

Changes of Preschool Children's Social Strategy (Cognition) and Social Behaviors after Participating in a Cognitive-Social Learning Model of Social Skills Training

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Abstract

This study explored the effects of a cognitive-social learning model of social skills training on 4- to 5-year-old children with low peer acceptance. The cognitive-social learning model of social skills training aims to improve children's social behaviors through teaching effective cognitive social strategies and providing opportunities for children to practice social behaviors and monitor their social behaviors within a certain social context. Using three assessment methods—peer nomination, peer rating, and teacher's observation—34 children with low peer acceptance were selected for the study. Two groups—the social skills training condition and the teacher-attention condition—were formed based on random assignment. Children in the social skills training condition participated in the intervention, and children in the teacher-attention condition were given attention but not training. After the social skills training was completed, children's cognitive social strategies were assessed by observing their responses to certain social situations. Research findings indicated that children in the social skills training condition showed a significant improvement in maintaining positive play relationships with peers. In general, a significant correlation coefficient between social cognition and social behaviors was not obtained after the training.

Research Purpose and Questions

This study explored the effects of a cognitive-social learning model of social skills training on 4- to 5-year-old children with low peer acceptance. A primary purpose of this study was to investigate whether or not a social skills training based on the cognitive-social learning model could enhance the social behaviors of children who have low peer acceptance.

To carry out the purposes of the study, the following research questions were examined:

1. Do children show a significant improvement in their social cognition after participating in social skills training based on the cognitive-social learning model?
2. Do children show a significant increase in using the targeted social goals and skills when they interact with their peers after participating in social skills training based on the cognitive-social learning model?
3. What are the relationships between children's social cognition and social behaviors?

Theoretical Framework

A number of studies have supported the important influence of peer acceptance on the development and life adjustment of children. Peer acceptance is defined as the degree to which an individual child is liked or disliked by the members of his or her social group (Asher, Parker, & Walker, 1996; Bukowski & Hoza, 1989; Ladd, 1988). According to research findings, children who have low peer acceptance show low academic achievement (DeRosier, Kupersmidt, & Patterson, 1994; Pettit, Clawson, Dodge, & Bates, 1996; Wentzel, 1991), report feelings of loneliness (Cassidy & Asher, 1992; Ladd, Kochenderfer, & Coleman, 1997; Kochenderfer & Ladd, 1996; Parkhurst & Asher, 1992), and show life adjustment problems later on in adulthood (Parker & Asher, 1987). Thus, establishing and maintaining relationships with other children is often of the utmost importance during early childhood (Hartup, 1992).

As a way of helping children become socially competent, social skills training programs have been used for children with low peer acceptance to teach prosocial skills (Bierman & Furman, 1984). An underlying premise in a social skills training program is that children who have low peer acceptance do not have the social skills required to develop and maintain positive peer relationships (Asher & Renshaw, 1981; Coie, Dodge, & Kupersmidt, 1990; Hughes & Cavell, 1995; Ladd, Price, & Hart, 1988). According to this premise, if children have an opportunity to learn the appropriate social skills, they can improve their peer relationships and increase their level of adjustments (Furman & Gavin, 1989).

In addition, competent social behavior appears to depend on social-cognitive abilities such as interpreting social cues in constructive ways, knowing about socially approved social goals and strategies, and providing socially appropriate solutions to social situations (Mize, 1995). Children's ability to translate their social knowledge into action is especially important in executing successful social behaviors (Mize, 1995).

Thus, in the present study, the cognitive-social learning model was used to provide children with an opportunity to learn the concept of appropriate social goals and strategies, practice the learned social knowledge in a social situation, and monitor or evaluate their social behaviors (Ladd & Mize, 1983; Mize, 1995).

As target social behaviors, two social goals (entering an ongoing play group and maintaining positive play relationships) and three social skills (comments, suggestions, and nonverbal social skills) were used in the present study. Social goals and skills are two distinct components of social competence. Social goals are defined as personal goals that people want to achieve during interaction with other people or in a certain social situation. Social skills are defined as means to achieve social goals (Renshaw & Asher, 1983).

Data Collection and Methodology

As a part of the project examining the link between social skills training and cognitive and behavioral changes in children, data were collected from pre-

kindergarten children enrolled at Thomas-Roque Child and Family Development Center. As a Head Start program, this center predominantly serves families of low socioeconomic status. All the children at the center, except one, were African American.

To select the subjects, all the children who had parental permission to participate in the research were assessed. For this study, children's peer acceptance was measured by two assessment procedures. First, sociometric assessments were conducted by having each child select three classmates with whom they would or would not like to play. Then the children were asked to rate their participating classmates according to degrees of liking. In the second assessment, classroom teachers were asked to observe children and complete the teacher's social skills rating form (Mize, 1984; revised with permission, 1999) for each participant. Thirty-four children who have low peer acceptance were identified as subjects. They were paired, then each pair of children was randomly assigned to either the social skills training condition or the teacher-attention condition.

To assess children's cognitive-social strategies and overt social behaviors, the enactive social knowledge interview (Mize, 1984; revised with permission, 1999) and social skills behavior observation form (Mize, 1984; revised with permission, 1999) were used, respectively. The interview is intended to assess social strategies that children would use in certain hypothetical situations. Using the revised enactive social knowledge interview form, children with low peer acceptance from both groups participating in this study were interviewed individually to explore their conceptions of appropriate social strategies in certain hypothetical situations.

Children with low peer acceptance scores who participated in this study were observed in their classroom by two trained graduate students who were unaware of the children's peer acceptance status or assignment to the two conditions. The social skills behavior observation form (Mize, 1984; revised with permission, 1999) was used to record social behaviors in a play context.

For the social skills training condition, a total of five social skills training sessions were administered by

the researcher. The training program consisted of three components—instruction for concept learning, practicing skills performance through guided rehearsal, and fostering skill generalization through self-directed rehearsal. All stories that were used in the intervention consisted of scripts—a series of events occurring in certain situations such as a child's inappropriate social behaviors, a conflict situation caused by the child's inappropriate social behaviors, a way to solve the conflict, and the consequences of its resolution.

For each session, three social skills (comments, suggestions, and nonverbal social skills) were introduced to the children through each of the five hypothetical situations. In the first session, children learned how they could join an ongoing play group. In the second session, the children learned how they could initiate new ideas or activities. In the third session, the children learned how they could express a positive attitude or caring toward peers. In the fourth session, the children learned how they could share toys or materials. In the fifth session, the children learned how they could solve a conflict situation. The first session was designed to help children "initiate" positive social interactions with peers. The other sessions were intended to help children "maintain" positive social relationships with peers.

Children assigned to the teacher-attention condition served as controls for the effects of adult attention, peer pairing, and exposure to the experimental materials. A pair of children who were assigned to the teacher-attention group played for 30 minutes with an array of toys. During this time, the children were not instructed on how to behave or interact with their peers in socially accepted ways.

The post-tests were conducted within two weeks of the end of training. The social knowledge interview and social skills observation were conducted by two trained graduate students using the enactive social knowledge interview (Mize, 1984; revised with permission, 1999) and the social skills behavior observation form (Mize, 1984; revised with permission, 1999), respectively. The classroom teachers were asked to complete the teacher's social skills rating form (Mize, 1984; revised with permission, 1999). Each test was identical to the one used in the pre-test.

To compare group differences on social cognition and behaviors, the two-way repeated measures ANOVA was used. To examine the relationship between children's social cognition and social behavior, Pearson correlation coefficients were computed comparing children's social cognition change and their overt social behaviors. Since there was no significant difference in the preliminary *t*-test results from the pre-test data, only the post-test data were used to compute Pearson correlation coefficients.

Results

After the intervention was administered, the following findings were obtained:

1. Children in the training group showed an increase in maintaining positive play relationships with peers at $p < .01$, but no significant group difference was found in entering an ongoing play group.
2. Children in the training group showed an almost significant increase in using the targeted social skills (comments, suggestions, and nonverbal social skills) at the marginal level, $p < .055$. (Target social behaviors scale score consisted of "comments," "suggestions," and "nonverbal social skills.")
3. Children's social cognition did not show significant changes after the training.

Discussion

The findings of this study indicate several important implications for social skills training programs for young children.

Social Goals

After the intervention, children in the social skills training condition did not show significant improvement in entry to an ongoing play group. Several explanations are possible. Primarily, a low incidence of children's entry behaviors was observed. Children's social behaviors were observed for 30 minutes in each test. Since successful peer-relationship maintenance behaviors were observed in this

period of time, entry behaviors did not occur often enough to obtain a significant group difference.

Also, in the present study, the number of subjects was too small to obtain a significant group improvement in children's social behaviors. Data from 26 children (14 children in the social skills training condition and 12 children in the teacher-attention condition) were used for a group comparison. The number of children in each group might not be enough to reveal a significant group effect in the children's social behaviors. Another possible reason is that one training session teaching children how to initiate peer relationships was not enough time to obtain a significant difference between the groups of children.

In addition, entering an ongoing play group is difficult (Corsaro, 1981; Putallaz & Gottman, 1981). Children's entry behavior success is affected by the features of the social context, such as the size, familiarity, and social composition of the group being entered, and the personal characteristics of both the entering children and their hosts (Borja-Alvarez, Zabatany, & Pepper, 1991; Putallaz & Gottman, 1981; Putallaz & Wasserman, 1989; Zabatany, Brunschot, Meadows, & Pepper, 1996). Without considering the relationship between children's entry behaviors and other social factors described above, it is difficult to assist children's entry behaviors to an ongoing play group.

Regarding maintaining positive play relationships, findings can be interpreted as the effects of the cognitive-social learning model of social skills training. First of all, when children in the social skills training condition were compared to the children in the teacher-attention condition, they showed a significant improvement in their ability to maintain positive play relationships with peers after the intervention. In the social skills training program, four training sessions were administered to help children maintain positive play relationships with peers using comments, suggestions, and nonverbal communication skills. Compared to one session designed to help children enter an ongoing play group, four sessions of training provided more opportunities for them to learn how to maintain positive play relationships with peers.

In each session, children in the social skills training condition learned socially appropriate behaviors for

continuing their play through concept learning, practiced their learned social skills in the training situation and in the real play situations, and evaluated or monitored their social behavior based on the trainer's and peers' feedback. Participating in these learning opportunities, children may develop the ability to understand others' perspectives and to behave in socially acceptable ways. Thus, a significant improvement in maintaining positive play relationships can be attributed to the intervention effects, which include modeling, teacher's and peers' feedback, and practicing new social skills.

Social Behaviors

Children in the intervention condition approached a statistically significant improvement in using the targeted social behaviors after the training. However, in using mature social behaviors, no significant difference was obtained between the two groups. Related to these findings, the characteristics of social behaviors that were assessed in the present study should be considered. In the social skills behavior observation, the targeted social behaviors scale score was composed of three social skills: comments, suggestions, and nonverbal social skills. On the other hand, the mature social behaviors scale score consisted of five social skills: comments, suggestions, nonverbal social skills, questions, and support.

According to the research findings, young children showed an improvement in using comments and suggestions after participating in the social skills training. However, they did not show a significant gain on the skills questions and support after the intervention. These findings suggest that questions and support may not have been operationally defined, appropriately taught, or lacked validity as target skills in an intervention for preschool children (Mize & Ladd, 1990a, 1990b). Therefore, in order to provide an effective social skills training program for young children, target social skills in an intervention should be selected by considering young children's social and cognitive developmental levels.

Relationship between Social Cognition and Behavior Changes

There were no significant positive correlation coefficients between interview responses and children's

observed overt social behaviors in the social skills training condition and the teacher-attention condition. Several explanations are possible. First, a consistency of construct validity between three stories in the enactive social knowledge interview and operational definitions of social behaviors in the observation of social skill behavior should be considered. In the enactive social knowledge interview, children's cognitive strategies were measured when they observed others' play and had nothing to do, when their peer did not want to play anymore, and when they had a conflict situation with a peer. These stories were provided for children to measure their entry behavior strategies, strategies for maintaining positive play relationships, and resolution strategies of a conflict situation. In the social skills behavior observation form, operational definitions of social behaviors, including entry behaviors, maintaining positive play relationships, and other positive behaviors, were used to measure children's overt behaviors. A consistency of construct validity between two assessment instruments, the enactive social knowledge and the social skills behavior observation, should be achieved to determine the relationship between children's social cognition and social behaviors.

Second, failure to translate their social knowledge into action may result from children's lack of practice in executing learned social strategies and from their ineptness at performing social behaviors (Mize, 1995; Mize & Ladd, 1990a). Even though children practiced their social skills in the training contexts as well as in the play contexts in class, five sessions of training might not be enough time to use newly learned social skills in play situations.

Third, children may be unwilling to use appropriate behaviors and feel anxiety in trying new behaviors (Mize, 1995; Mize & Ladd, 1990a). Children in the social skills training condition were provided feedback, encouragement, or support from the trainer as a training procedure when they tried certain social behaviors and interacted with peers. Based on the trainer's assistance, children can evaluate and monitor their behaviors. It is likely that the trainer's presence, support, or feedback made it possible for children to have better social strategies, to behave socially more appropriately, and to feel emotionally secure. After the intervention, however, children had

to behave according to their own decisions without the trainer's assistance. Changes in social contexts might prevent children from using the learned social behaviors.

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