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Third grade children's reactions to socially skilled versus socially deficient female peers

Ann M. Horstman
The University of Montana

Third Grade Children's Reactions to

Socially Skilled Versus

Socially Deficient Female Peers

By

Ann M. Horstman

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Approved by:

Philip H Bornet

Chairman, Board of Examiners

(signature)

Dean, Graduate School

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Director: Dr. Philip H. Bornstein *PHB*

This study explored the effects of five behavioral components
of social skills on children's peer acceptance. Subjects were
thirty-seven boys and girls in third who viewed a set of five
videotaped scenes. Subjects viewed scenes in which a girl their
age demonstrated skills or deficits in five areas of social
behavior. These were: (1) assertiveness, (2) giving positive
reinforcement, (3) effectively initiating, maintaining, and
ending interactions, (4) conveying empathy, and (5) being
helpful. Subjects rated the videotape models' interpersonal
skills on a number of dimensions, including attractiveness and
likability. Sex of subject and overall social skillfulness
were the between-groups variables and the five areas of behavior
were the within-groups variables. Significant main effects of
overall social skillfulness and an interaction between this
variable and the within-groups variables were obtained. Ratings
for the assertive model were significantly lower than for the
models demonstrating the other four social skill behaviors.
Results also showed that male subjects' interpersonal reactions
to the female videotape models were significantly less positive
than female subjects' but no sex differences were obtained for
the majority of subjects' ratings.

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CHAPTER I

INTRODUCTION

Until recently, research on children's social skills focused primarily on parent-child interactions. This may be the result of dominant psychoanalytic theorizing regarding children's socialization (Lewis & Rosenblum, 1975). The importance of peer relationships for fostering children's interpersonal skillfulness is being recognized by more and more mental health professionals. Moreover, the current interest in children's interactions with peers is reflected by an increasing number of research studies in this area (Hops & Greenwood, 1981).

A concern for shy, withdrawn children has spawned a number of social skills training programs (Bornstein, Bellack, & Hersen, 1977; Cartledge & Milburn, 1980; Gottman, Gonso, & Schuler, 1976). Unfortunately, these attempts to improve children's peer acceptance, which comprise primarily behavioral techniques, have only produced short term effects. Ollendick (1981) suggests that the failure of these treatment programs to effect long term changes may result from invalid assessment strategies. Target behaviors in children's social skills training program may not be the most salient aspects of children's interpersonal skills in their peers' views. This too may be related to the failure of behavioral training to effect long

term changes.

Most studies of assessment and training of children's social skills are adult-directed in several ways. First of all, the training that children receive in interpersonal skills often consists of practicing behaviors with adults in role play situations (for example, Bornstein et al., 1977). Also, the methods of selecting children for social skills training often involve adults rating the children's social skillfulness (Furman, 1981). Most important, the behaviors that are targeted for change in studies of children's interpersonal skills are generally not empirically selected. Rather, they are often chosen on the basis of face validity and may parallel social skill behaviors that are studied in adult populations (Hops & Greenwood, 1981). The children's point of view is rarely considered in selecting target behaviors for social skills training (Michelson et al., 1981).

The present study was an attempt to resolve some of these issues. Behaviors that are frequently analyzed in studies of children's skills were empirically tested. Children rated peer models displaying social skillfulness and social skills deficits on several dimensions, including their interpersonal reactions and perceptions of attractiveness. This was a step toward validating assessment and treatment procedures in the area of

children's social skills.

Definitions of Children's Social Skills

Social skills have been defined as a repetoire of children's verbal and nonverbal behaviors toward others which are mutually pleasing in social situations (Michelson, Foster, & Ritchey, 1981). The key term in this definition is the word "mutual." Social skill behaviors are those which lead to self enhancement as well as to the enhancement of others. Children who are not able to express themselves in effective and socially appropriate ways may have difficulty acquiring social, cultural, and economic reinforcers (Michelson & Wood, 1980). This reciprocal and interdependent nature of social skills is emphasized in most conceptualizatons (Hops & Greenwood, 1981).

The major formulations of children's social skills encompass four important dimensions. These are (1) specific social behaviors, (2) situational and interpersonal antecedents of behavior, (3) personal characteristics of the interactor, and (4) short and long term outcomes of social skill behavior (Michelson et al., 1981). These four dimensions will be briefly described and then a number of studies exploring relationships among them will be reviewed.

Five aspects of the behavioral dimension of children's social skills that have been studied are (1) assertion, (2) helpfulness, (3) communication skills, (4) initiating, maintaining, and ending interactions effectively, and (5) giving, and receiving positive reinforcement (Bornstein et al., 1977; Gottman, Gonso, & Rasmussen, 1975; Gottman et al., 1976). Each of these abilities is made up of several components. As will be discussed in the review of research studies, children's knowledge as well as performance of these social skill behaviors has been studied.

The second dimension of children's social skills comprises situational and interpersonal antecedents of behavior in social settings. These include the degree of structure in children's social situations, the presence of adults, the number of other children present, and whether or not children of the same sex are interacting. Situational variables have a considerable effect on the frequency and type of social skill behaviors that children exhibit. Third, a number of personal characteristics are related to children's interpersonal skills. In this review, physical attractiveness, social desirability of children's names, and special talents will be discussed.

Finally, social skillfulness in childhood has been associated with a number of short and long term outcome criteria. Examples of short term outcomes of interpersonal skills are acceptance and popularity among peers. These are usually assessed using sociometric measures. Popularity and peer acceptance have been used as criteria for evaluating the effectiveness of social skills training and also to predict long term outcomes of social skillfulness in childhood. Sociometric status has been found to predict psychiatric referrals in adulthood, and delinquency and school dropouts during adolescence (Michelson et al., 1981).

Relationships Among Dimensions of Children's Social Skills

A number of studies have explored relationships among these four dimensions of children's social skills. The present study will explore the relationship between the behavioral and outcome dimensions of this construct. Thus four studies will be extensively reviewed which focus on these two dimensions of children's interpersonal behavior. The first study, by Bornstein et al., (1977) focuses on assertive behavior and evaluates the effectiveness of a behavioral training program using a multiple baseline analysis. The next two studies by Gottman, et al., (1975) and by Gottman et al. (1976) explore relationships among peer acceptance and communication skills, helpfulness,

social initiations, and giving and receiving positive reinforcement. Finally, a study by Ladd and Oden (1979) focuses specifically on helpfulness and its relationship to children's acceptance among peers.

Situational and interpersonal antecedents of children's social skill behaviors will be briefly reviewed. The relationship of personal characteristics of the interactor to the other dimensions of children's social skills will be discussed and four studies which explore this area will be presented. Finally, sociometric status was used as a measure of short term outcome of the behavioral, personal characteristics, and antecedent dimensions of children's social skills in several of the studies in this review.

Review of Research on the Behavioral and Outcome Dimensions

Assertiveness is one of five components of children's social skills that was explored in the present study. Assertive behavior comprises several verbal and nonverbal components. These are requesting behavior change, refusing unreasonable requests, expressing positive and negative feelings toward others, maintaining eye contact while speaking, and speaking in a clear, audible tone of voice. Bornstein, et al. (1977) targeted requests for new behavior, ratio of eye contact to speech duration, and

loudness of speech for change in a social skills training program for unassertive children. This multiple baseline analysis was designed to examine the effectiveness of a behavior training program consisting of instructions, behavior rehearsal, modeling, and feedback. Subjects were three girls and a boy, ranging in age from 8 to 11 years. Each subject underwent the Behavioral Assertiveness Test for Children (BAT-C), which consists of a number of role play scenes that represent everyday social situations.

Administering the BAT-C involves a child and an adult examiner participating in the role plays. The adult delivers prompts that call for assertive or unassertive responses. Trained observers then record components of verbal and nonverbal assertive behavior. In this investigation, the role play scenes were videotaped and scored. Based on subjective clinical criteria, three assertive behaviors were targeted as deficient in the four subjects. One was ratio of eye contact to speech duration which was measured by forming a ratio of the durations of the two behaviors. Requests for new behavior, which was scored as occurring or not occurring was another target behavior in this investigaton. Finally, loudness of speech was rated on a five point scale. In addition, overall assertiveness was rated on a five point scale in this study. Interrater agreement was computed for half of the scenes

using Pearson product-moment correlations for the behaviors measured by timing or rated on scales. For requests for new behavior, reliability was assessed using percent agreement and percent occurrence agreement. Reliabilities ranged from 85% to 100%.

Based on subjective evaluation of data collected over a period of weeks, the authors believed that each behavior increased significantly in frequency or duration after being the focus of treatment. Bornstein et al. (1977) concluded that the social skills training program generated considerable improvement in both the targeted behaviors and in overall assertiveness.

This study typifies attempts to assess and modify children's social skills. The approach has a number of weaknesses. First of all, the target behaviors were selected for change based on subjective clinical criteria. As the authors point out, objective criteria for assessing children's assertiveness are not available. However, social comparison as described by Kazdin (1980) might have been the basis for identifying problem behaviors in this study. This could be achieved by assessing the behavior of peers using the BAT-C and essentially establishing norms for the behaviors of interest. Of course, this would be an extremely expensive procedure as it would involve long hours of training observers and then scoring a large number of

potential target behaviors.

A second problem with this study is the potential lack of generalizabiltiy of the role play scenes to everyday social situations. The problem of using analogue assessment procedures to evaluate children's social skillfulness will be discussed in another section. Within this role play format, the situations could be made to approximate behavior in the natural environment more closely by using peer role play partners for both assessment and treatment rather than adults.

A final problem with this approach to identifying social skill deficits in children is that it relies on adult judgments without considering the child's point of view. Because the goal of any social skills training program presumably is to facilitate effective peer interaction, peer judgments should play a role in evaluating treatment outcome. This could be accomplished by using sociometric ratings before and after the treatment program. This was done in the study by Gottman et al. (1976) which will be reviewed later. A problem with sociometric ratings is that they tend to be stable and may not be sensitive to the effects of treatment. Thus, this technique would not be appropriate for a multiple baseline design, but rather for a group design. As will be discussed in the review of strategies for assessing children's social skills, peer

judgments have rarely been used to assess children actual interpersonal behavior (Michelson et al., 1981).

One strength of the study by Bornstein et al. (1977) is that behavior change across the course of the training program is closely followed. This provides useful information about the acquisition of social skill behaviors. A second strength of this study is that the frequency of each target behavior increased only when that skill was the focus of treatment, which provides support for for the effectiveness of the training program. Finally, results were replicated across subjects as well as across behaviors, which provides further support for the efficacy of the treatment program.

Helpfulness is another component of children's social skills that has been studied Ladd and Oden (1979) explored the relationship between third and fifth graders' sociometric status and their understanding of how to be helpful. In this study, children completed sociometric measures that consisted of questions asking how much they liked to work and play with each of their classmates. Subjects also had to choose their three best friends out of the children in their class. Subjects were then shown three sets of cartoons in which a child was being teased by peers, yelled at by peers, and having trouble with arithmetic. Sex of subject was matched with that of the target child in the

cartoons. Subjects were asked to take either the perspective of the target child or of an onlooker and generate ways of helping the child in the cartoons.

Responses were condensed into 13 independent categories by trained judges. Subjects' responses were evaluated according to their uniqueness and flexibility. A unique response was the only one of its type emitted by children of a particular sex. Flexibility was determined by the total number of categories to which each child's responses were assigned. Finally, subjects were asked to nominate a classmate for the role of helper in the cartoons.

Results indicated negative relationships between sociometric status and uniqueness and flexibility of responses. The authors interpret these findings as suggesting that unpopular children are less aware of peer norms or values for helpful social behavior and are less consistent in the helping strategies that they employ with peers. The negative relationship between sociometric status and flexibility contradicted the researchers' predictions that greater flexibility in problem-solving strategies would be associated with acceptance among peers.

Because the relationships demonstrated in this study are correlational, causality cannot be inferred. Perhaps children are not accepted among peers because they do not

know how to be helpful. Another possibility is that children do not have opportunities to learn how to be helpful because their peers fail to accept them for some reason and thus do not associate with them.

Another criticism of the Ladd and Oden study is that children's knowledge of how to be helpful rather than their actual helping behavior was explored. Ability to generate helping strategies does not necessarily correspond to their actual behavior. Assessing subjects' helping behaviors in actual social situations would give information about the children's social behavior as well as about their social knowledge.

Three other areas of children's social skill behavior that have been studied are communication skills, giving and receiving positive reinforcement, and effectively initiating, maintaining, and ending social interactions. Giving and receiving reinforcement may take the form of complimenting another person, responding to compliments by enhancing oneself, or smiling and touching others to display affection. Effective communicaton requires the ability to understand others' feelings. Initiating, maintaining, and ending interactions effectively involves greetings, requesting or giving information, and effective leave-taking.

Gottman et al. (1975) assessed behaviors and skills related to these categories in their correlational study exploring the relationship among children's popularity, social interaction with peers, and specific interpersonal skills. In this study, 198 third and fourth graders completed a sociometric assessment in which they were asked to list (1) their best friends, (2) three children that they would go to for help, (3) three children that they would like to work with, (4) three children "who really listen to you", (5) three children "who really like you", and (6) three children "you'd like to play with best."

In addition, the subjects completed six tasks designed to assess their social skills. In the first task, children were asked to match photographs of various facial expressions with index cards containing words describing the expressions. In the next task, subjects had to communicate clues to referent words in similar and dissimilar word pairs to a listener. Clue words were scored on the basis of their quality. In the third task, children had to indicate which object was on their left or right or on the experimenter's, who sat facing them. They also had to determine how a mountain range would look from the experimenter's perspective, a task developed by Piaget. The next task required subjects to instruct a blindfolded person through a miniature display of obstacles. The children also had to

give instructions to an imaginary blindfolded child as to the correct sequence of colors of objects in a line before them. In the fifth task, each child had to pretend that the experimenter was a new child at school with whom she or he wanted to make friends. Responses were scored for occurrences of greeting, asking for information, extending inclusion and giving information. Finally subjects were asked to pretend that the experimenter was a student in class who needed help in arithmetic. The child's ability to switch teaching strategies was evaluated on this task.

The final dependent measure in this study was a behavioral observation conducted in the classroom. The behaviors of interest included dispensing and receiving positive and negative reinforcement to peers both verbally and nonverbally and entry behaviors (such as asking for something) with peers. Trained observers maintained a reliability of at least 80% in recording these behaviors throughout the study.

Results showed that children who had a high number of friendship nominations scored significantly higher on the unrelated word pair task than did children with low friendship nominations. Ability to label facial expressions, give help, and take another person's perspective were not related to sociometric status. Receiving positive reinforcement was positively associated

with number of friends but distributing reinforcement was not. The relationship between frequency of classroom social skills and performance on the social skills tasks was not explored. .

Ability to label facial expressions and to take another person's perspective were components of effective communication that these researchers explored. Neither of these was found to be positively associated with popularity in this study. However, ability to give helpful clue words on the unrelated word pair task was associated with popularity. Performing well on this task would seem to require the ability to understand another person's way of thinking, which is broadly related to empathy. More research exploring this relationship is needed, which was one goal of the present study.

Effective social initiations were also explored in the Gottman et al. (1975) study. On the friendship-making task, behaviors of interest were greetings, extending inclusion, and asking for and giving information, all of which are ways of initiating interactions. Again, knowledge of how to make friends, which was measured by summing children's scores for displaying the above behaviors, was found to be positively associated with popularity. In addition, a behavioral observation conducted in subjects' classrooms assessed giving and receiving positive

reinforcement. Only the frequency of receiving positive reinforcement from peers was significantly associated with popularity. The ability to respond to positive reinforcement was not assessed. Frequency of giving positive reinforcement was not significantly related to popularity in this study. Finally, helpfulness was a social skill behavior that was examined in the Gottman et al. (1975) study. This was operationalized as the ability to switch strategies in assisting another person in arithmetic. Results did not indicate a significant association between the ability to use a number of helping strategies and sociometric status. Ladd and Oden (1979) also demonstrated that consistency rather than flexibility in being helpful is associated with popularity among peers.

The Gottman et al. (1975) study has a number of weaknesses. First, the situations in which interpersonal skills were assessed did not necessarily represent real life social settings. Rather than using adult partners in these tasks, children might have been trained to participate as experimenters in these tasks. Second, the frequencies but not the quality of social behaviors in the classroom were recorded. Thus important information, such as children's ability to respond to positive reinforcement was not obtained. The cost of training observers to make such fine discriminations for such a large number of subjects may be

prohibitive. Problems with this method of assessing children's social skills will be more extensively explored in a later section.

Finally, the relationship between interpersonal skills and frequency of social behavior in the classroom was not explored in this study. This is extremely important information given the large number of studies in this area which rely on self-report and analogue situations to assess children's social skills. What a child knows how to do and what she or he actually does in a social situation might well be highly disparate.

The Gottman et al. (1975) study has two major strengths. The first is incorporating the child's point of view into the assessment of social skills. This was accomplished by using a fairly detailed sociometric procedure. The other area of strength of this study is the breadth of social skill behaviors that was explored. Communications skills, social initiations, giving and receiving positive reinforcement, and helpfulness were all examined in relation to popularity. Including communication skills is particularly noteworthy as very few investigations have explored this class of behaviors in preadolescent children. In summary, findings from the Gottman et al. (1975) study shed light on some important relationships among aspects of children's social skill behaviors.

The fourth study to be reviewed is an investigation of the effectiveness of a social skills training program by Gottman et al. (1976). The training program aimed to increase children's sociometric popularity and frequency of positive interactions with peers by teaching children friendship making skills. The skills taught included active listening skills, giving positive reinforcement, effective social interactions and helpfulness. This study incorporates some of the strengths of the Gottman et al. (1975) study.

In this investigation, sociometric measures were used to identify and to assess treatment effectiveness for four unpopular girls. The four female subjects were identified as having significantly fewer friends than their classmates. Two girls were assigned to a treatment group and two to a control group. The social skills training began with a phase in which subjects were instructed in initiating interactions using a film that modeled examples of these behaviors. After this, children practiced a sequence of friendship-making skills in role play situations with a male adult coach. This sequence was greetings, asking for and giving information, extending inclusion and effective leave taking (ie., ending interactions). The subjects also practiced active listening skills and giving positive reinforcement. Finally, the subjects were trained in the

social skills tasks described in the Gottman et al. (1975) study. In each of these phases of the training, subjects selected a classmate with whom they would practice the specific behaviors. The two girls in the control group were seen by female experimenters for the same amount of time. During these meetings, subjects and the experimenter talked and played games. The topic of "friends" was specifically avoided in these conversations.

In addition to sociometric ratings before and after treatment, a behavioral assessment of the frequency of positive, negative, and neutral interacton with peers was performed to assess treatment effectiveness. Positive interaction comprised those categories described in the Gottman et al. (1975) study. Interactions were also classified according to the level of popularity of the children with whom the subjects interacted. Percentage of total interactions that involved popular male and female classmates were computed. Observers in this study recorded the behavior of all of the children in the class and were blind to the time of intervention and which children were being targeted for behavior change. This was accomplished by having children regularly leaving the class for various reasons. Inter-observer agreement was computed on about 20% of the observations and was maintained at a minimum of 85% throughout the study. Baseline and treatment behavioral

assessments lasted nine and five days respectively. Followup behavioral assessment began 47 days after the end of treatment and lasted 11 days. In addition, followup sociometric data were gathered 63 days afer the end of treatment.

Results showed significant improvement in the treatment group on the sociometric questions regarding how many classmates would like to work with the subjects. An interrupted time-series analysis of the observational data revealed no significant differences between experimental and control subjects in increases or decreases in positive, negative, and neutral interaction with peers. However, one subject in the treatment group did increase the proportion of her interaction with popular females. Neither control subject increased the proportion of her interaction with any category of classmates. The authors concluded that the social skills training program is potentially an effective treatment for unpopular children. They did acknowledge that studying only four females limits the generalizability of their findings. They also noted that increases in sociometric status are not associated with increases in total frequency of interaction.

The Gottman et al (1976) study is quite complex and although is has some strengths, it has a number of obvious weaknesses. First of all, a between groups analysis with four subjects was inappropriate and does not provide any meaningful information. Second, the treatment and control conditions were confounded with sex of the experimenter. Thus it cannot be determined whether any behavior changes were the result of the treatment or interacting with an adult of a particular sex. Third, each target child selected a peer role play partner which was not constant across subjects. Again, this confounds interpersonal variables in the training situation with treatment procedures. Finally, subjects were selected according to the number of friendship nominations they received. Thus popularity rather than peer acceptance was the basis for identifying socially unskilled children. An assessment procedure which requires each classmate to rate each other classmate, such as the pupil evaluation inventory (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976) would seem to be more sensitive to treatment changes.

A major strength of the Gottman et al (1976) study is that it attempts to establish a causal relationship between social skill behaviors and acceptance among peers. This was accomplished by evaluating changes in sociometric status after training children to engage in a higher frequency of

certain behaviors. Also, the researchers used an interrupted time-series analysis to evaluate the observational data. This procedure is superior to the subjective evaluation of the data that was conducted in the Bornstein et al. (1977) study. Most important, Gottman et al. (1976) consider the children's point of view when evaluating the short term outcomes of social skill behavior. Again, this was accomplished by using the sociometric measures.

Taken together, the studies by Bornstein et al. (1977), Ladd and Oden (1979), Gottman et al. (1975), and Gottman et al. (1976) explored the major components of children's social skills and their relationships to some of the other dimensions of this construct. Following is a brief discussion of the findings in the areas of interpersonal and situational antecedents of social skill behavior and of personal characteristics of the interactor in children's social situations.

Situational and Interpersonal Antecedents of Children's Social Skills

The environmental context greatly affects opportunities for children's interactions with peers. Two important interpersonal and situational antecedents of children's social skill behaviors are the sex of the interactors and

the degree of structure in the social setting. Across all levels of childhood and early adolescence, children seem to prefer interactions with members of their own sex. This may be related to apparent sex differences in preferences for certain play activities (Hops & Greenwood, 1981). In addition, Masters and Furman (1981) found that children tend to name same-sex classmates as their best friends more frequently and like them more than opposite-sex classmates.

With regard to structure of social situations, two factors seem to influence peer interaction among children. One is the presence and participation of adults. In general, children appear to interact with peers at a lower rate when adults accompany them. For example, free play settings with limited teacher-imposed structure seem to facilitate higher levels of peer interaction than teacher-directed instructional formats in schools (Hops & Greenwood, 1981).

The other factor in structure of social situations that affects children's opportunities for interpersonal interactions are availability and number of peers. Generally, higher rates of peer interaction is associated with greater peer density. However, interaction of specific subjects may not require the presence of many peers for its occurrence (Hops and Greenwood, 1981).

Personal Characteristics and Children's Social Skills

Children's personal characteristics appear to be related to their level of social skillfulness, peer acceptance, and popularity. Several studies will be reviewed which explore contributions of physical attractiveness, social desirability of children's names, and special abilities to overall social skillfulness.

Surprisingly, only a handful of studies have explored the relationship among children's physical attractiveness, social skill behaviors, and peer acceptance. Results of these investigations strongly suggest a positive relationship between adults' perceptions of children's attractiveness and acceptance among peers. However, whether or not children's perceptions of their peers' attractiveness is associated with social skillfulness and peer acceptance is not clear.

Lerner and Lerner (1977) demonstrated that children rated by adults as attractive tended to receive more positive attributions from peers than children rated as unattractive. These attributions included "other boys and girls like/don't like him or her," "most/least want as a friend," and " has many/few friends."

Adults' and children's ratings of children's attractiveness seem to correspond. Langlois and Stephan (1977) demonstrated a positive relationship between adults' and children's attractiveness ratings of children. These authors also found a positive association between adults' attractiveness ratings and children's likability ratings of other children. Similarly, Salvia, Sheare, and Algozzine (1975) demonstrated significant positive correlations between adults' ratings of children's physical attractiveness and likability ratings by peers in third and fifth grade children.

Cross and Cross (1971) explored the relationship among age, sex, race, and attractiveness of children, teenagers, and adults. Subjects were 7, 12, and 17 year old children and adults with an average age of 36 years. Results of the Cross and Cross study suggest a correspondence between children's and adults' attractiveness ratings of 7 and 17 year olds and adults.

Results of the investigations by Lerner and Lerner (1977), Langlois and Stephan (1977), Salvia et al, (1975), and Cross and Cross (1971) do not provide direct evidence of a positive association between children's perceptions of attractiveness and acceptance of their peers. The nature of the relationships among physical attractiveness, peer acceptance, and actual social behavior has not been

determined. It may be that physically attractive children have more opportunities to interact with other children because they are positively viewed by their peers. Attractive children then develop high levels of social skillfulness. Whether or not behavioral variables can overcome possible deleterious effects of unattractiveness on peer acceptance remains to be determined. The present study further explored possible effects of attractiveness as perceived by children on attributions related to peer acceptance.

Social desirability of children's names may also be associated with popularity. MacDavid and Harari (1966) found positive correlations between popularity of children's first names and the number of friendship nominations by the children's classmates. In this study "names" were emphasized when subjects were rating their peers first names. In contrast, "people" were stressed in the directions for the sociometric assessment involving friendship nominations.

One interpretation of these results is that socially undesirable names put children at a disadvantage in social situations. However, friendship nominations may also have been contaminated by subjects confusing names with people when they rated names of children with whom they were acquainted (MacDavid & Harari, 1966).

Having special abilities in certain areas seems to be positively associated with the number of friends children have. Children's academic and athletic accomplishments can enhance popularity and social acceptance (Michelson et al., 1981). Green, Forehand, Beck, and Vosk (1980) explored the relationships among children's academic achievement, peer acceptance, and social skill behaviors. A behavioral assessment using the categories from the Gottman et al. (1975) study was also conducted. Green et al. (1981) demonstrated positive associations among scores on the achievement test, number of positive behaviors emitted in peer interactions, and likability ratings.

Assessment of Children's Social Skills

Methods of assessing children's social skills are intended to evaluate the behavioral and/or outcome dimensions of the construct.The behavioral, situational, personal, and outcome dimensions of children's social skills play a role in the kind of information about interpersonal skills that a measuring instrument gathers. Social skills assessment techniques can be divided into five categories. These are ratings by adults, analogue measures, naturalistic observation, self-reports, and peer-directed measures. The first three classes of instruments are primarily adult-directed whereas the last two employ the child's point of view. All five types of social skills measures have

strengths and weaknesses which will be discussed below.

<u>Ratings by Adults</u>

Some fairly reliable and useful means of assessing children's social skills are ratings by significant adults. Teacher rating scales are widely used as screening devices for identifying children with poor social adjustment. Some of these measures require teachers to rate children on Likert scales for categories of social skills behavior. The Social Competence Scale (Kohn & Rosman, 1972) consists of items describing specific, behaviorally anchored responses. Teachers rate children on a scale for each item. Other teacher rating scales are checklists on which teachers report various appropriate and inappropriate behaviors for each student (Michelson & Wood, 1980). The Walker Behavior Problem Inventory Checklist (WPBIC) is widely used and can be completed in a short time. The WPBIC consists of five subtests: acting out, withdrawal, distractability, disturbed peer relations, and immaturity (Michelson & Wood, 1980).

Most existing teacher rating scales are problem oriented, as the WPBIC subtests exemplify. Such measures provide little information about children's socially competent behavior. The Kohn Social Competence Scale is an exception. The items on this scale were designed to measure

adaptive as well as problem behaviors (Michelson et al, 1981).

Validity studies of teacher rating scales of children's social skills have demonstrated concurrent and predictive validity in many cases (Michelson et al., 1981). However, the psychometric properties, accuracy, and functional utility of these measures is questionable (Michelson & Wood, 1980). Teacher ratings have been demonstrated to correlate moderately with peer sociometric measures (Green et al., 1980). Relationships between judgments of teachers and clinicians seem to depend on the experience of the teacher. Inexperienced teachers tend to overrate maladjustment. Research suggests that teacher ratings are influenced by factors other than children's behavior (Michelson et al., 1981).

Although most adult ratings of children's social skills have been gathered from teachers, parents are an additional source of information. An example of a parent rating of children's social competence is the Child Behavior Checklist (CBCL). Parents indicate whether items in behavior problems and social competence sections are very true, somewhat true, or not true of their child. Areas assessed in the social competence section of the CBCL are the child's participation in sports, hobbies, games, chores, organizations, and school, the child's ability to get along with significant

others, and the occurrence of various school problems. The CBCL covers a breadth of areas, has reasonable reliability, and has norms for both males and females. However, its utility in assessing social skills is limited because (1) scales include no situational parameters, (2) items tend to reflect global parameters rather than observable behaviors, and (3) evidence relating parental reports to observable behaviors is lacking (Michelson et al., 1981).

In summary, reports by significant adults have some utility as screening devices to identify children with problem behaviors. A greater emphasis on observable behavior and relating adult reports to actual child behavior is needed.

Analogue Measures

A number of researchers have attempted to assess children's social skillfulness using analogue measures. One example is the BAT-C, which was used in the Bornstein et al. (1977) study mentioned earlier. This is a role play test consisting of scenes depicting situations that children are likely to encounter. Children act out the scenes with an adult partner and their behavior is scored on a number of dimensions.

Role play tests such as the BAT-C have the advantage of facilitating a wide range of behaviors that might occur infrequently in the natural setting. Also, role play tests allow control over situational and interpersonal variables than affect social skill behavior. Finally, these tests can yield accurate, fine-grained analyses of behavior (Michelson et al., 1981).

A major disadvantage of role play tests of children's social skills is lack of external validity. Van Hasselt, Hersen, and Bellack (1981) attempted to validate role play tests as a technique for assessing children's social skills. The Children's Interpersonal Behavior Test (CIBT) and the Conversation Probe (CONPROBE) were the role play tests employed in this study. The CIBT is derived from the BAT-C and the Behavioral Assertiveness Test for Boys (BAT-B), which is similar to the BAT-C. This test consists of six role play scenes that represent typical interpersonal stuations that children encounter. In this role play test, the adult partner follows the subjects' initial responses with two prearranged counterresponses. This change from this BAT-C was intended to make this scenes more similar to real-life encounters.

The CONPROBE is designed to assess extended interactions necessary for in initiating conversation. This measure consists of single interpersonal situations which enable the subject to engage in prolonged (one-minute) conversations with an adult role model. Also, the role-play partners do not deliver prompts, but wait for the children to initiate and maintain conversation.

In the Van Hasselt et al. (1981) study, videotaped responses to the CIBT and the CONPROBE were scored on dimensions similar to those employed in scoring the BAT-C. Correlations among subjects' scores on these tests and on sociometric ratings, teacher ratings of social competence, and nonverbal social skill behaviors assessed in a natural setting were the basis for validation of the role play tests. Analyses based on results of a multi-trait-multi-method matrix revealed that the CIBT and CONPROBE had unacceptable levels of test-retest reliability. Also, scores on the two role play tests were not significantly associated with sociometric ratings, frequency of nonverbal social behaviors, or teacher ratings of social competence. These results do not support the external validity of role play tests for assessing children's social skills.

Analogue measures of children's social skills seem to be assessing children's knowledge of appropriate behavior in social situations. A distinction must be made between social knowledge and actual social behavior in assessing children's social skills.

Naturalistic Observation

Observations of children's behavior in natural social settings has been widely used as a technique to assess social skills behaviors. Naturalistic observation typically involves first specifying categories of behavior. Generally, the categories are broad and, as mentioned earlier, the behaviors that are targeted are rarely empirically selected. Rather, these behaviors are often chosen on the basis of face validity (Hops & Greenwood, 1981).

The next step in assessing children's interpersonal skills through naturalistic observation is training observers who are naive to the hypotheses and details of the experimental design. Observers usually practice with videotapes until they are categorizing behaviors at a sufficiently reliable level. Reliability is determined by having two observers record the same behaviors independently and computing the percentage of agreements between the two observers on the occurrence and/or nonoccurrence of the

behaviors of interest. Usually, reliability of 85% or better is desired in studies employing natualistic observation as an assessment technique.

The study by Gottman et al. (1975) uses a naturalistic observation coding system that is representative of those used to assess the social skillfulness of 8 to 10 year old children. The system used in this investigation will be reviewed. The categories used in this study of children's social skill behaviors in the classroom setting were (1) alone positive, (2) alone and off task, (3) dispensing positive reinforcer verbally, (4) dispensing positive reinforcer nonverbally (ie., smiling), (5) dispensing negative reinforcer verbally, (6) dispensing negative reinforcer nonverbally, (7) receiving positive reinforcer verbally, (8) receiving negative reinforcer verbally, (9) receiving positive reinforcer nonverbally, (10) receiving negative reinforcer nonverbally, (11) entry behavior (ie., asking for something), (12) peer interaction neutral, (13) teacher giving child positive reinforcer, (14) teacher giving child negative reinforcer, (15) teacher interacting neutral, (16) child initiating interaction with teacher.

Associations between these categories of behavior and sociometric status were determined in the Gottman et al., (1975) studdy. However, before performing these analyses, categories (3) and (4) were combined, as were (5) and (6),

(7) and (8), (9) and (10), (11) and (12), and (13), (14), and (15). Thus the original sixteen categories were reduced to eight with verbal and nonverbal behaviors combined into the same classes. Gottman et al. (1975) demonstrated positive associations between distributing and receiving positive reinforcement and number of friends.

This study is typical of those employing naturalistic observation to assess children's social skills. Generally, the behaviors are not emirically selected, as mentioned earlier. Also, they are not causally related to the outcome criteria of peer acceptance or popularity. Rather, correlations among the observed behavior and other dimensions of social skills are usually demonstrated. In addition, the catogories of behavior in these studies are fairly broad, in contrast to the specific skills that are practiced in social skills training programs for children.

In their critique of naturalistic observation techniques, Asher, Markel, and Hymel (1981) point out that frequently, simple rate of interaction is used as a measure of children's social competence. These authors cite evidence that in general, studies have not found significant associations between rate of interaction and sociometric status of children. Asher et al. (1981) further assert that some children with a low overall rate of social interaction may be quite competent when they do interact.

The quality is more important than overall frequency of social interaction in relation to peer acceptance in children (Asher et al., 1981). Naturalistic observation systems typically assess overall rates of different categories of behavior.

Self-Report Measures

Self-report measures of social skill require children to report on how they view their feelings, behavior, and social relationships with peers (Hops and Greenwood, 1981). The Written Role-Play Test (WRPT) is an example of a self-report measure of one type of social skill behavior (Vogrin & Kassinove, 1979). The WRPT consists of 10 interpersonal situations which call for assertive behavior. An adult verbally describes these scenes to children and asks them to imagine themselves in the situation. The children then write down the verbal response they believe they would give in the situation.

In their study of the effectiveness of behavior rehearsal and audiotaped observation in modifying children's assertive behavior, Vogrin and Kassinove (1979) employed the WRPT. Two independent judges rated the children's responses as either assertive or unassertive. In this study, the correlation between the judges scores was statistically significant, which indicated sufficient inter-observer

reliability in rating assertive behavior. Researchers found significant increases in third grade children's scores on this measure following assertiveness training.

Two other self-report measures of children's social skills are the Children's Assertiveness Behavior Scale (CABS) and the Self-Report Assertiveness Scale for Boys (SRAT). Both of these are group paper and pencil tests which require children to indicate their responses to written interpersonal situations (Hops & Greenwood, 1981).

Assessing children's social skills using self-report measures has several problems. First, validation of paper and pencil techniques depends on children's reading ability. The WRPT is not hampered in this respect because the stimulus materials are verbal descriptions of interpersonal situations. However, the WRPT as well as other self-report measures confound children's conceptual knowledge with performance and are subject to social desirability sets (Hops & Greenwood, 1981). Thus, because a child's own perceptions are likely to be inaccurate representations of his or her actual behavior, self-reports have limited validity in assessing children social skills (Michelson et al., 1981). As with analogue measures of children's social skills, self-report measures tap social knowledge rather than social behavior.

Peer-Directed Measures

Three types of peer-directed assessment procedures are friendship nominations, peer rating scales, and peer assessment strategies. The first two are often referred to as sociometric measures and are frequently used to assess the outcome of social skills behavior. Peer assessment strategies have not been frequently used with children (Michelson et al., 1981).

Friendship nominations require children to select their best friends from a class roster. Often children are also asked to select their favorite playmates and workmates (Michelson et al., 1981). Gottman et al. (1975) added "children you'd go to for help" and "children who really listen to you" to their sociometric questions. Children with a large number of friendship nominations relative to their classmates are considered to be "popular". Children with few nominations are considered to be "isolated". Often friendship nominations are the first step in selecting children for social skills training.

Peer rating scales are to be distinguished from friendship nominations because each child rates every other child in his or her class. One example is the Pupil Evaluation Inventory (Pekarik et al. 1976). This is a 35-item questionnaire which requires children to indicate

every child in their class who fits a certain description. This test taps three core factors: aggression, withdrawal, and likability. These factors seem to be homogenous and stable. Children's ratings on the pupil evaluation inventory correlate modestly with teacher ratings, lending support for concurrent validity (Pekarik et al., 1976).

Friendship nominations and peer rating scales seem to yield different information about children's social skills. Using factor analytic techniques, Gresham (1981) attempted to validate these two sociometric strategies. Results of Gresham's study suggest that these two devices assess separate aspects of children's social skills. Friendship nominations seem to measure "friendship" or popularity, whereas peer rating scales appear to tap "likability" or peer acceptance (Gresham, 1981). Peer rating scales seem to yield a better picture of a child's status with each member of the group and relatively fine-grained analyses are possible. Also, rating are unaffected by group size, unlike friendship nomination procedures (Michelson et al., 1981).

Peer assessment strategies for measuring children's social skills are distinct from peer sociometric measures and rating scales. Peer assessment measures require raters to assess certain peer characteristics rather than their feelings toward peers (Michelson et al., 1981). This strategy has been successfully used with adults but has not

been frequently used with children. Rather, sociometric techniques have been used to assess children's standing among peers.

In general, children have been underutilized as raters of peer social behavior. According to Michelson et al. (1981), choice of raters should depend on the relationship of interest. That is, if adult-child interactions are the focus of a study of children's social skills, then adult raters should be used. However, if children's peer interactions are being evaluated, then children would be the most appropriate raters of peer social behavior. This has not been the case in most research studies of children's social skill behavior. Because sociometric standing is frequently used as the outcome criteria for social skills training for children, it would seem logical that children's views on socially appropriate behavior should be considered.

In summary, analogue and self-report procedures for assessing children's social skills seem to be measuring children's knowledge of socially appropriate behavior. Ratings by adults and naturalistic observation techniques focus on children's actual behavior in social settings, but these behaviors are not empirically selected. Peer-directed assessment procedures hold promise as valid means of measuring children's acceptance in a group. However, children's scores on these measures have not been causally

related to actual social skill behaviors. The present investigation employed children as judges of peers' behavior and attempted to establish a causal relationship between social skills and peer acceptance in children.

Purposes and Hypotheses of the Present Study

To date, no studies of children's social skills have directly related interpersonal behaviors to peer acceptance. A recent controlled study of adult assertiveness examined the interpersonal effects of this class of behavior (Kelly, St. Lawrence, Bradlyn, Himadi, Graves, and Keane, 1982). Surprisingly, results of this investigation included some negative reactions to assertive adults. Kelly et al. (1982) studied college students' reactions to assertive and unassertive black and white adult males. The stimulus materials in this study were videotaped scenes in which the models handled interpersonal conflict situations either assertively or unassertively. The assertive models' verbal behaviors were noncompliance with another person's unreasonable behavior and requesting more reasonable behavior from the person. These models' nonverbal behavior was characterized by speaking in a clear, audible voice and maintaining eye contact. In the unassertive condition, the models on the videotapes complied with another person's unreasonable behavior and failed to request more reasonable behavior from that person. Subjects completed a 26-item

interpersonal evaluation inventory that called for ratings on a 7-point scale as to how accurately adjectives described the models.

Results showed that subjects rated the assertive models' as being significantly more assertive, appropriate, educated, intelligent, and superior than the unassertive models. However, the assertive models were evaluated as being significantly less favorable than their unassertive counterparts on a number of dimensions. These were friendly, inoffensive, agreeable, pleasant, considerate, flexible, open-minded, sympathetic, good-natured, kind, likeable, thoughtful, and warm. Other results related to race of model and sex of subject. Two notable findings are that female subjects rated all models significantly higher in appropriateness, tactfulness, education, and intelligence than did male subjects. Male subjects, in turn, rated all models higher in their flexibility and sympathetic qualities than did female female subjects.

The present investigation was an extension of the Kelly et al. (1982) study. The components of social skills examined were (1) assertiveness (2) empathic understanding, (3) effectively initiating, maintaining, and ending interactions, (4) giving positive reinforcement, and (5) use of consistent helping strategies. Children's ratings of the interpersonal effectiveness of peers displaying these five

classes of behavior were compared to their ratings of peers demonstrating unassertiveness, lack of empathy, ineffective social interaction, failure to acknowledge positive characteristics or behavior, and inconsistent helping strategies.

Subjects were third grade children who viewed videotaped vignettes of 8 to 10 year old girls in social situations. This age group was selected because it has been noted as a period of transition in the development of children's social abilities (Gottman et al., 1975). After viewing the videotapes, subjects completed a rating scale about their perceptions of the models' interpersonal skillfulness. Items on this measure also tapped subjects' interpersonal reactions to the videotape models. Overall differences between male and female subjects' reactions to female models who either demonstrate or fail to demonstrate social skills were evaluated. In addition, effect of specific components of socal skills on subjects' likability ratings of the videotape models were explored.

Hypothesized results were significantly more positive ratings for socially skilled models than for the models displaying social skills deficits. Assertive behavior was predicted to receive significantly lower ratings than the other social skill behaviors. The basis for this prediction was the finding from the study of interpersonal reactions to

adult assertive behavior by Kelly et al. (1982).

Female subjects were expected to give higher overall ratings than male subjects. This contrasts with the finding that female subjects rated assertive males significantly higher than male subjects on a number of interpersonal dimensions (kelly et al., 1982). However, children between 8 and 10 years of age generally tend to like members of their own sex more than members of the other sex (Michelson et al., 1981). Because this investigation was primarily exploratory, no other predictions about the differential effects of the five behaviors on subjects' ratings were made.

CHAPTER II

METHODS

Subjects

The subjects were 18 boys and 19 girls in three third grade classes at a local, public elementary school. The majority of these children were Caucasian and came from middle- and upper-middle class families. These children were between 8 and 10 years of age. Written parental consent was obtained prior to conducting the study. See Appendix C for the letter and form used.

Materials

Videotaped scenes served as the stimulus materials for this study. Five scenes each displayed the following social skill behaviors: (1) assertiveness, (2) empathic understanding, (3) initiating, maintaining, and ending social interaction, (4) complimenting another person, and (5) helpfulness. Five additional videotaped scenes displayed deficits in these behaviors. Thus a total of ten videotaped scenes were used in this investigation.

Five Caucasian females between 8 and 10 years of age served as the models in the videotape scenes. These girls followed scripts and were familiar with the components of social skills. Each model appeared in two scenes, one in

which she exhibited one of the social skill behaviors and one in which she demonstrated deficits in that skill. Counterbalancing the models across behaviors insured that personal characteristics did not covary with the skills these girls exhibited. Each of the ten videotape scenes were approximately thirty seconds in length. This matched the length of time that the models appeared on the tapes both between sets of scenes displaying social skill behaviors and deficits and within these sets of specific behaviors. A nineteen-inch video monitor displayed these scenes in color.

In each scene, one of the female models interacted with another girl, who was not entirely visible to the viewer. The girls were interacting in social situations that children typically encounter. For all five scenes displaying social skill behavior, the models' nonverbal behavior was characterized by smiling, maintaining eye contact, and speaking in a clear, audible voice. The models' verbal behavior in this set of scenes varied depending on the skill that was illustrated and was consistent with behaviors that are typically the focus of social skills training for children. For example, in the scene which portrays empathic understanding, the model demonstrated reflection of the other person's feelings.

In the five videotaped scenes which portrayed social skills deficits, the models' nonverbal behavior was characterized by a lack of eye contact and smiling, and speaking in a relatively soft voice. Verbal behaviors in these scenes depended on the behavioral deficit that was illustrated. For example, one model exhibited unassertiveness by failing to request a desired behavior change and complying with an unreasonable request. The examples of social skill behaviors illustrated in these scenes are based on the training program outlined by Cartledge and Milburn (1980). For a complete description of the videotape scenes, see Appendix A.

Dependent Measure

Before viewing each videotape, subjects rated the videotape models' attractiveness. They viewed color photographs, approximately two inches by four inches, of the five girls and rated their attractiveness on a five point Likert scale.

Subjects indicated their ratings of the videotape models' interpersonal skills by completing a short questionnaire after each scene. This measure consisted of ten words or phrases describing interpersonal attributes (e.g. "friendly") or reactions (e.g. "I like her"). These items were derived from the measures employed in the studies

by Kelly et al. (1982) and by Gottman et al. (1975). All items were anchored 5 point bipolar ratings (e.g. 1 = not at all to 5 = very much). Subjects indicated their responses to each stimulus model on each item. Also, to insure that the subjects' ratings were not influenced by prior experience with the models on the videotapes, additional questions regarding the subjects' relationship (if any) to the girls on the videotapes were included. See Appendix A for a copy of this measure.

Manipulation Check

To insure that the two sets of videotapes differed significantly on the dimensions of interest, a check on the manipulation of the behavioral variables (socially skilled or social skills deficits) was performed. Ten graduate and undergraduate students in psychology with experience and expertise in working with children and who were unfamiliar with the experimental manipulation rated the models in each videotape scene. The measures employed were ratings of the models' overall social skillfulness and of the specific skills that each model was portraying on 7-point Likert scales. T-tests were performed on these ratings to determine whether each model portraying a social skill behavior received significantly higher ratings on that dimension and on overall social skillfulness than when she displayed deficits in that behavior.

Procedure

Before the subjects viewed the videotapes, the experimenter, a female graduate student in clinical psychology, explained the basic procedures to the subjects in their classrooms. The experimenter explained that the study was to learn some reasons why children like or dislike one another. She also Emphasized that the girls on the videotapes would be showing how they would handle situations with other children. At this time, subjects saw an example of the ten-item questionnaire that they would be completing. The experimenter guided them through two sample items that were based on a verbal description of a social situation. Subjects had an opportunity to ask questions at this time. See Appendix A for a copy of the instructions that the subjects heard.

After this introduction to the study, groups of two or three girls or boys from the same class were taken to view the videotapes in a room outside of their classrooms. Running two or three children from the same classroom at a time was least disruptive to regular school activities. The subjects were seated at separate desks to insure that they could not see each other's ratings.

The experimenter explained that they would be observing five girls in everyday social situations. Subjects were instructed to observe each scene carefully, as they would be making judgments about the models' behavior.

The subjects made their attractiveness ratings based on the photographs and then viewed the scenes in a randomly determined sequence. For the five scenes, subjects completed the questions independently with a brief cue from the experimenter. Subjects were instructed not to discuss the contents of the videotapes or questionnaires with other children until everyone in the three classes had seen the videotapes.

Finally, subjects were debriefed after they had all completed the experimental procedures. The experimenter explained the purposes and hypotheses of the study to the children as a group in their classrooms. Subjects had an opportunity to ask any questions about the investigation at this time. The children were encouraged to give their own comments and feedback about their participation in the study.

Design

Two between groups variables were examined in this study. These were sex of subject and behavior of the videotape model (either socially skilled or socially deficient). Thus a two-by-two factorial design was employed, as each of these variables had two levels. Also, one within groups variable was studied. This variable had five levels, which corresponded to the five areas of behavior mentioned above.

Subjects were randomly assigned to the two levels of the behavioral variable. Data from one female subject randomly selected from the group that viewed social skill behaviors was not included so that each cell had an equal number of subjects for the data analyses. To insure that the order of presentation of the videotape scenes did not influence subjects' ratings, the scenes were presented in randomly determined sequences for each group of subjects.

CHAPTER III

RESULTS

Attractiveness Ratings

A split-plot analysis of variance was performed on the attractiveness ratings with sex of subject as the between-groups variable and the five videotape models as the within-groups variable. Results of this analysis showed that the female subjects rated the models as significantly more attractive than male subjects ($F = 37.84$, $p < .001$). Also, subjects did not rate the five models as equally attractive ($F = 6.83$, $p < .001$). A Newman-Keuls test of mean differences for the attractiveness ratings was performed. Results showed that the female subjects rated two of the videotape models as significantly less attractive than the other three. However, the male subjects' attractiveness ratings for the five models did not differ significantly.

Pearson product-moment correlations between subjects' attractiveness ratings and responses to each questionnaire item were then performed for each model. The questionnaire is displayed in Appendix A. The majority of these correlations were not statistically significant. See Tables 1 and 2 in Appendix B for a listing of the correlations. Male subjects' attractiveness ratings were significantly

positively associated with their responses to the last two questionnaire items ("I like her" and "I would like to be friends with her") for four of the five models.

These results suggest that, overall, subjects' responses to the questionnaire items were not influenced by their perception of the videotape models' attractiveness. Male subjects' responses to the last two items could be predicted from their attractiveness ratings for four of the five models. However, because male subjects did not rate the models as differentially attractive, their responses to the last two items appear not to be confounded with attractiveness ratings.

Manipulation Check

Results of the T-tests performed on the adult judges' ratings of the videotape models' specific and overall social skills indicated that the independent variables were effectively manipulated. The five models received significantly higher ratings for helpfulness, assertiveness, empathy, effective interaction, or positive reinforcement when they demonstrated skills in the area of behavior than when they displayed deficits in that area. These differences were all significant at the .001 level. Also, the videotape models were rated by the adult judges as being significantly more socially skilled overall when they

demonstrated social skill behavior than when they portrayed social skills deficits. The differences in ratings for the model demonstrating assertive versus unassertive behavior were significant at the .05 level and the differences for the other four areas of behavior were all significant at the .001 level. Thus, the independent variables appear to have been successfully manipulated.

Main Effects

Split-plot analyses of variance were performed on subjects' responses to each questionnaire item. Significant sex differences were obtained for three of the ten items: "friendly" ($F = 15.44$, $p < .001$), "I like her" ($F = 6.18$, $p < .05$), and "I would like to be friends with her"($F = 13.16$, $p < .01$). These results must be interpreted with caution as male subjects' responses to the last two items were significantly associated with attractiveness ratings of the videotape models.

Male and female subjects' ratings for the other seven questionnaire items did not differ significantly. Also, sex did not interact with overall social skillfulness or with the five areas of behavior.

Main effects of overall social skillfulness were demonstrated for all ten questionnaire items. For eight items, these effects were significant at the .001 level. For the fourth item, "stands up for herself", differences on this variable were significant at the .05 level. For the ninth item, "I like her", the differences between ratings for social skills and deficits were significant at the .01 level. This suggests that, overall, the female videotape models made a more favorable impression on subjects when they demonstrated social skills than when they displayed social skills deficits. Also, these results provide evidence for successful manipulation of the between-groups variable.

Effects of Specific Social Skill Behaviors

Significant differences among subjects' ratings for the five areas of social skill behavior were obtained for all ten questionnaire items. For eight items, these differences were significant at the .001 level. For the third and fourth items, ("fair" and "stands up for herself") these differences were significant at the .01 level.

Overall social skillfulness interacted with the within-groups variable for all items except "stands up for herself" and the interactions were all significant at the .001 level. Newman-Keuls tests were performed on the mean

ratings for the videotape models on all ten items. These results are displayed in Tables 3 and 4 and Figures 1 through 13 in Appendix B.

Results of these analyses showed a fairly consistent pattern for the five areas of social skill behaviors. Subjects' ratings for the videotape models displaying empathy, positive reinforcement, consistent helping strategies, and effective interaction skills were significantly higher than for the model demonstrating assertiveness. Also, the ratings for the former four behaviors did not differ significantly from each other for nine of the ten items. Thus these social skill behaviors appear to have similar effects on children's interpersonal reactions to peers and perceptions of peers' social skillfulness.

Ratings for the model demonstrating assertiveness were significantly higher than for the model displaying effective social interaction skills for the fourth item ("stands up for herself"). However, ratings for the assertive model did not differ significantly from those for the models displaying empathy, consistent helping strategies, and positive reinforcement for this item.

Effects of Social Skills Deficits

Results for the five areas of social skills deficits were not entirely consistent. The model displaying ineffective interaction skills received significantly lower ratings than the models demonstrating the other four areas of social skills deficits for five of the ten items. These were: "cares about other people," "gets along with other people," "friendly," "helpful," and "listens to what other people say." Also, for the first three of these items, this model's ratings did not differ significantly from those for the assertive model.

The model demonstrating ineffective social interaction skills received ratings that did not differ significantly from those for the model displaying inconsistent helping strategies for the remaining five questionnaire items. These were: "I like her," "I would like to be friends with her," "fair," "stands up for herself," and "says nice things to other people." The model demonstrating ineffective social interaction skills received ratings that did not differ from those for the unassertive model on the first two of these items. Also, for the first of these items, ratings for the unassertive and unempathic models did not differ from those for the model displaying ineffective social interaction skills.

Ratings for the model displaying assertiveness did not differ significantly from her ratings when she demonstrated unassertiveness for seven of the ten questionnaire items. The assertive models' ratings were significantly higher than when she was unassertive on one item, "stands up for herself". The model displaying assertive behavior was rated significantly lower than when she demonstrated unassertiveness for two items: "fair" and "gets along with other people".

The models demonstrating deficits in the areas of empathy, helpfulness, positive reinforcement, and assertiveness received ratings that did not differ significantly from each other on nine of the ten questionnaire items. These results parallel those for social skill behaviors. These behavioral deficits appear not to have differential effects on children's perceptions of female peers' social skillfulness or their interpersonal reactions to these peers.

Differences among subjects' ratings of the models deficient in assertiveness, empathy, helpfulness, and positive reinforcement were obtained for one item. This was: "says nice things to other people." The model failing to demonstrate positive reinforcement received significantly higher ratings than the models displaying deficits in empathy, assertiveness, and effective social interaction for

this item. However, this model's ratings did not differ significantly from those for the model displaying inconsistent helping strategies on this item.

CHAPTER IV

DISCUSSION

Results of this investigation suggest that, with the exception of assertiveness, male and female children respond more favorably to socially skilled female peers than to socially deficient female peers. Also, sex appears to influence children's interpersonal reactions to female peers, but not their perception of these peers' social skillfulness.

Effects of Overall Social Skillfulness

Results of this study supported the experimental hypothesis regarding overall social skillfulness. Socially skilled videotape models indeed received more favorable ratings than the socially deficient models. These differences were obtained for all ten questionnaire items. Results of the Gottman et al. (1975) study suggest that children who demonstrate effective social interaction skills, one of the social skill behaviors explored in the present study, tend to be well-accepted among peers. Also, Green et al. (1980) demonstrated positive associations among a number of positive interactive behaviors, and likability ratings. Thus, results of this investigation are consistent with previous research findings. Moreover, these results suggest a causal relationship between consistent

helping strategies, assertiveness, empathy, effective social interaction skills, and positive reinforcement as a group, and peer's ratings of interpersonal skillfulness and likability for children. In other words, these five social skills behaviors collectively appear to have positive effects on children's peer acceptance.

The overall differences between subjects' ratings of the socially skilled versus socially deficient models were highly significant. The results provide strong support for the hypothesized positive effects of social skillfulness on peer acceptance and judgments of interpersonal skillfulness among children. Of course, the experimental conditions in this study were highly artificial. Generalizations to children's friendship choices and acceptance of peers in natural settings based on these results must be made with caution.

Effects of Assertive Behavior

Another hypothesis that the results of this investigation supported was the predicted effect of assertiveness on children's judgments relative to those based on the other social skill behaviors. The assertive model received significantly lower ratings than the models demonstrating consistent helping strategies, empathy, effective interaction skills, and positive reinforcement for

nine of the ten questionnaire items. The effects of assertive behavior on interpersonal judgments were not compared to those of other social skill behaviors in the Kelly et al. (1982) study.

Subjects in the present study may have rated the assertive model relatively unfavorably for several reasons. First of all, the assertive situation illustrated in this study involved a girl expressing dissatisfaction with, and requesting a change of, another girl's behavior. The assertive model's ratings may have been higher if she had demonstrated positive forms of assertion, such as making requests or responding to compliments assertively.

Another hypothesis regarding subjects' unfavorable ratings of the assertive model is that subjects may have failed to perceive this girl as respecting others' rights. Rather, she may have been seen as insensitive to the other girl's feelings as she expressed her own feelings. Again, if assertive behavior had been comprehensively represented in the videotape scene, showing "positive" as well as "negative" assertion, the assertive model may have been positively viewed.

An unexpected finding in the present study was the overall lack of differences between subjects' ratings of the assertive model and her unassertive counterpart. For seven

of the ten questionnaire items, ratings based on this model's assertive versus unassertive behavior did not differ significantly. The assertive model's ratings for "stands up for herself" were significantly higher than when whe demonstrated unassertiveness. This result is consistent with the primary feature of assertive behavior and provides further evidence that this variable was successfully manipulated.

However, the assertive model's ratings were significantly lower that those of her unassertive counterpart for two items. These were: "fair," and "gets along with other people." These results are consistent with the findings of the Kelly et al. (1982) study. These authors found that unassertive male adults received higher ratings than assertive males on a number of interpersonal dimensions very similar to these two items. The subjects in the present study may not have viewed the assertive model as responding to others in a "fair" fashion although they appear to have seen her as "fair" to herself. This model's ratings did not differ significantly from three of the other socially skilled models' for one item. This was "stands up for herself".

Assertiveness appears to be considered a component of social skills as viewed by adults (MacDonald & Cohen, 1981.) Also, the adult judges involved in the manipulation check in the present study rated the assertive model as significantly more socially skilled than the unassertive model. A discrepancy seems to exist among global and specific interpersonal judgments and interpersonal reactions to assertive behavior. Perhaps children and adults admire and respect assertive people on some level, yet at the same time, respond negatively to them.

Another explanation for the apparently widespread negative reactions to assertive people may be related to their nonverbal behavior. Verbal assertion may not be positively viewed by many people. However, the nonverbal behaviors associated with assertiveness, such as smiling and eye contact, may elicit positive interpersonal reactions. In this view, subjects' negative reactions to the assertive model in the present study may be based on a perceived inconsistency between her verbal and nonverbal behavior.

The videotape models in this study demonstrated both verbal and nonverbal social skill behaviors or deficits. Therefore, the relative effects of the videotape models' verbal and nonverbal behaviors on subjects' responses cannot be determined from these data. Future research on children's social skills should explore comparisons among

the effects of children's verbal and nonverbal social skill behaviors on peer acceptance and judgments of interpersonal skillfulness. Future studies of children's and adults' interpersonal reactions to social skill behaviors should also focus on the effects of incongruent verbal and nonverbal behavior on acceptance and likability ratings as well as judgments of interpersonal skills.

Effects of Specific Social Skill Behaviors

Although the assertive model received significantly lower ratings than the other four socially skilled models on most of the items, ratings for these other four models did not differ from each other significantly. The only exception was for "stands up for herself". On this item, the model demonstrating effective social interaction skills received significantly lower ratings than the other four socially skilled models.

Reasons for this lack of differences among ratings for the socially skilled models are not clear. As mentioned earlier, these social skill behaviors may not differentially affect children's interpersonal reactions to female peers or their perceptions of these peers' interpersonal skillfulness. The common factor underlying the similarity of the ratings for the socially skilled models may be related to their nonverbal behavior. All five of the

socially skilled models maintained eye contact, smiled, and spoke in a clear audible voice when interacting with the other girl in the videotape scene. However, they each demonstrated different verbal social skill behaviors. Subjects may have responded similarly to these models based on their nonverbal social skill behaviors.

Another reason for the lack of differences among subjects' ratings of the socially skilled models may have been ineffective manipulation of the within-groups independent variables. In other words, the socially skilled models as a group indeed demonstrated a higher level of social skills than the socially deficient models. However, the similarities among their behaviors may have outweighed the differences. Also, the differences accounted for by assertive behavior may have obscured differences among the other four areas of social skill behavior.

In addition, the lack of differences among subjects' judgments of the socially skilled models may indicate that the dependent measure was not sufficiently sensitive to reflect differential effects of the various behaviors. On the surface, differences among subjects' ratings for each model on specific questionnaire items might be expected. For example, the model who displayed positive reinforcement of another person would be expected to receive the highest ratings for the item "says nice things to other

people." Although this result was obtained, differences between this model's and the other socially skilled models' ratings were not significant for this item (with the exception of assertiveness.)

Likewise, the model demonstrating consistent helping strategies received the highest ratings on the second item ("helpful") as would be expected. However, these differences again were not significant. Similar patterns were obtained for the empathic model's ratings for "cares about other people" and the assertive model's ratings for "stands up for herself."

These specific differences among subjects' ratings of each model may have reached significance if a seven-point, rather than a five-point Likert scale had been employed in this study. The problem with lengthening the scale is that children at these ages are not likely to give reliable responses on such a scale.

Another problem with the questionnaire may have been the wording of the anchor points on the scale. At the extremes, a rating of "1" corresponded to "not at all" while "5" corresponded to "very much." Problems may have arisen for ratings of "2" ("not much"), "3" ("not sure") and "4" ("some" or "sometimes"). Subjects may have confused these three points on the Likert scale. Perhaps using smiling

faces instead of words to mark the anchor points, as Gresham (1981) discusses, would have circumvented this problem.

The wording of the questionnaire items may be another factor affecting the results of this study. The lack of differences among subjects' ratings of the socially skilled models may have reflected their understanding of the words and phrases on the questionnaire. The meaning of "fair" or "says nice things to other people" may have been different for each subject. The within-groups variability may thus have outweighed differences among ratings based on each of the social skill behaviors. Future research should explore children's understanding of various interpersonal attributes.

Finally, the lack of differences among ratings of the socially skilled models may have been a result of the design of the experiment. Each subject viewed five videotape models and completed a questionnaire for each one. Although the children made their ratings after viewing each scene, a response set may have influenced their answers. Randomizing the order of presentation of the five scenes would not necessarily control for biasing effects of early reponses on subsequent answers. Perhaps differences would have been obtained if each social skill behavior had been a separate, between-groups variable.

Effects of Social Skills Deficits

The pattern of results for the ratings of the socially deficient models paralleled that for the socially skilled models. That is, subjects' ratings for the five videotape models demonstrating social skills deficits in general did not differ significantly. One exception to the overall finding of similar ratings for all socially deficient models was the pattern of ratings for the model displaying deficits in the abilities to initiate, maintain, and end social interactions. This model received significantly lower ratings than the other socially deficient (as well as the socially skilled) models for half of the questionnaire items. These were "cares about other people," "gets along with other people," "friendly," "helpful," and "listens to what other people say." Perhaps subjects' associated the inability to carry on a conversation with these areas of interpersonal skills. This model exhibited a relatively low rate of interaction in the videotape scene. The subjects may thus have seen her as lacking in these interpersonal skills.

The model who demonstrated deficits in interaction skills received ratings that did not differ significantly from those for the model displaying inconsistent helping strategies for the five items not mentioned above. Also, this model and the assertive model received equally low

ratings for three items: "cares about other people," "gets along with other people," and "friendly." Reasons for these patterns of findings are not clear and may reflect effects of similarities and differences of nonverbal social skills deficits.

Interpretations of the overall lack of differences among ratings of the socially deficient models generally parallel those for the similarities among ratings of the socially skilled models. These five areas of social skills deficits may have similar effects on children's perceptions of female peers' social skillfulness as well as on their interpersonal reactions to these peers. The socially deficient models may have demonstrated similarities in their nonverbal behavior, as mentioned above, that outweighed differences in ratings of their verbal behavior. The hypothesized problems with the dependent measure may have affected subjects' ratings of the socially deficient models as well as the socially skilled models. Finally, exploring the effects of these behavioral variables may best be done in a between-groups design.

A problem unique to the social skill deficits that may be partially responsible for the lack of differences in these ratings, is that these behaviors were not clearly defined. Each socially deficient model demonstrated a deficit in a particular area of behavior. However, the

behaviors that these models did exhibit, both verbally and nonverbally, were not necessarily specific to their particular social skills deficit. Therefore, the verbal as well as nonverbal behaviors may have been perceived as similar across the five scenes in which social skills deficits were illustrated.

Sex Differences

Finally, results of this study partially supported the experimental hypothesis regarding sex differences. Significant differences between male and female subjects' responses were obtained for three questionnaire items and the attractiveness ratings. Female subjects rated the female videotape models as significtantly more friendly, liked them more, and wanted to be friends with them more than male subjects. Responses to these three items may be determined, in large part, by subjects' interpersonal reactions to the videotape models. These items appear to correspond to those on commonly used sociometric measures. Masters and Furman (1981) found that children named same-sex classmates as their friends more frequently and liked them more than opposite-sex classmates. Thus, the sex differences obtained in the present study are consistent with results of a previous study in this area.

Contrary to the experimental hypothesis, sex differences were not demonstrated for subjects' responses for the majority of the questionnaire items. The three items mentioned above appear to correspond to subjects' interpersonal reactions to the models. In contrast, the remaining items required subjects to make judgments about the models' interpersonal skills. Perhaps sex differences were not obtained for these items because subjects' apparent preference for friends of the same sex did not affect these judgments. Future research in this area should explore variables affecting children's judgments of peer's interpersonal skills.

Somewhat surprisingly, sex differences were obtained for subjects' attractiveness of the videotape models. Again, female subjects rated the models as being significantly more attractive than the male subjects did. Sex differences in children's pperceptions of peer's attractiveness have not been extensively explored in psychological research on children's social skills. One interpretation of these differences is that the question "how pretty do you think this girl is?" may have elicited subjects' interpersonal reactions to the models. Thus, these findings would be consistent with the sex differences obtained for the three items described above. In addition, this interpretation of subjects' attractiveness of the

models is consistent with results the Masters and Furman (1981) study.

Summary and Implications

In summary, results of the present study supported the major experimental hypotheses. The socially skilled models, as a group, received significantly higher ratings than the socially deficient models on all ten questionnaire items. Also, the assertive model received significantly lower ratings than the other four socially skilled models as predicted. Finally, the predicted sex differences were obtained for three of the ten questionnaire items, and unexpectedly, for the attractiveness ratings of the videotape models.

In general, significant differences among ratings for the groups of socially skilled and socially deficient models were not obtained. Possible reasons for the similarities for ratings across the within-groups variables may be the models' nonverbal behavior, insensitivity of the dependent measure and the experimental design.

Clearly, more research is needed exploring the effects of children's social skills on peers' judgments of interpersonal skillfulness and peer acceptance. Future studies in this area should examine the effects of the following factors on peers' judgments of children's

interpersonal skillfulness and acceptance: (1) physical attractiveness, as judged by peers, (2) sex differences in children's judgments of other children, (3) the differential effects of verbal and nonverbal social skill behavior, (4) the effects of congruent versus incongruent verbal and nonverbal social skill behavior, (5) the differential effects of "positive" versus "negative" assertion, and (6) comparisons among different areas of social skill behaviors.

In addition, effects of different stimulus materials should be explored in future research. For example, children might interact with socially skilled versus socially deficient peers in role plays and then express their reactions to these role play partners. This procedure was employed by Hull and Schroeder (1979). In this study, female adults behaved assertively, unassertively, or aggressively toward subjects, who then rated these women on a number of interpersonal dimensions.

Exploring the effects of children's social behavior on peer acceptance in an experimental design has important implications for social skills training for unpopular children. Before assuming that children's acceptance among peers can be improved through behavioral training programs, a causal relationship between children's behavior and peer's reactions to them must be established. Results of the present study provide some evidence for such a relationship.

REFERENCES

Asher, S. R., Markel, R. A., & Hymel, S. Identifying children at risk in peer relationships: A critique of the rate-of-interaction approach to assessment. Child Development, 1981, 52, 1239-1245.

Bornstein, M. R., Bellack, A. S., & Hersen, M. Social skills training for unassertive children: A multiple baseline analysis. Journal of Applied Behavior Analysis, 1977, 10, 183-195.

Cartledge, G. & Milburn, J. F. Teaching social skills to children, New York: Pergammon Press, 1980.

Cross, J. F. & Cross, J. Age, sex, race, and the perception of facial beauty. Developmental Psychology, 1971, 5, 433-439.

Furman, W. Promoting appropriate social behavior: A developmental perspective. In B. Lahey and A. Kazdin (Eds.), Advances in child clinical psychology (Vol. 3). New York: Plenum, 1980.

Gottman, J., Gonso, J., & Rasmussen, B. Social interaction, social competence, and friendship in children. Child Development, 1975, 46, 709-718.

Gottman, J., Gonso, J., & Schuler, P. Teaching social skills to isolated children. Journal of Abnormal Child Psychology, 1976, 4, 179-197.

Green, D., Forehand, R., Beck, S. J., & Vosk, B. An assessment of the relationship among measures of children's social competence and children's academic achievement. Child Development, 1980, 51, 1149-1156.

Gresham, F. Validity of social skills measures for assessing social competence in low status children: A multi-variate investigation. Developmental Psychology, 1981, 17, 390-398.

Hops, H. & Greenwood, C. R. Social skills deficits. In E. J. Mash and L. G. Terdal (Eds.), Behavioral assessment of childhood disorders, New York: Guilford, 1981.

Hull, D. B. & Schroeder, H. E. Some interpersonal effects of assertion, nonassertion, and aggression. Behavior Therapy, 1979, 10, 20-28.

Kazdin, A. Research design in clinical psychology. New York: Harper & Row, 1980.

Kelly, J. A., St. Lawrence, J. S., Bradlyn, A. S., Himadi, W. G., Graves, K. A. & Keane, T. M. Interpersonal reactions to assertive and unassertive styles when handling social conflict situations. Journal of Behavior Therapy and Experimental Psychiatry, 1982, 11, 1-8.

Kohn, M. & Rosman, B. C. Relationship of preschool social-emotional functioning to later intellectual achievement. Developmental Psychology, 1972, 11, 445-452.

Ladd, G. W. & Oden, S. L. The relationship between peer acceptance and children's ideas about helpfulness. Child Development, 1979, 50, 402-408.

Langlois, J. H. & Stephan, C. The effects of physical attractiveness and ethnicity on children's behavioral attributions and peer preferences. Child Development, 1977, 48, 1694-1698.

Lerner, R. M. & Lerner, J. V. Effects of age, sex, and physical attractiveness on child-peer relations, academic performance, and elementary school adjustment. Developmental Psychology, 1977, 13, 585-590.

MacDavid, J. W. & Harari, H. Stereotyping of names and popularity in gradeschool children. Child Development, 1966, 37, 453-459.

MacDonald, M. L. & Cohen, J. Trees in the forest: Some components of social skills. Journal of Clinical Psychology, 1981, 37, 342-347.

Masters, J. C. & Furman, W. Popularity, individual friendship selection, and specific peer interaction among children. Developmental Psychology, 1981, 17, 344-350.

Michelson, L., Foster, S. L., & Ritchey, W. L. Social skills assessment of children. In B. Lahey and A. Kazdin (Eds.), Advances in clinical child psychology, (Vol. 4). New York: Plenum, 1981.

Michelson, L. & Wood, R. Behavioral assessment and training of children's social skills. In M. Hersen, P. Miller, and R. Eisler (Eds.), _Progress in Behavior Modification_, (Vol. 9). New York: Academic Press, 1980.

Ollendick, T. H. Assessment of social interaction skills in children. _Behavioral Counseling Quarterly_, 1981, 1, 227-243.

Pekarik, E. G., Prinz, R. J., Liebert, D. E., Weintraub, S., & Neale, J. M. The Pupil Evaluation Inventory: A sociometric technique for assessing children's social behavior. _Journal of Abnormal Child Psychology_, 1976, 4, 83-97.

Salvia, J., Sheare, J.B., & Algozzine, B. Facial attractiveness and personal-social development. _Journal of Abnormal Child Psychology_, 1975, 3, 171-178.

Van Hasselt, V., Hersen, M., & Bellack, A. The validity of role play tests for assessing social skills in children. _Behavior Therapy_, 1981, 12, 202,-216.

Vogrin, P. & Kassinove, H. Effects of behavior rehearsal, audiotaped observation, and intelligence on assertiveness and adjustment in third grade children. _Psychology in the Schools_, 1979, 16, 422-427.

Appendix A

Scripts of Videotape Scenes

Instructions to Subjects

Dependent Measure

Consistent Versus Inconsistent Helping Strategies

A girl's classmate approaches her during a class work period and says:

"I just can't figure out how to do these math problems. Can you help me?"

Consistent Helping Behavior

Girl: "I'll try my best. Which ones are the hardest for you?"

Classmate: "Number three. How do you do that one?"

Girl: "Let's do number three together, okay?" 5 x 3 is the same as 5 + 5 + 5. How much does that equal?"

Classmate: "Fifteen."

Girl: "Right. Now 3 x 4 would be 3 + 3 + 3 + 3 -- four threes! How much is that?"

Classmate: "Twelve."

Inconsistent Helping Behavior

Girl: "Well, I guess so. What do you want?"

Classmate: "I just can't figure out these times problems. Like number three. How do you do that one?"

Girl: "Well, 5 x 3 equals fifteen."

Classmate: "Oh."

Girl: "There. Why don't you try it again."

Assertive Versus Unassertive Behavior

A girl's friend returns a book that she had borrowed from the girl. The friend says:

"I'm sorry that I didn't give this book back to you yesterday like I promised. Here it is now."

Assertive Behavior

Girl: "I wish that you gave it back to me yesterday like you said you would because I needed it last night."

Friend: "Oh, I would have given it back yesterday but I gave it to Karen to look at too. I thought that it would be okay with you."

Girl: "It's not okay for you to let Karen borrow my book without asking me first. From now on, I wish you would check with me first about these things."

Unassertive Behavior

Girl: "Oh well, better late than never. I should have told you about giving it back yesterday."

Friend: "Oh, I would have given it back yesterday but I gave it to Karen to look at too. I thought that it wold be okay with you."

Girl: "Well...I guess it's okay for you to let Karen borrow my book. It doesn't matter -- that's okay."

Empathic Versus Unempathic Behavior

A girl and her friend are together after a softball game, which they lost. The friend is very upset about striking out in the last inning. The friend says:

"Those kids on the other team are making fun of me 'cause we lost the game!"

Empathic Behavior

Girl: "April, I know you're feeling bad about losing the game. I feel bad, too. We tried our best, though."

Friend: "It's all my fault that we lost because I struck out in the last inning!:

Girl: "You're really upset about striking out, huh?"

Friend: "Yeah!"

Girl: "Don't feel bad about losing today, April. Lots of us struck out in the game. You weren't the only one."

Unempathic Behavior

Girl: "Yeah, I saw them making faces and saying mean things about our team."

Friend: "It's all may fault that we lost because I struck out in the last inning!"

Girl: "Striking out sure didn't help. Maybe you could get some extra batting practice before our next game."

Effective Versus Ineffective Social Interaction

(Initiating, Maintaining, and Ending Interactions)

A girl and a classmate are talking after school.

Effective Interaction

Girl: "Hi, Kim. How are you?"

Friend: "Real good. We finally finished the newspaper project we were working on. It came out great!"

Girl: "That sounds like fun! How many people worked on it?"

Friend: "Eight of us worked on it together. It should be out tomorrow for everyone to see."

Girl: "That sounds like it was a neat project. I have to get on the bus now. I'll see you tomorrow. Maybe we can talk about it then. 'Bye Kim!"

Ineffective Interaction

Girl: Says nothing.

Friend: "We finally finished the newspaper project we were working on. It came out great!"

Girl: "Oh...yeah. Do you know what time the assembly ends today?"

Friend: "2:15, I think. Anyway, eight of worked on the newspaper together. It should be out tomorrow for everyone to see."

Girl: Long pause. "I think my bus is here." She leaves.

Positive Versus No Reinforcement

A girl and her classmate are working on an art project. The classmate has made a beautiful picture of a bird. She proudly shows it to the girl.

The classmate says:

"I'm finished with my picture of the bird. I've really been working hard on this."

Positive Reinforcement

Girl: "You really did a good job on your project Kathy. It's a beautiful picture."

Classmate: "I wonder if I should enter this in the art fair."

Girl: "Oh yes, you should, Kathy. You're a good artist and you could probably win an award for that picture."

No Reinforcement

Girl: "Oh yeah. I'm almost finished, too. Mine's going to be a fish."

Classmate: "I wonder if I should enter this in the art fair."

Girl: "I guess you could. I think that a lot of kids are going to enter things in the fair this year."

Instructions to Subjects

The classroom teacher introduces the experimenter:

"This is Ann Horstman. She is a student at the University and she is doing a project about freindship-making."

The experimenter then explains the procedures to the students.

"Hi. I'm glad that you are all going to help me with my project. I want to learn some reasons why children your age like or don't like other kids.

"I am going to be working with two of you at a time down in the orchestra room. You will each be watching five short videotapes on a TV screen. On these tapes, you will see girls your age showing how they handle different situations with other kids. After you watch each girl, you will answer some questions about her. I am passing out a copy of the questions that you will be answering."

The experimenter then hands out a copy of the dependent measure to each subject. She continues with the explanation of the procedures.

"Let's all do an example together. Imagine that you see a girl go up to a new girl at school. She says: "Hi, my name is Amy. What's yours?" Then she asks the new girl what she likes to do. Finally, Amy invites the new girl to play with her and her friends.

"Now look at the paper that I handed out to you. For now, we are going to skip the first two questions at the top of the page. Let's skip down to where it says: "Do you think this girl." Question number 1 says "is friendly." I want to know how friendly you think Amy is. If you think that she is very friendly, then you would circle the number 5 under the word "very" that is across from "friendly." If you think Amy is "some" friendly, then you would circle the number 4 under the word "some." If you're not sure if Amy is friendly or not, then you would circle the number 3 under the words "not sure." If you think that Amy is "not much" friendly, then you would circle the number 2 under the words "not much." If you think Amy is "not at all" friendly, then you would circle the number 1 under the words "not at all." Go ahead and circle one of the numbers under the words across from "friendly." Does anyone have any questions?"

The experimenter circulates through the group of children checking to see if they are filling out the form correctly.

"Now let's do another one together. The next question says: "is helpful." If you think Amy is very helpful, then would circle the number 5. If you think she is some helpful, then you would circle the number 4. If you're not sure if Amy is helpful, then you would circle the number 3. If you think that she is not much helpful, then you circle the number 2. If you think Amy is not at all helpful, then you would circle the number 1. Does anyone have any questions?" You will be answering the rest of the questions in the same way.

"Okay, the first two student to work with me are..."

PLEASE ANSWER THESE QUESTIONS ABOUT THE GIRL IN THIS PICTURE

Do you know this girl?   ___ yes   ___ no

If you answered yes, please explain how you know her _____

How pretty do you think this girl is?	Very 5	Some 4	Not sure 3	Not much 2	Not at all 1

FOR THE REST OF THE QUESTIONS, CIRCLE THE NUMBER UNDER YOUR ANSWER

Do you think this girl:

1.	is friendly	Very 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
2.	is helpful	Very 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
3.	is fair	Very 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
4.	stands up for herself	A lot 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
5.	listens to what other people say	A lot 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
6.	cares about other people	Very much 5	Sometimes 4	Not sure 3	Not Much 2	Not at all 1
7.	gets along with other people	Very well 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
8.	says nice things to other people	A lot 5	Sometimes 4	Not Sure 3	Not Much 2	Not at all 1
9.	I like her	A lot 5	Some 4	Not Sure 3	Not Much 2	Not at all 1
10.	I would like to be friends with her	Very Much 5	Some 4	Not Sure 3	Not Much 2	Not at all 1

Appendix B

Tables and Figures

Table 1

Correlations Between Female Subjects' Attractiveness Ratings
and Responses to Questionnaire Items

Item	Area of Behavior				
	Helpful	Assertive	Empathy	Effective Interaction	Positive Reinforcement
1	-.31	.39	-.17	-.49*	-.27
2	-.18	.62**	-.27	-.39	-.03
3	-.10	-.10	-.15	-.32	.13
4	.09	-.02	.25	.06	-.06
5	-.34	.49*	-.16	-.36	.04
6	.09	.40	-.14	-.45	.12
7	-.04	.30	-.36	-.37	.18
8	-.23	.24	-.27	-.48*	-.10
9	.19	.22	-.08	-.49*	-.003
10	-.05	-.34	.06	-.55*	-.23

*$p < .05$
**$p < .01$
***$p < .001$

Table 2

Correlations Between Male Subjects' Attractiveness Ratings
and Responses to Questionnaire Items

	Area of Behavior				
Item	Helpful	Assertive	Empathy	Effective Interaction	Positive Reinforcement
1	.30	-.10	.53*	.54*	.16
2	.20	.13	.41	.65**	.14
3	.10	.10	.29	.47	.42
4	.45	.21	.09	.37	-.02
5	.19	.24	.13	.55*	.26
6	.06	.34	.04	.52*	.18
7	.04	.09	.42	.37	-.02
8	.05	.07	.48*	.57*	-.05
9	.27	.64**	.75***	.63**	.47*
10	.40	.54*	.53*	.60**	.60**

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

Table 3

Mean Ratings for Socially Skilled Videotape Models

| | Area of Behavior | | | | |
Item	Helpful	Assertive	Empathy	Effective Interaction	Positive Reinforcement
1*	5.00	2.89	4.89	5.00	5.00
1**	4.67	1.89	4.44	4.33	4.78
2	4.89	2.56	4.72	4.28	4.83
3	4.78	3.06	4.56	4.50	4.67
4	3.89	4.33	4.00	3.78	4.11
5	4.78	3.28	4.61	4.56	4.83
6	4.83	2.50	4.83	4.61	4.72
7	4.78	2.67	4.78	4.67	5.00
8	4.78	2.44	4.72	4.61	4.94
9*	4.78	2.78	4.78	4.67	4.78
9**	3.11	1.89	3.11	2.89	3.44
10*	4.89	3.11	4.44	4.89	4.67
10**	3.22	1.78	3.22	3.00	3.11

* female subjects' ratings
** male subjects' ratings

Table 4

Mean Ratings for Socially Deficient Videotape Models

	Area of Behavior				
Item	Helpful	Assertive	Empathy	Effective Interaction	Positive Reinforcement
1*	3.11	3.56	3.44	2.00	3.78
1**	3.11	2.67	3.00	2.00	3.33
2	3.38	3.17	3.00	1.94	3.61
3	2.50	3.39	3.28	2.06	3.22
4	3.38	3.78	3.72	2.61	3.72
5	3.67	3.50	4.17	1.72	3.94
6	3.22	2.83	3.06	1.94	3.33
7	3.83	3.33	3.22	2.56	3.83
8	3.39	2.78	2.50	1.89	3.56
9*	2.89	3.11	3.44	2.78	3.33
9**	2.11	2.00	1.89	1.22	2.56
10*	2.67	2.78	3.33	2.11	3.11
10**	2.11	1.67	2.33	1.22	2.33

* female subjects' ratings
** male subjects' ratings

Figure 1. Female subjects' ratings for item #1: "friendly"
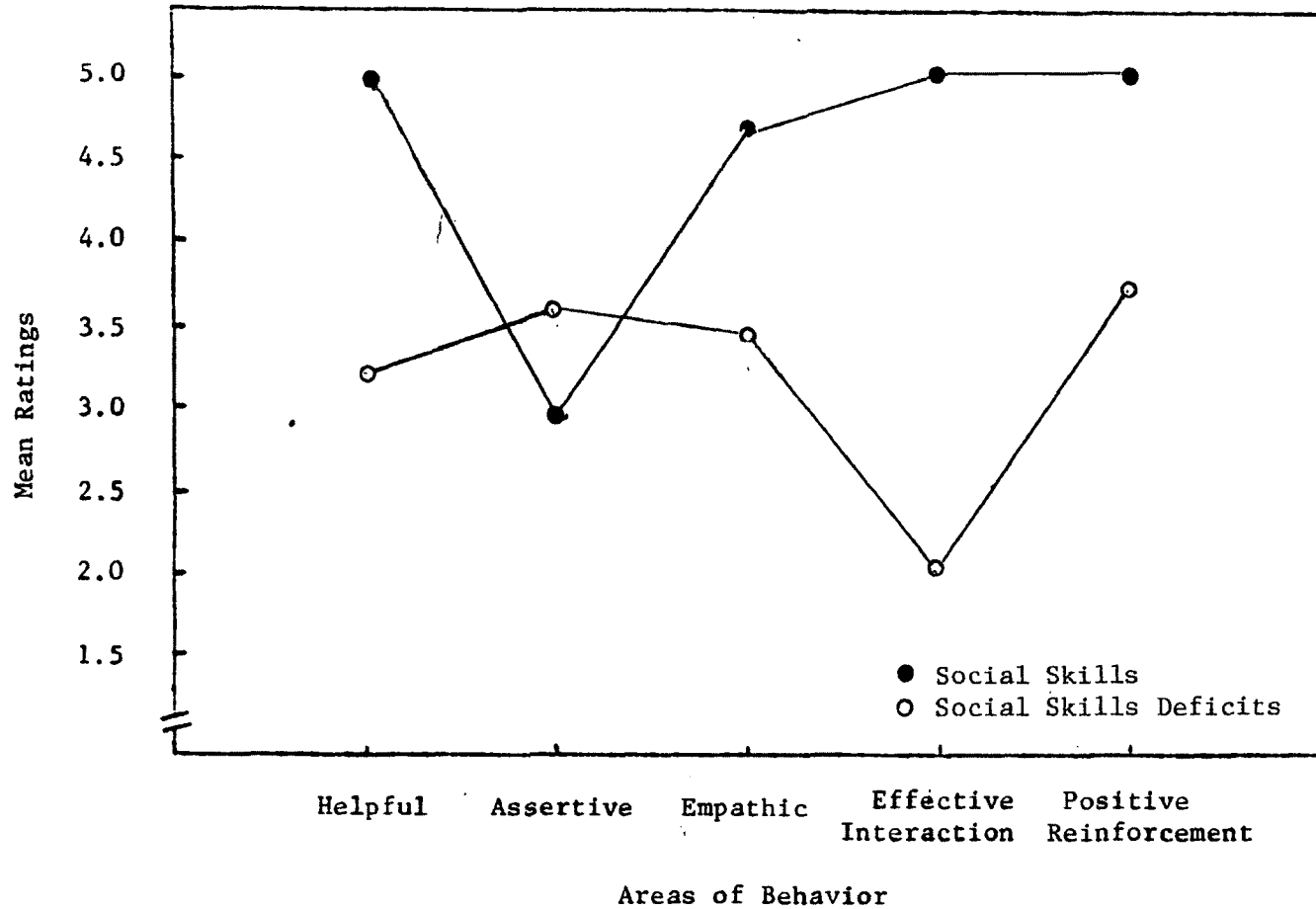
Figure 2. Male subjects' ratings for item #1: "friendly"
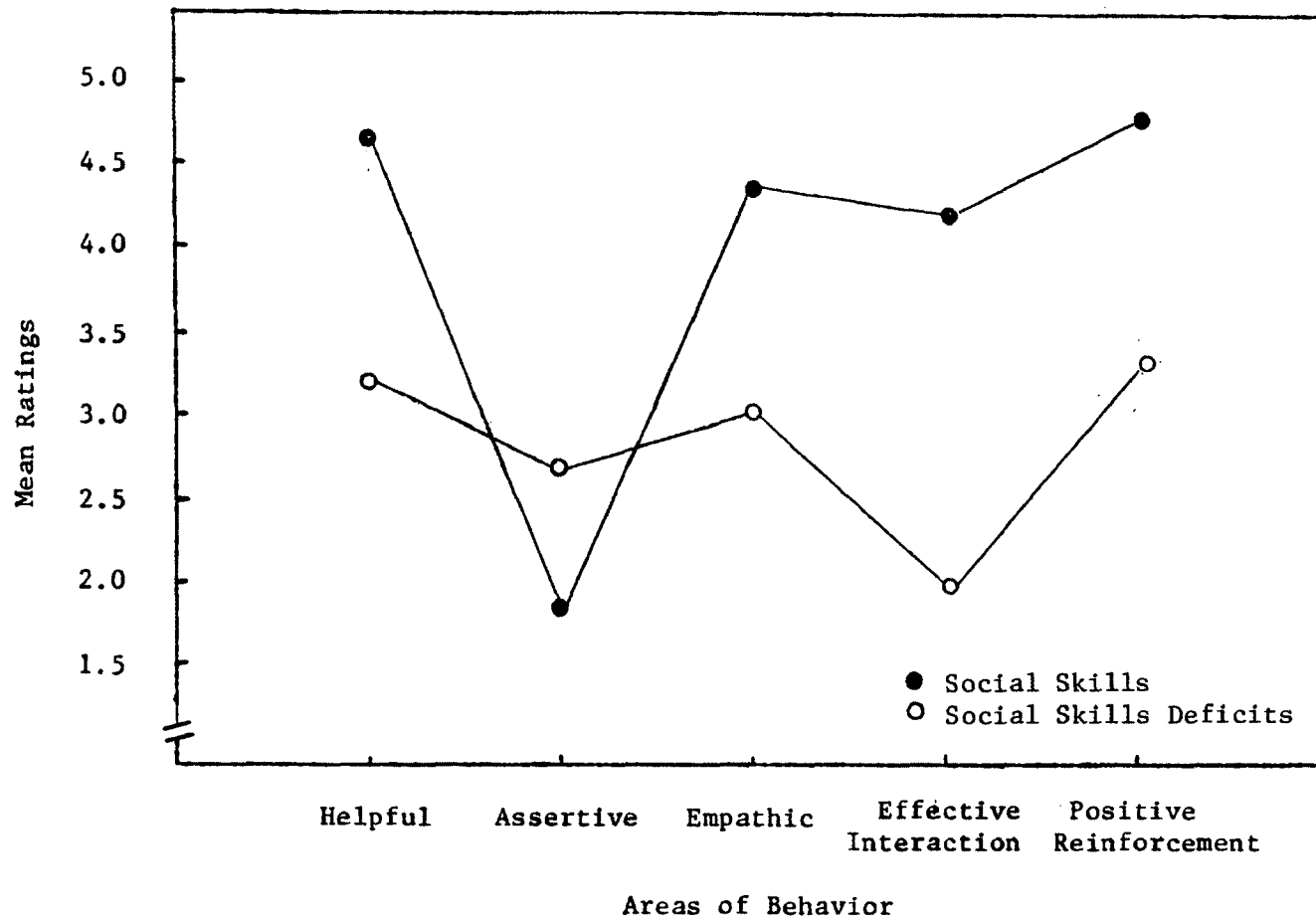
Figure 3. Subjects' ratings for item #2: "helpful"
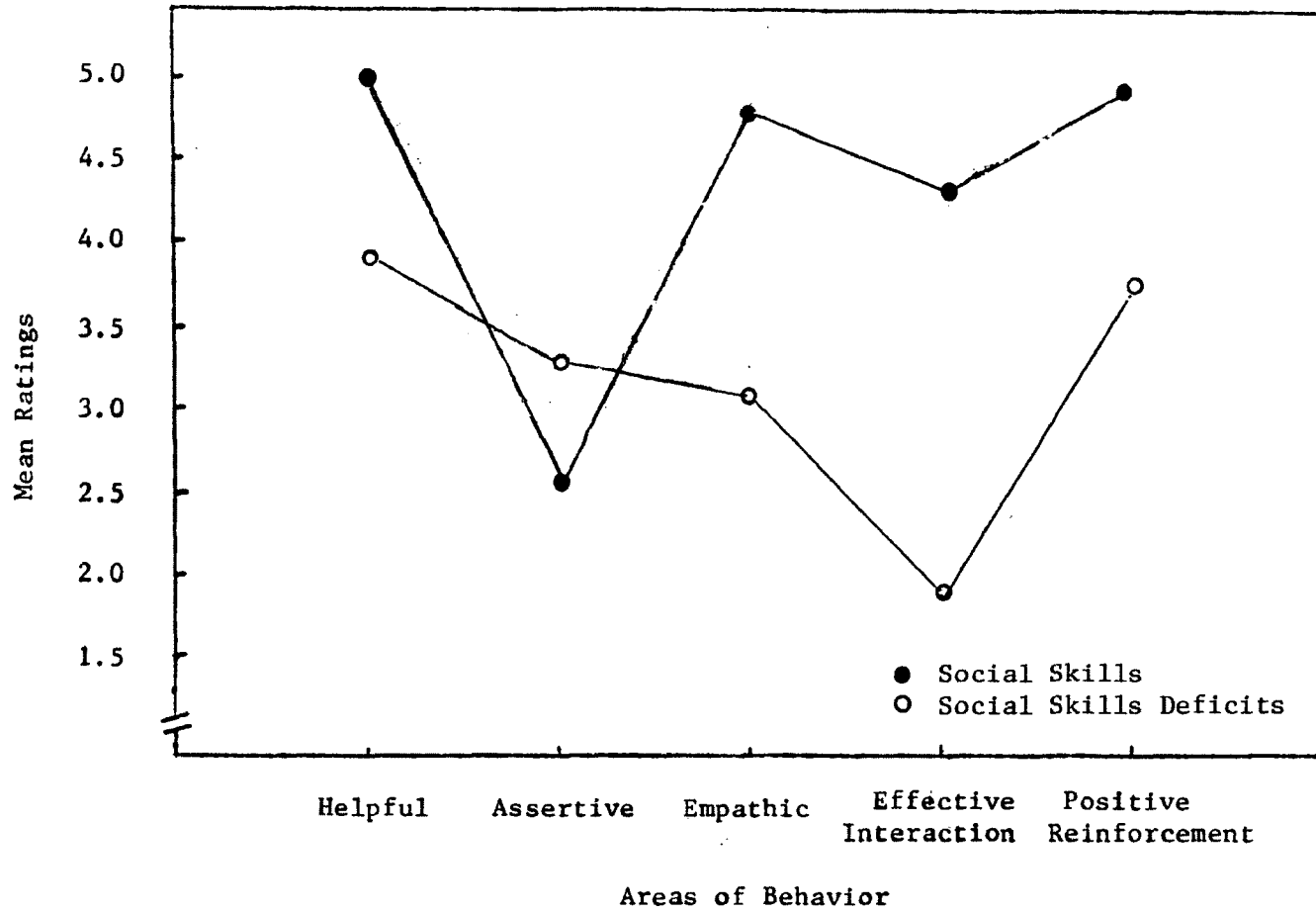
Figure 4. Subjects' ratings for item #3: "fair"
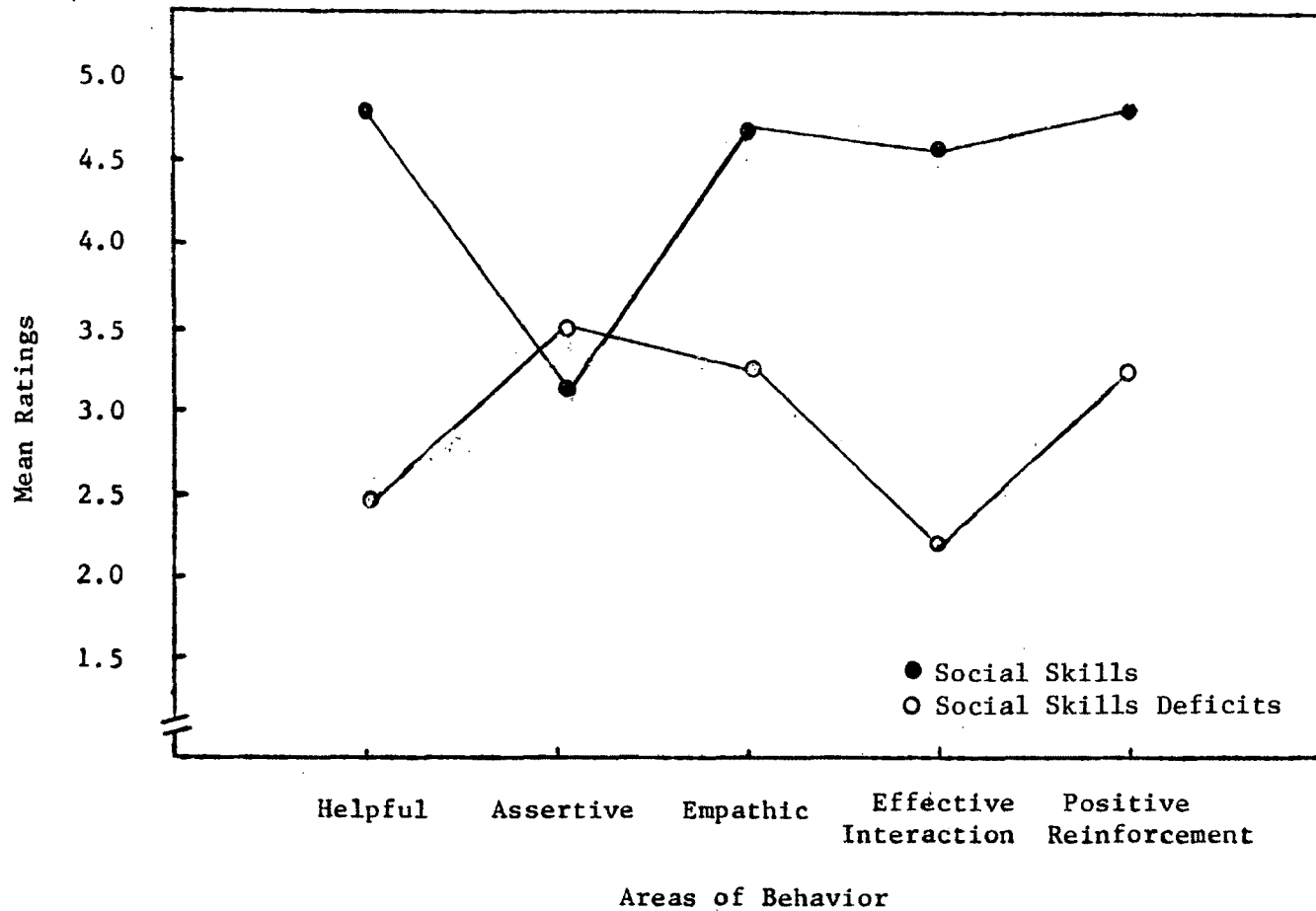
Figure 5. Subjects' ratings for item #4: "stands up for herself"
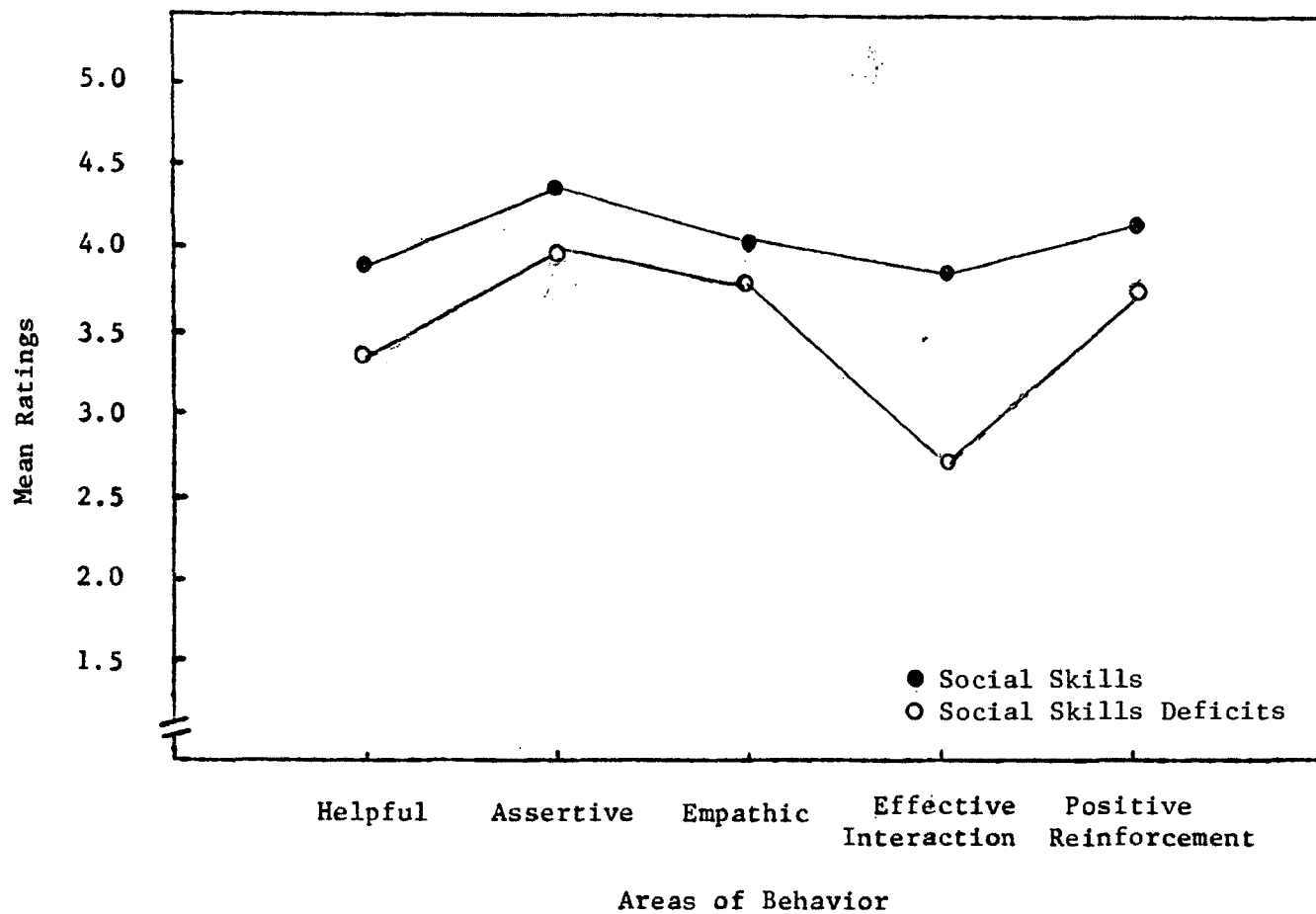
Figure 6. Subjects' ratings for item #5: "listens to what other people say"
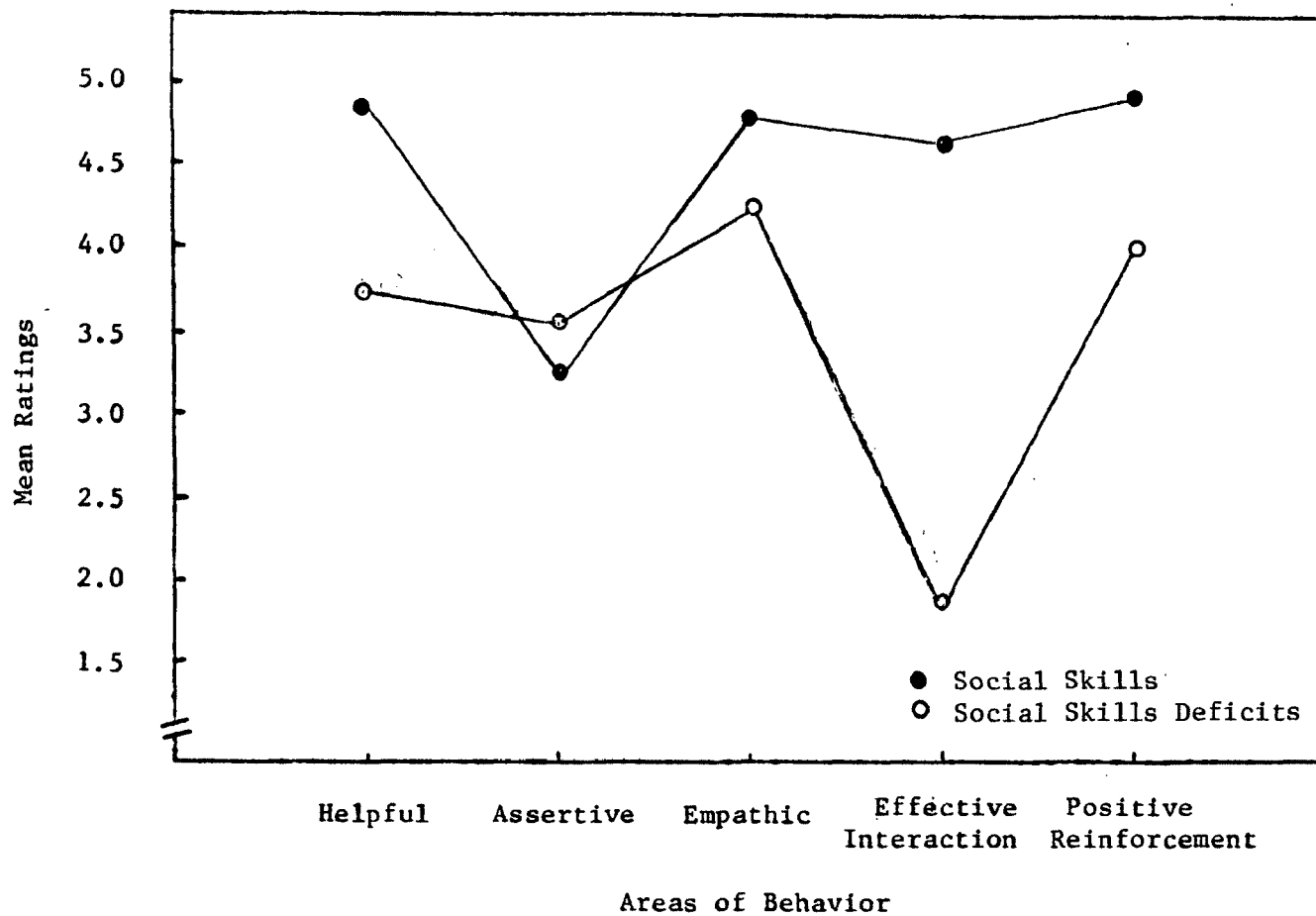
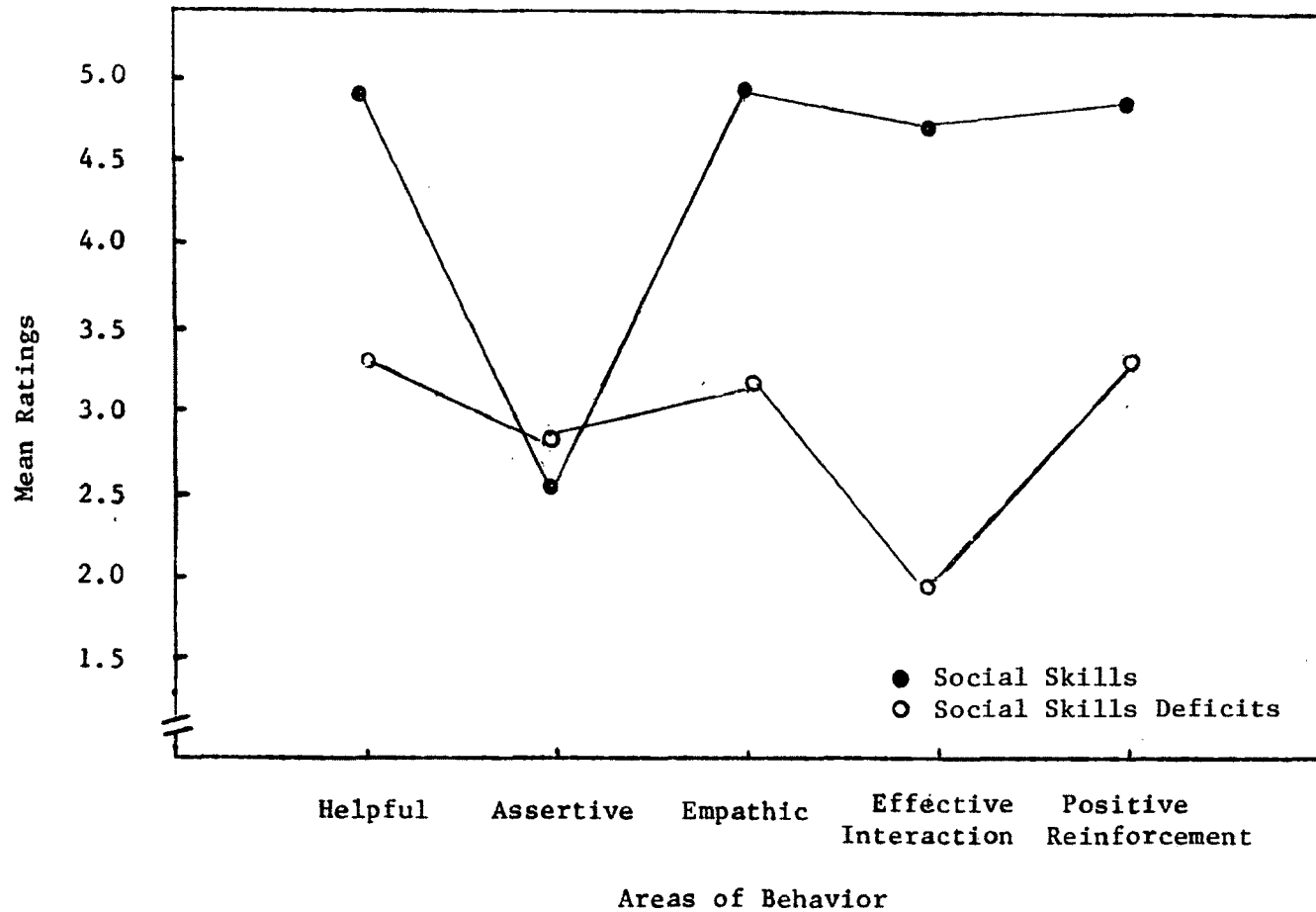Figure #7. Subjects' ratings for item #6: "cares about other people"
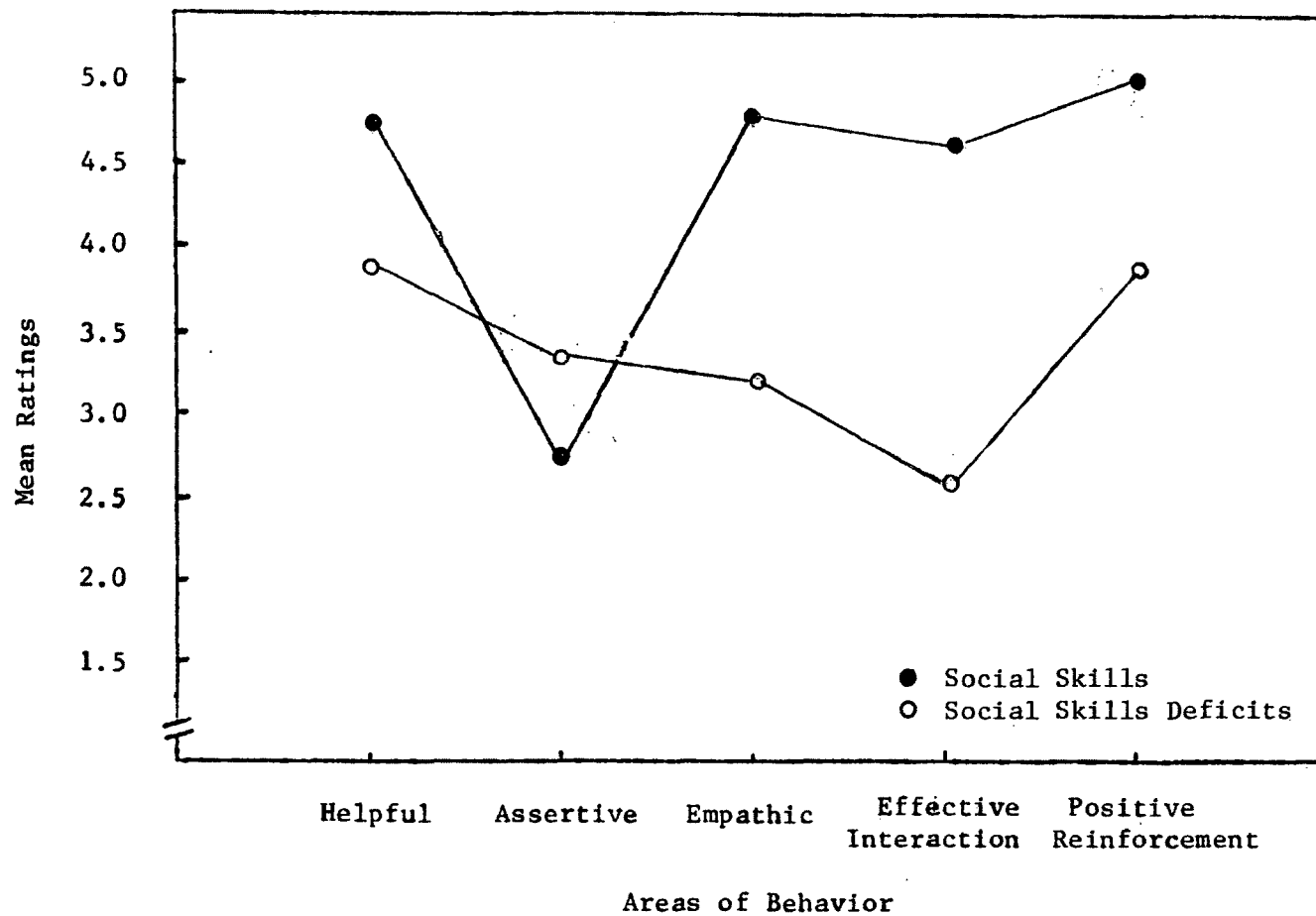
Figure 8. Subjects' ratings for item #7: "gets along with other people"

Figure 9. Subjects' ratings for item #8: "says nice things to other people"
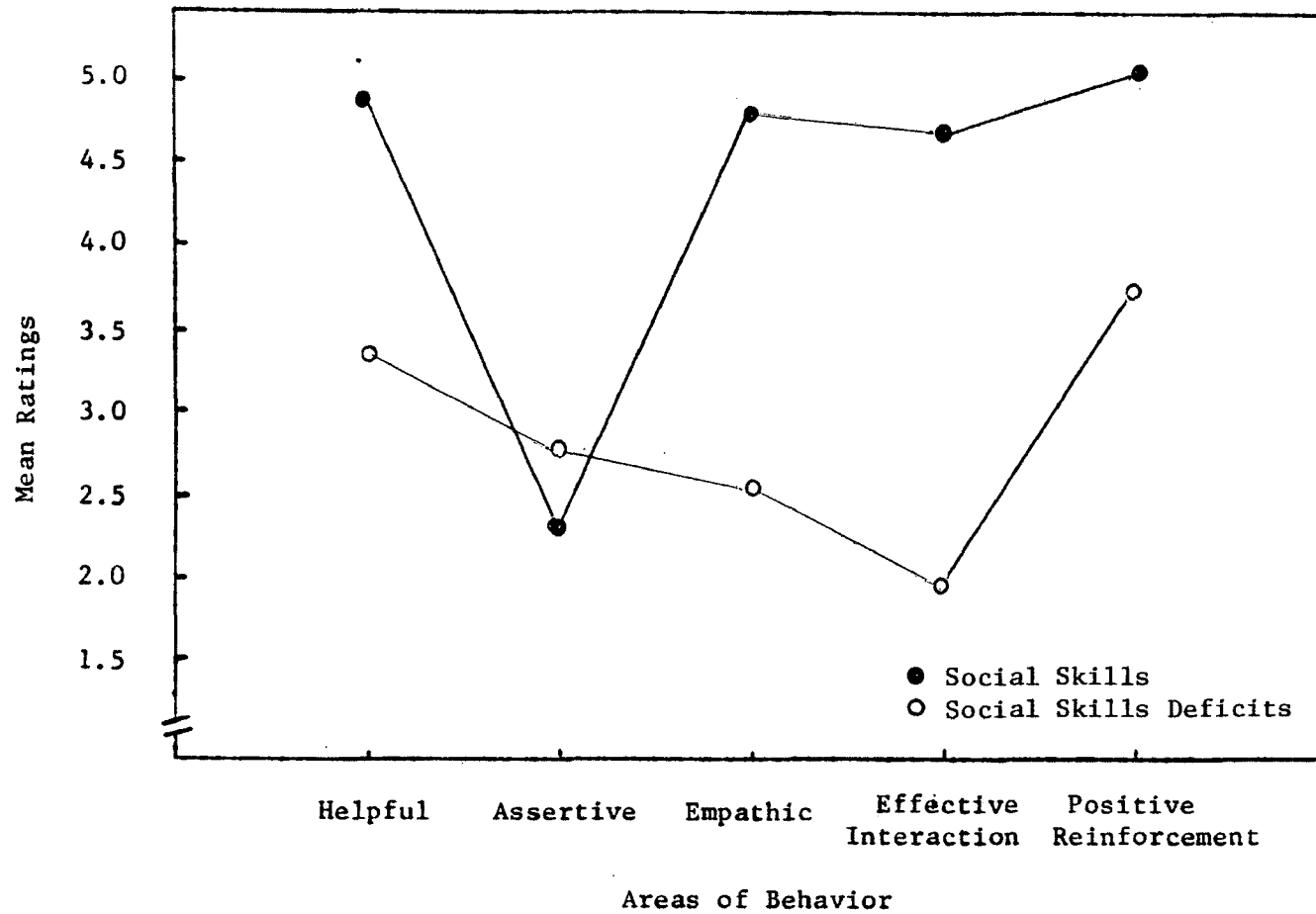
Figure 10. Female subjects' ratings for item #9: "I like her"
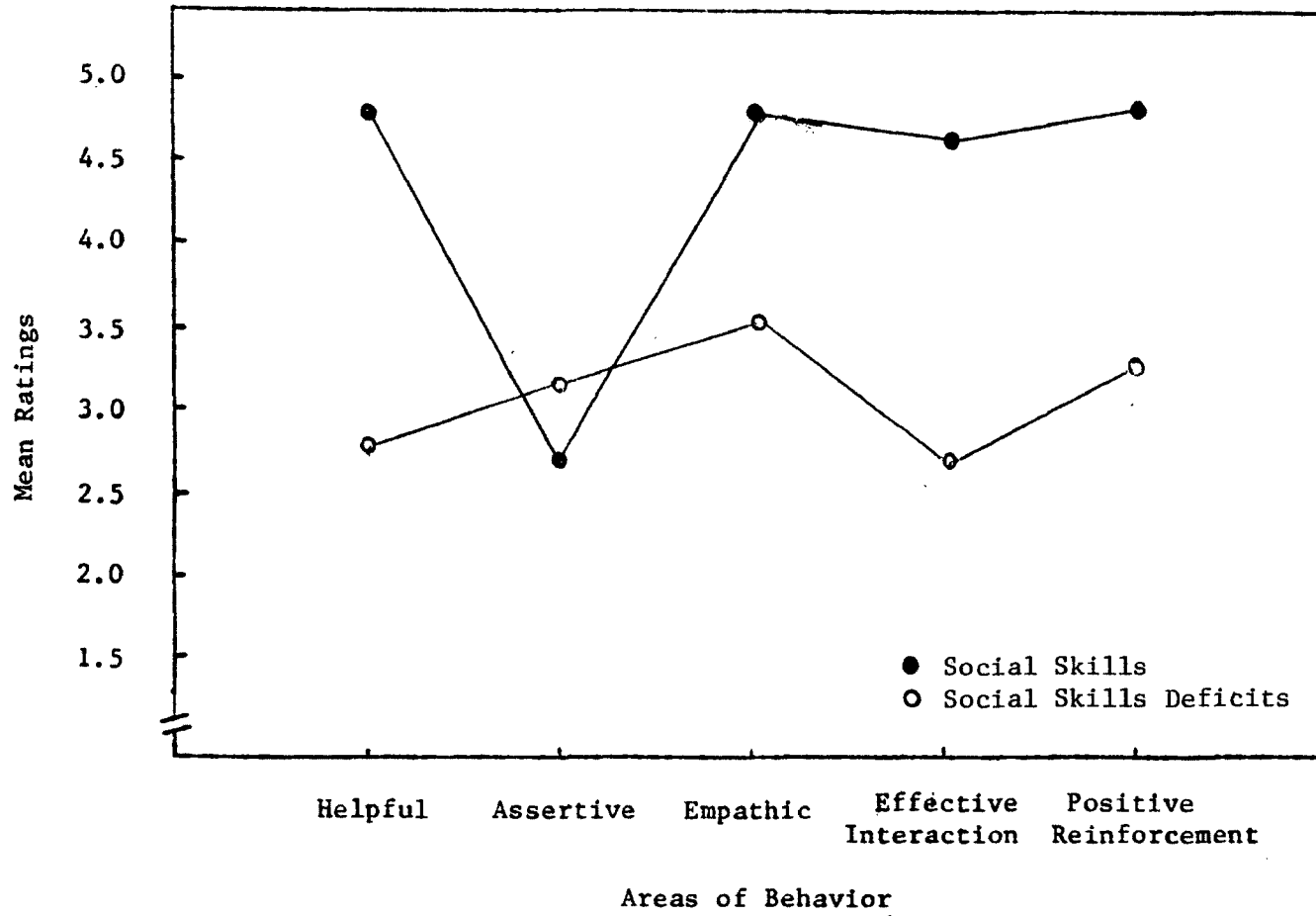
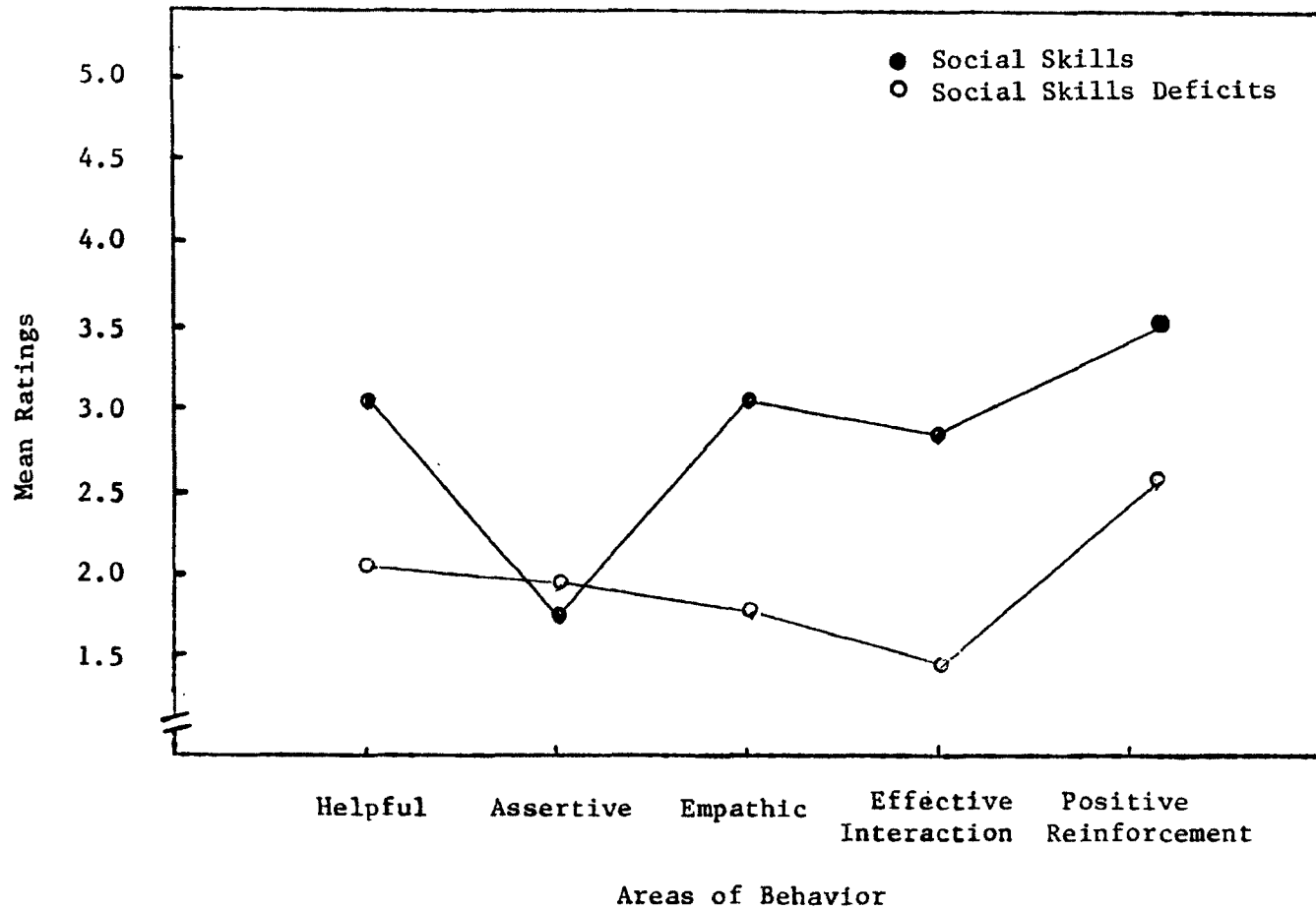Figure 11. Male subjects' ratings for item #9: "I like her"

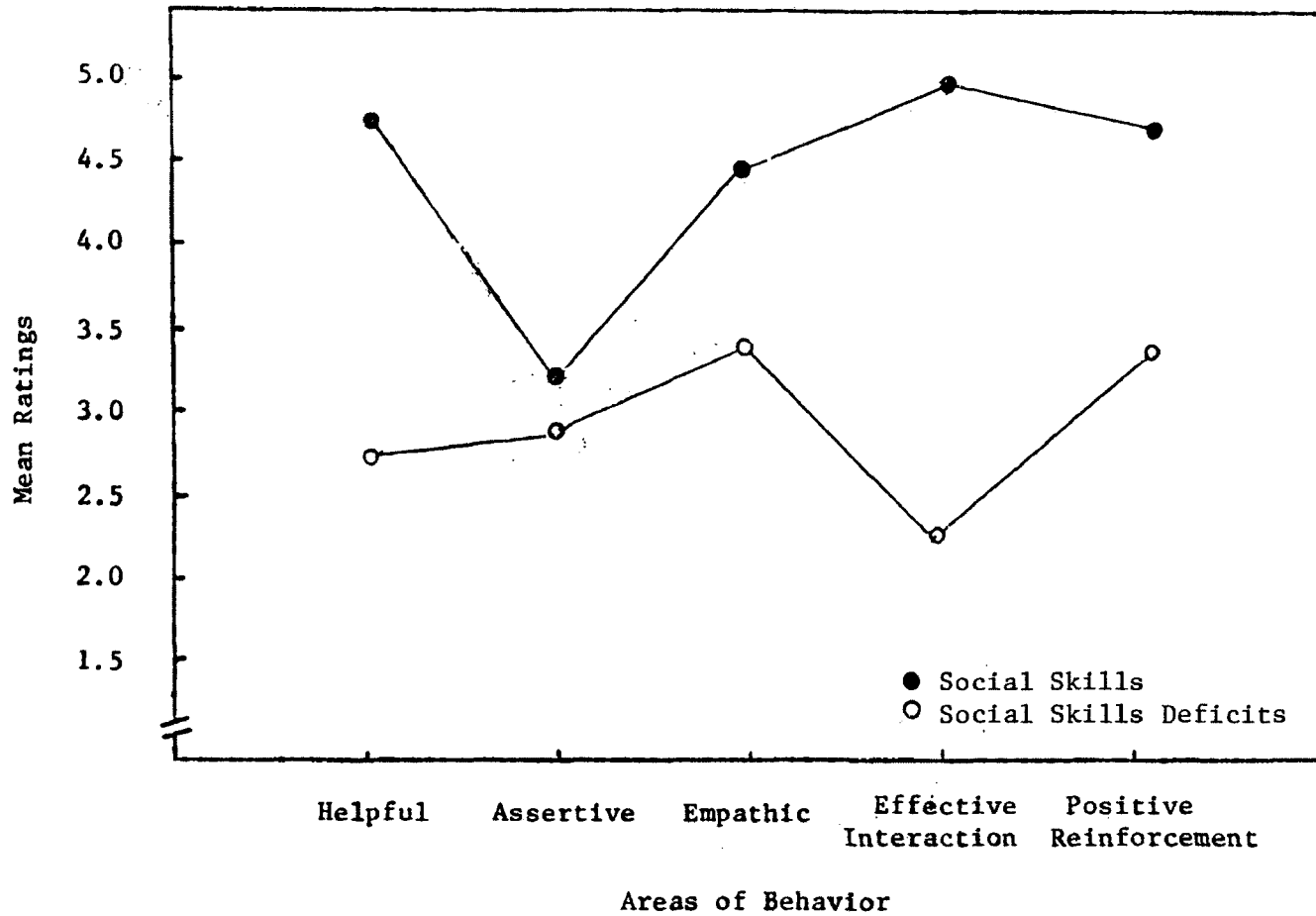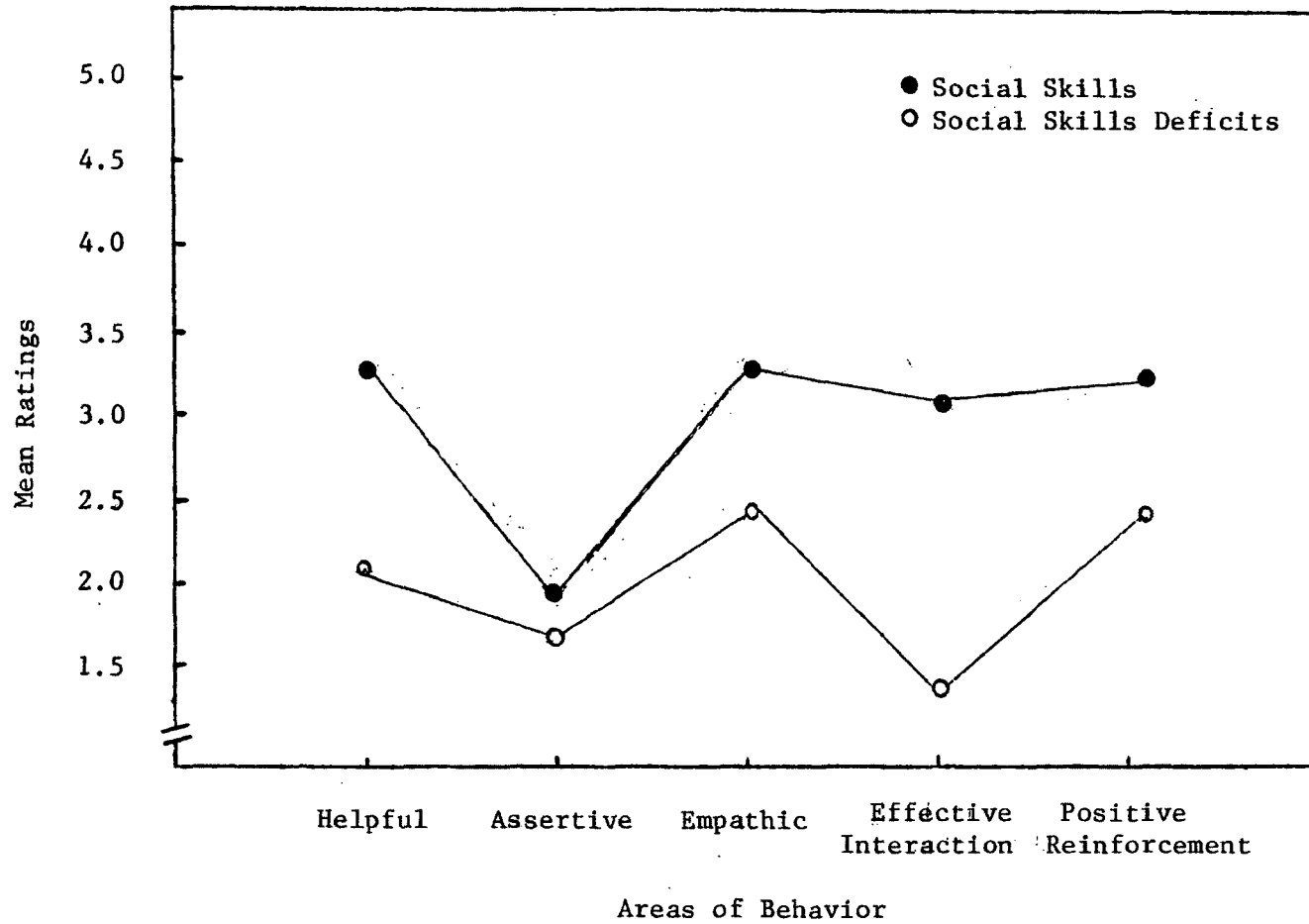Figure 12. Female subjects' ratings for item #10: "I would like to be friends with her"

Figure 13. Male subjects' ratings for item #10: "I would like to be friends with her"

Appendix C

Parent Permission Letter

University of Montana

Department of Psychology

April 18, 1983

Dear Parent:

    I am a graduate student in Psychology at the University of Montana and am conducting a research project about third grade children's social behavior. I would like your permission for your child to participate in this study.

    The children in this project will be watching videotapes at their school. These tapes will show normal, eight and nine year old children in everyday social situations. In some of the scenes, the children on the tapes will engage in social skill behaviors such as inviting another child to play, giving compliments, and being helpful. On the other tapes, the children will appear shy and withdrawn.

    After viewing the tapes, the children will answer written questions about their reactions to the children they saw. To answer most of the questions, children will place a mark on a scale to show how much they think a word or phrase describes the children on the tapes. I will be instructing and assisting the children as they complete the questionnaires.

    The entire procedure will last about 15 minutes of class time for each child. The activities will take place in a room at your child's school that is outside of his or her classroom. I am making arrangements with the school principal and classroom teachers so that my study will not disrupt regular school activities.

    I hope that you will grant permission for your child to participate in this study. Below is a parent permission form that you may complete and return to your child's teacher. I am available to answer any questions that you may have and plan to provide you with information about the results of this study.

Philip H. Bornstein, PhD

Sincerely,

Ann M. Horstman
243-4523, 728-6854

Parent Permission Form

Child's name:_____ Sex: M___ F___ Age:_____

I grant permission for my child to participate in the aforementioned project:

Yes____ No____ Parent or Guardian's signature_____

please return within one week