anxiety, behavior, and popularity factors of the Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1964; Piers, 1972) than did the aggressive children. These results generally confirm the hypothesis that less well-liked children would have lower self-concepts and perceptions of competence than other social effectiveness groups.

Like the aggressive and unpopular children, shy children were accurate in their self- and perceived-ratings of aggressive behavior, in that their low ratings on this dimension were expected. However, contrary to expectation, these children did not consistently rate themselves, or perceive themselves as being highly rated, on the anxious/immature factor. The perceived competences and self-concepts of the shy group were lower than other groups, with the exception of Harter's (1979) general self-worth factor and Piers and Harris' (1964) behavior factor, on which these children had more positive scores than the unpopular and aggressive groups, respectively. Thus, support was not provided for the predictions that internalizing children would be less accurate than their more well-liked peers in assessing their social status, and that children manifesting internalizing behaviors would have higher self-concept and perceptions of competence than

children demonstrating aggressive behavioral excesses.

As noted in the above review of the results of this study, the hypothesis stating that younger children would be less accurate than older children in estimating their own social competence was not supported. This is contrary to the theory posited by Waters, et al. (1985) suggesting that as children mature, a decrease in the relationship between social competence and self-esteem is expected due to a proliferation of the sources of self-esteem. These results are also contrary to the body of social comparison literature which indicates increasing sophistication in children's use of social comparison for ability evaluation with age (Veroff, 1969; Masters, 1971; Mullener & Laird, 1971; Montemayor & Eisen, 1977; Suls & Sanders, 1979; Ruble, 1983).

The lack of support for this hypothesis may be a function of the lower verifiability of social skill in comparison to other abilities such as academic or physical accomplishments. In particular, Bohrnstedt & Felson (1983) propose that the more ambiguous an ability is, the more difficult it is to verify, and therefore, the more susceptible it is to bias in social comparison situations.

Additionally, it is likely that this lack of support is due, in part, to the fact that most of the children participating in the current study were functioning at a similar stage of social cognitive development. In particular, although research has demonstrated a marked increase in children's use of more differentiating psychological descriptors of others with age, Livesley and Bromley (1978) note that the major developmental changes in this domain occur between 7 1/2 and 8 1/2 years of age. There seem to be fewer differences in the use of

psychological descriptors between eight and fifteen years of age than there are between the earlier years of 7 1/2 and 8 1/2 (Hetherington & Parke, 1986).

Despite the lack of support for the first hypothesis, some interesting developmental differences were noted. In particular, grade effects indicated that younger children may rate and perceive themselves as being rated as more anxious/immature than older children. This finding may be due to a combination of processes. First, as children mature and gain more effective coping mechanisms for dealing with fears and anxieties, the behaviors which make up the anxious/immature construct would be expected to become less salient. Second, Younger, Schwartzman, and Ledingham (1985) have shown that with age, behaviors representing anxious or withdrawing constructs become increasingly more distinct for children. Thus, an additional factor explaining the grade effects for the anxious/immature self and perceived ratings may be that the increasing distinctness of this category allows older children to be more discriminating and more accurate in their ratings and perceptions of such behaviors.

Discrimination and accuracy of ratings were also of interest in the second hypothesis, which stated that children exhibiting behavioral excesses were expected to be less accurate than children exhibiting excessive avoidance behaviors, average children, and popular children in assessing their own peer status, as well as in assessing how their peers perceive them. The data generally support this hypothesis. More specifically, popular and average children were accurate both in assessing their own social skill and in assessing the ways in which

their peers perceived them. Shy children were accurate in assessing their lack of aggressive behaviors, but did not differentiate themselves on the anxious/immature behaviors which comprised their social effectiveness grouping. Unexpectedly, aggressive children were also accurate in assessing their aggressive tendencies in self and perceived ratings.

In further comparing aggressive and shy children's responses, it was noted that the aggressive children had more positive perceived cognitive and social competence than did shy children. Aggressive children also had more positive concepts on the anxious, popularity, and happiness/satisfaction factors than shy children. These latter findings are contrary to both the hypotheses of the current study, and to Rolf's (1972, 1976) findings that children exhibiting behavioral excesses perceived themselves more negatively than withdrawn and prosocial children. The findings of higher perceived competence and self-concept on certain factors for aggressive children, in comparison to shy children, may be due to the more detailed nature of the perceived competence and self-concept measures used in the present study, since on the self ratings and perceived ratings of social effectiveness in both the current study and in Rolf's (1972, 1976) work, aggressive children did rate themselves, and perceive themselves as being rated, more negatively than other groups on the disruptive dimensions.

In comparison to shy and unpopular children, the aggressive children's more negative self and perceived ratings of social skill may be a function of temperament variables. That is, these children might, by developmental history, have been identified, according to the work

of Thomas and his colleagues (Chess, Thomas, & Birch, 1968; Thomas, Chess, Birch, Hertzog, & Korn, 1963; Graham, Rutter, & George, 1973) on temperament, as difficult children. The characteristics related to these children, such as inflexibility, slow adaptability to change, negative moods, difficulty coping with new or stressful experiences, may be tapped by the variables in the social effectiveness questionnaires of the current study. The aggressive children's more negative social effectiveness, and their more negative perceptions of their social effectiveness, may be a reflection of temperament in combination with social learning experience. Similarly, the shy children's more positive perceptions of social effectiveness may be related to their history of more adaptable temperament (Chess, et al., 1968; Thomas, et al., 1963). Similar to Rolf's (1972, 1976) findings, Graham, et al. (1973) have noted that the children of difficult temperament, those who adapt less easily--i.e. presumably the aggressive and/or unpopular children in the current study--are less likely to experience positive behavioral outcomes in future interaction than children who are, by temperament, more adaptable.

Although, as noted above, the data generally supported the hypothesis concerning children's accuracy in assessing their social effectiveness, findings indicated that the shy children did not differentiate themselves by endorsing the anxious/immature ratings which comprised their social effectiveness. The failure of the anxious/immature factor to differentiate children's self- and perceived-ratings may be due to its smaller item content and lower reliability coefficient than that of the other factors. Support for this suggestion is found in a study by Masten, Morison, and Pellegrini

(1985). These authors modified Bower's (1969) class play, altering some item content and adding new items, as well as simplifying roles which described multiple behavioral classes. Three factors, similar in nature to those used in the present study, were derived through factor analysis. One of the major differences between the anxious/immature factor from the present study and the comparable factor used by Masten, et. al. (1985) was the larger item content of the latter. The larger item content could result in greater internal consistency estimates, as well as providing a more well-differentiated construct for children to use when rating one another as well as when rating themselves. Thus, use of the Masten, et. al. (1985) measure might have produced more consistent and clearer results for the shy group of children from the present study.

A further contributing factor to the failure of the shy children to differentiate themselves on the items in the anxious/immature construct may have been the tendency of children to rate themselves differentially on one of the items in this factor depending on the order in which perceived and self ratings were presented in the questionnaire packet. This occurred despite counter-balanced presentation order of the perceived rating and self rating measures in the packet.

The third hypothesis, stating that well-liked and average social effectiveness children would have more positive self-concepts and perceived competence ratings than other children was also supported. Popular children had more positive self-concepts than all other groups, as well as reporting higher perceived competence and general self-worth than other groups. Average children also reported higher perceived

competence and self-concept than the unpopular, aggressive, and shy children on some, but not all factors. These findings support data both from the social comparison literature (Levine, 1982; Ruble, 1983) and data from developmental literature (Masten, et. al., 1985; Waters, et al., 1985) which indicates that socially competent children evidence higher self-esteem, possess positive resources which are used effectively in social situations, and evaluate themselves more positively as a result of receiving positive feedback regarding the success of their interpersonal interactions.

In contrast to the popular and average children, the present data indicate that shy and unpopular children have relatively low self-concepts. These findings support the literature dealing with peer adjustment and negative outcomes which suggests that children of low sociometric status have lower self-concepts and suffer more peer rejection than more highly accepted children (Bryan, 1974, 1976; Bruininks, 1978; Coleman, 1983a, 1983b; Gottlieb & Leyser, 1981; Perlmutter, et. al., 1983; Strang, et. al., 1978). These data also support the notion that although some poorly accepted children do not have problems related to disruptiveness or highly salient behavioral excesses, shy and unpopular children may have other problems related to coping with the day-to-day demands of classroom or community-based social skills which put them at risk for later psychological adjustment difficulties.

The final hypothesis regarding sex differences was also supported. Boys rated themselves as exhibiting aggressive behaviors more often than did girls, while also perceiving their male peers as choosing them

more frequently than girls for aggressive roles. Girls, in contrast, believed that their peers would rate them as more anxious/immature. These findings are consistent with research demonstrating that boys are more often involved in or instigate aggressive incidents than girls (Maccoby & Jacklin, 1980), and with research on peer relations which demonstrates that, at least for aggressive boys, their perceptions that others will rate them as aggressive are based in the reality of their tendency to meet the actions of peers in an aggressive manner (Dodge, 1985; Dodge & Frame, 1982).

Boys also reported more positive perceived social and physical competence, as well as higher levels of general self-worth than girls. This combination of findings may be related to societal demands or stereotypes which reinforce males' development of independence while encouraging females to develop greater dependence upon others. As a result, girls may rely more upon others' evaluations of them for feedback, and they may receive feedback from peers which indicates a recognition of greater anxiety and dependence. Alternatively, and more likely, these sex differences may be a function of a tendency for boys to evaluate their abilities according to previous performances and verifiable ability constructs such as grades, physical education abilities, frequency of being chosen by peers to participate in pick-up games during recess, and the like (Parsons, 1982); while girls may compare themselves to peers according to affiliative or social interaction constructs which are more ambiguous and harder to verify (cf. Bohrnstedt & Felson, 1983).

Overall, the results of the present study provide further support for conclusions made by others concerning the importance of peer

relations for both current functioning and later psychological adjustment (Cowen, et.al., 1973; Rolf, 1972, 1976; Graham, et al., 1973; Hartup, 1983) . Self-concept and perceived competence appear to be important related variables in the social comparison process which takes place during evaluation of social effectiveness. More specifically, post-hoc path analyses indicated that general self-worth may be influenced not only by actual social skill/social effectiveness, but also by a mediating variable-- perceived social skill. That is, children's self-perceptions of competence and self-esteem are influenced by actual social effectiveness via children's perceptions of how peers view them. Similar findings were evident in a study by Newcomb, Bukowski, and Wissman (1985) in which a longitudinal design was used in assessing the causal relations among children's sociometric status, academic and physical abilities, perceived competence, and general self-worth. Although the sociometric procedures, as well as the mediating perceived social skill variables, differed between the current study and that of Newcomb, et. al. (1985), results of both studies indicated a causal flow from actual behavior to perceived social competence to general self-worth. The data from these two studies, however, contradict that of Bohrnstedt and Felson (1983) who found that the causal model best fitting their data flowed from sociometric status to self-esteem to perceived sociometric status. The difference between the results of the current study and those of Bohrnstedt and Felson (1983) may be a function of differences in the measures used. More specifically, the current study used a measure of social effectiveness which tapped a variety of social skills, while Bohrnstedt and Felson's (1983) measure involved the nominations of

peers as liked and disliked. The former type of measure taps specific behavioral constructs which may be more verifiable than does a measure based on a subjective construct such as overall liking or disliking of another child.

Assuming that Bohrnstedt and Felson's (1983) model suggesting that the more verifiable a skill, the more likely that the causal flow will be from actual ability to perceived competence to self-esteem, is valid, then the data from the present study which uses more operationally specific constructs, supports the model. An additional factor which could also account for the differences between Bohrnstedt and Felson's (1983) results and those of the current study and others (Newcomb, et. al., 1985) is that the social comparison process related to sociometric status is more complicated than has been hypothesized. If this is the case, it may be that the measures used in all of these studies are not adequately tapping the determinants which researchers are attempting to measure. Further research is needed using similar measures, as well as other measures, in order to determine which model best describes the causal influences for perceived sociometric status, perceived social skill, and overall self-esteem in relation to actual social skill and/or actual social effectiveness. Results which support those of the present study would also support the function of skill verifiability in social comparison processes.

In addition to further considering the function of skill verifiability in the relation of actual skill to perceived competence and overall self-esteem and self-worth, the results of the present study are important to the fields of child social development and psychological adjustment. In particular, although it is generally

agreed upon that children exhibiting behavioral excesses are more likely to experience more negative outcomes than other children (cf. Cowen, et. al., 1973; Rolf, 1972, 1976), it has also been shown that greater attention needs to be directed toward children who may be having difficulties coping with the social demands of the classroom and community environments, but who may not be exhibiting behavioral excesses—e.g. children identified as shy or unpopular in the present study. These children may be exhibiting more withdrawing or socially fearful behaviors, or they may be receiving little attention, either positive or negative, from their peers.

The child receiving little peer attention of either a positive or negative nature may be more difficult for educators and professionals to identify as their overt behaviors may not differentiate them clearly as those related to being poorly accepted. Prior to recommending intervention for such children, it appears that a necessary first step would be to more definitively determine and analyze the problems that may be preventing these children from receiving attention from their peers.

One method of making this analysis would be to individually examine these children's responses to the self-concept and perceived competence measures to determine whether or not there is a general item response pattern in one or more categories which distinguishes these children from others. Further, more detailed sociometric measures such as that developed by Masten, et. al. (1985), in combination with the more traditionally used liked/disliked nomination measures (Coie, Dodge, & Coppotelli, 1982; Newcomb & Bukowski, 1983) may be helpful in analyzing the behavioral factors which make up the unpopular children's

lower social status. A detailed analysis of these children's actual social interaction behaviors in a naturalistic or analog setting might also provide the basis for developing intervention programs to facilitate more positive social and psychological outcomes for these children.

Finally, it is important to focus on the behaviors of those children in the present study for which data seems sufficient to consider intervention strategies. That is, the aggressive children appear to be easily identified by their peers, and data suggest that these children are able to identify their behavioral excesses. One obvious intervention route for the aggressive children would be to teach them more adaptive ways of coping with difficult social situations such as dealing with peers' rejections of social overtures or attempts to join the group. This could take the form of a curriculum addition, in which general social skills are taught to the entire class, or more specific programs designed to target overcoming the behavioral excesses. An important step in the process would be for teachers, administrators, parents, and professionals to become more aware of the behaviors which identify this group of children, and to more closely observe the children they are involved with in order to make early identifications and referrals for assistance in dealing with these problems.

APPENDICES

APPENDIX A

LETTER TO PARENTS AND INFORMED CONSENT

APPENDIX A
Letter to parents

Dear Parents:

I am a doctoral candidate in the Department of Psychology at Michigan State University, and I have been studying the importance of peer relations and children's self-appraisals of academic, physical, and social abilities for healthy social and emotional development. Mr. School Principal of _____ Elementary School, has kindly agreed to work with me, and we would like to request permission for your third-grade (fifth-grade) child to join this project.

The study will involve one fifty minute session, conducted at the school and supervised by researchers from the University. During the session the participating students in your child's classroom will be asked to individually complete several short paper-and-pencil questionnaires. In particular, each student will be asked to tell us which of his/her classmates they would choose to perform the parts in a fictitious class play, which parts they could best play, and which parts they think their classmates would choose for them. The roles in this play include well-liked characters as well as some characters who are less well-liked. In addition, each student will be asked to tell us how they feel about their own abilities in social, academic, and physical activities encountered by children their age. Students will be asked not to discuss any of their answers with their classmates.

It is anticipated that the information collected in this study will be useful to educators in planning group learning experiences, and to professionals in helping children relate more successfully with others. In previous experience with such procedures, students have found the questionnaires fun to complete, and their teachers have suggested that completing the forms is a good learning experience.

The purpose of this letter is to inform you of the study and to request permission for your child to participate. All information collected in the study will be treated with complete anonymity and confidentiality, and all written reports of the results will present only group trends. Numbers rather than names will be used to identify each student. No information about individual students will be reported, and at the conclusion of the study all questionnaire information will be destroyed. You are of course free to request additional explanation of the study at any time, both before and after your child participates. Also, both you and your child are free to terminate your participation at any time, if you request to do so.

We hope that you will agree to your child's participation in this project. Please fill out and sign the attached permission form indicating whether or not you are freely willing to consent to your child's participation, and have your child return the form to school tomorrow. If you agree to your child's participation, the general nature of the project will be explained to him/her, and he/she will be asked to participate.

If you or your child have any concerns or questions about the questionnaires, please feel free to call me at 355-9561 days, or at 372-7943 evenings, and I will be glad to discuss them directly with you.

Sincerely,

Judith Meister
Michigan State University

APPENDIX A (cont.)

Informed consent

MSU Social Relations Study

Page 1

PERMISSION FORM

This study has been explained to me and I am willing to participate in it. I understand that I may choose to stop participating at any time in the study.

My name is _____.

Today's date is _____.

My teacher's name is _____.

APPENDIX B
CLASS PLAY SOCIOMETRIC

APPENDIX B

Class play sociometric

1. Someone who is a GOOD LOYAL FRIEND.

ELICIA
REBECCA
DAWN
JENNIFER
ANDREA
JOAN
HANNAH

2. Someone who is a TOUGH BAD KID.
3. Someone who is often AFRAID AND EASILY FRIGHTENED.
4. Someone who could be a CLASS PRESIDENT.
5. Someone who is STUCK-UP AND THINKS THEY'RE BETTER THAN EVERYONE ELSE.
6. Someone who ACTS LIKE A LITTLE KID.
7. Someone who IS FRIENDLY AND HELPFUL.
8. Someone who is a MEAN CRUEL BOSS.
9. Someone who is LAZY AND DOESN'T GET THEIR WORK DONE.
10. Someone who would be a GOOD TEAM CAPTAIN.
11. Someone who has a BAD TEMPER AND FIGHTS ALOT.
12. Someone who is SMART AND ALWAYS KNOWS THE ANSWER.
13. Someone who PICKS ON SMALLER KIDS.
14. Someone who has a GOOD SENSE OF HUMOR.
15. Someone who is SHY AND DOESN'T HAVE MANY FRIENDS.
16. Someone who GETS IN TROUBLE FOR BOTHERING OTHERS IN CLASS.
17. Someone who is NICE AND LIKED BY EVERYBODY.

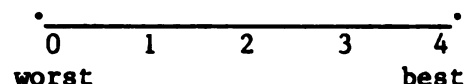
APPENDIX C
CLASS PLAY ADAPTATIONS

APPENDIX C

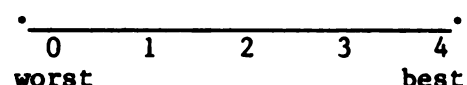
Class play adaptations: Self-evaluation of social skill

Now we would like to have you decide which parts in the play you think you could play well, and which ones you think you could not play very well. Below and on the next page is a list of the parts in the class play, and next to each part is a scale with the numbers 0,1,2,3, and 4. If you think you would be the worst person in your class to play the part, circle the 0. If you think you would be pretty bad at playing the part, but not the worst, circle the 1. If you think you would be about as good as the rest of the kids in your class, circle the 2. If you think you would be better than most kids in your class, circle the 3. And if you think you would be the best person in your class to play the part, circle the 4. Do you have any questions about this part?

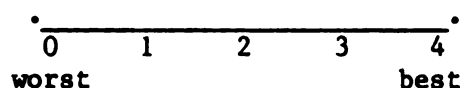
1. Someone who is a GOOD LOYAL FRIEND.



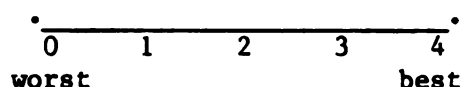
2. Someone who is a TOUGH BAD KID.



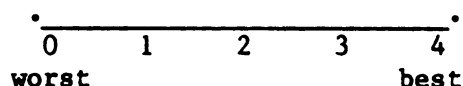
3. Someone who is often AFRAID AND EASILY FRIGHTENED.



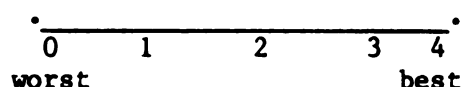
4. Someone who could be a CLASS PRESIDENT.



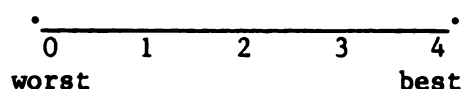
5. Someone who is STUCK-UP AND THINKS BETTER THAN EVERYONE ELSE.



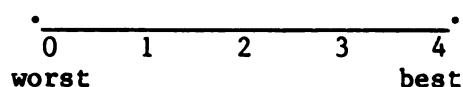
6. Someone who ACTS LIKE A LITTLE KID.



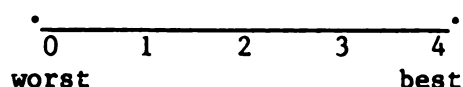
7. Someone who is FRIENDLY AND HELPFUL.



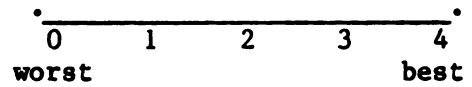
8. Someone who is a MEAN CRUEL BOSS.



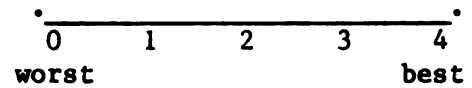
9. Someone who is LAZY AND DOESN'T GET THEIR WORK DONE.



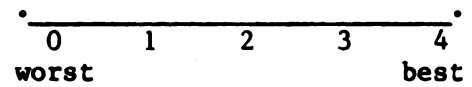
10. Someone who would be a GOOD TEAM CAPTAIN.



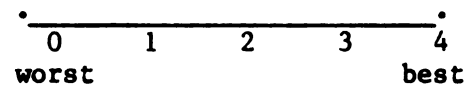
11. Someone who has a BAD TEMPER AND FIGHTS ALOT.



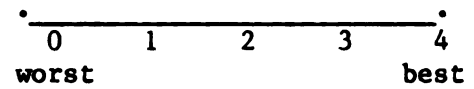
12. Someone who is SMART AND ALWAYS KNOWS THE ANSWER.



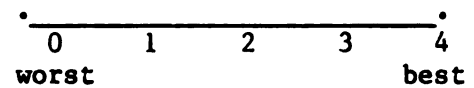
13. Someone who PICKS ON SMALLER KIDS.



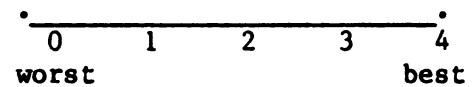
14. Someone who has a GOOD SENSE OF HUMOR.



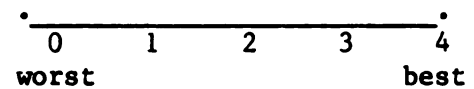
15. Someone who is SHY AND DOESN'T HAVE MANY FRIENDS.



16. Someone who GETS IN TROUBLE FOR BOTHERING OTHERS IN CLASS.



17. Someone who is NICE AND LIKED BY EVERYBODY.

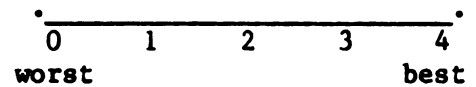


APPENXIX C (cont.)

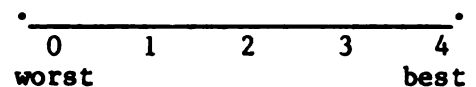
Class play adaptations: Perceived evaluation of social skill

Now we would like to have you tell us which parts you think the rest of the kids in your class would pick you for. Below and on the next page is a list of the parts in the class play, and next to each part is a scale with the numbers 0,1,2,3, and 4. If you think none of the kids in your class would pick you to play the part, circle the 0. If you think most kids would not pick you to play the part, but a few kids might, circle the 1. If you think about half the kids would pick you for the part and half of them would not, circle the 2. If you think most kids would pick you for the part, but a few kids would not, circle the 3. And if you think all of the kids in your class would pick you to play the part, circle the 4. Do you have any questions?

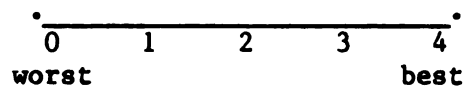
1. Someone who is a GOOD LOYAL FRIEND.



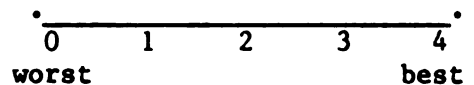
2. Someone who is a TOUGH BAD KID.



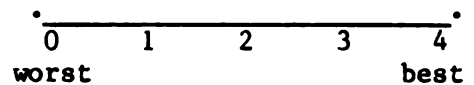
3. Someone who is often AFRAID AND EASILY FRIGHTENED.



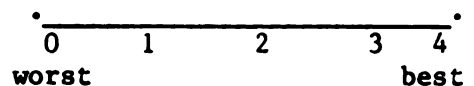
4. Someone who could be a CLASS PRESIDENT.



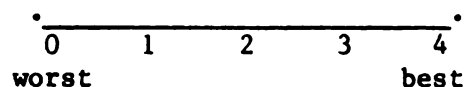
5. Someone who is STUCK-UP AND THINKS BETTER THAN EVERYONE ELSE.



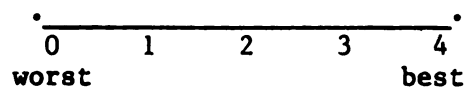
6. Someone who ACTS LIKE A LITTLE KID.



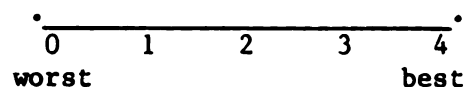
7. Someone who is FRIENDLY AND HELPFUL.



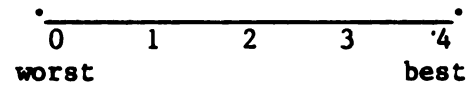
8. Someone who is a MEAN CRUEL BOSS.



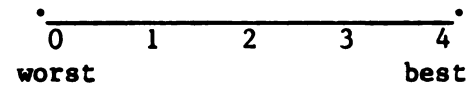
9. Someone who is LAZY AND DOESN'T GET THEIR WORK DONE.



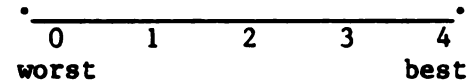
10. Someone who would be a GOOD TEAM CAPTAIN.



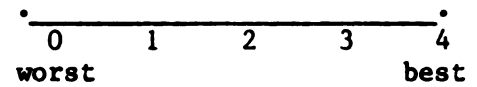
11. Someone who has a BAD TEMPER AND FIGHTS ALOT.



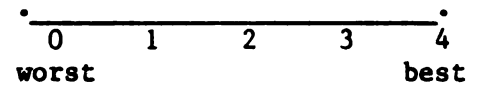
12. Someone who is SMART AND ALWAYS KNOWS THE ANSWER.



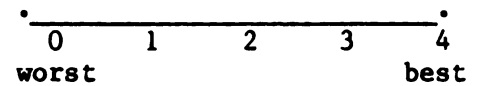
13. Someone who PICKS ON SMALLER KIDS.



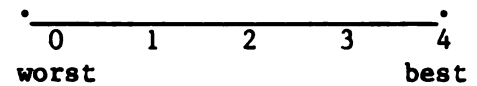
14. Someone who has a GOOD SENSE OF HUMOR.



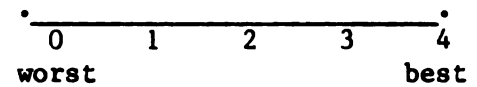
15. Someone who is SHY AND DOESN'T HAVE MANY FRIENDS.



16. Someone who GETS IN TROUBLE FOR BOTHERING OTHERS IN CLASS.



17. Someone who is NICE AND LIKED BY EVERYBODY.



APPENDIX D

PERCEIVED COMPETENCE SCALE FOR CHILDREN

WHAT AM I LIKE

Sample Sentence

	REALLY TRUE for me	SORT OF TRUE for me				SORT OF TRUE for me	REALLY TRUE for me
a.	☐	☐	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	☐	☐
1.	☐	☐	Some kids feel that they are very good at their school work	BUT	Other kids worry about whether they can do the school work assigned to them.	☐	☐
2.	☐	☐	Some kids find it hard to make friends	BUT	For other kids it's pretty easy.	☐	☐
3.	☐	☐	Some kids do very well at all kinds of sports	BUT	Others don't feel that they are very good when it comes to sports.	☐	☐
4.	☐	☐	Some kids feel that there are alot of things about themselves that they would change if they could	BUT	Other kids would like to stay pretty much the same.	☐	☐
5.	☐	☐	Some kids feel like they are just as smart as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart.	☐	☐
6.	☐	☐	Some kids have alot of friends	BUT	Other kids don't have very many friends.	☐	☐
7.	☐	☐	Some kids wish they could be alot better at sports	BUT	Other kids feel they are good enough.	☐	☐
8.	☐	☐	Some kids are pretty sure of themselves	BUT	Other kids are not very sure of themselves.	☐	☐
9.	☐	☐	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work quickly.	☐	☐

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

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

APPENDIX E

PIERS-HARRIS CHILDREN'S SELF CONCEPT SCALE

Here are a set of statements. Some of them are true of you and so you will circle the yes. Some are not true of you and so you will circle the no. Answer every question even if some are hard to decide, but do not circle both yes and no. Remember, circle the yes if the statement is generally like you, or circle the no if the statement is generally not like you. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

1. My classmates make fun of me yes no
2. I am a happy person yes no
3. It is hard for me to make friends yes no
4. I am often sad yes no
5. I am smart yes no
6. I am shy yes no
7. I get nervous when the teacher calls on me yes no
8. My looks bother me yes no
9. When I grow up, I will be an important person yes no
10. I get worried when we have tests in school yes no
11. I am unpopular yes no
12. I am well behaved in school yes no
13. It is usually my fault when something goes wrong yes no
14. I cause trouble to my family yes no
15. I am strong yes no
16. I have good ideas yes no
17. I am an important member of my family yes no
18. I usually want my own way yes no
19. I am good at making things with my hands yes no
20. I give up easily yes no
21. I am good in my schoolwork yes no
22. I do many bad things yes no
23. I can draw well yes no
24. I am good in music yes no
25. I behave badly at home yes no

26. I am slow in finishing my school work yes no
27. I am an important member of my class yes no
28. I am nervous yes no
29. I have pretty eyes yes no
30. I can give a good report in front of the class yes no
31. In school I am a dreamer yes no
32. I pick on my brother(s) and sister(s) yes no
33. My friends like my ideas yes no
34. I often get into trouble yes no
35. I am obedient at home yes no
36. I am lucky yes no
37. I worry a lot yes no
38. My parents expect too much of me yes no
39. I like being the way I am yes no
40. I feel left out of things yes no
41. I have nice hair yes no
42. I often volunteer in school yes no
43. I wish I were different yes no
44. I sleep well at night yes no
45. I hate school yes no
46. I am among the last to be chosen for games yes no
47. I am sick a lot yes no
48. I am often mean to other people yes no
49. My classmates in school think I have good ideas . . . yes no
50. I am unhappy yes no
51. I have many friends yes no
52. I am cheerful yes no
53. I am dumb about most things yes no
54. I am good looking yes no
55. I have lots of pep yes no

56. I get into a lot of fights yes no
57. I am popular with boys yes no
58. People pick on me yes no
59. My family is disappointed in me yes no
60. I have a pleasant face yes no
61. When I try to make something, everything seems
to go wrong yes no
62. I am picked on at home yes no
63. I am a leader in games and sports yes no
64. I am clumsy yes no
65. In games and sports, I watch instead of play yes no
66. I forget what I learn yes no
67. I am easy to get along with yes no
68. I lose my temper easily yes no
69. I am popular with girls yes no
70. I am a good reader yes no
71. I would rather work alone than with a group yes no
72. I like my brother(sister) yes no
73. I have a good figure yes no
74. I am often afraid yes no
75. I am always dropping or breaking things yes no
76. I can be trusted yes no
77. I am different from other people yes no
78. I think bad thoughts yes no
79. I cry easily yes no
80. I am a good person yes no

APPENDIX F

FIFTH GRADERS' MEAN PIERS-HARRIS FACTOR SCORES

ACCORDING TO NATIONAL NORMS

APPENDIX F

Fifth graders' mean Piers-Harris factor scores according to national norms

<u>Factor</u>	<u>Mean Score</u>	<u>National T-score</u>	<u>National Percentile</u>
<u>Rank</u>			
Total self concept	58.94	54	66
Anxiety	9.70	52	58
Behavior	12.01	47	40
Popularity	8.41	47	38
Appearance	8.52	49	48
Intellectual status	12.63	52	60
Happiness/satisfaction	8.24	52	56

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