EFFECTS OF A COMPREHENSIVE PEER ENGAGEMENT PROGRAM ON CHILDREN WITH SOCIALLY WITHDRAWN BEHAVIORS AND HISTORIES OF MALTREATMENT

By

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Abstract

Children with history of child maltreatment often have socially withdrawn behaviors. A Comprehensive Peer Engagement Program consisting of peer mentoring and social skills training with positive reinforcement was implemented on three children with low levels of verbal interaction and engagement in social activities with peers and adults. The setting was a Midwestern urban after-school program. A multiple baseline research design was used. The dependent measures were direct observation of verbal interaction and engagement in social activities with peers and adults, pre- and post intervention Child Behavior Checklist (CBCL) – Parent Version rating scale, Social Skills Rating Scale, and the U. S. Centers for Disease Control rating scales for prosocial and aggressive behaviors in children. Social validity assessments were obtained on the youth, parents, staff, and experts in the field. The results showed significantly improved levels of verbal and social interaction with peers at completion of the program and three months post intervention. All children scored higher on the social skills rating scales. The social validity assessments showed favorable results for importance of goals, acceptability of intervention, and significance of effects.

Acknowledgements

The development of this research project stems from a desire to help vulnerable children - through a vision that assures all children have a healthy, safe, and caring community. This vision is shared by my outstanding advisor, Distinguished Professor Dr. Stephen B. Fawcett. Through this shared vision, Dr. Fawcett has provided an immense amount of support, guidance, and encouragement through the completion of this project. I am very grateful for his respect and belief in my ideas, skills, and endurance.

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Finally, I am dedicating this project to Braeden Martin, a child who showed all the characteristics of a resilient child. Although never maltreated, Braeden endured suffering with immense strength and an angelic spirit. His purpose in this life was clearly shown and will never be forgotten- to love one another.

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I. Introduction

Problem/Background

Child maltreatment is a serious and prevalent public health problem in our society. Although the exact number of children affected by child maltreatment is not known, the 2005 U.S. Department of Health and Human Services data indicate that the rates of children victimized in 2000 were approximately 12.4 per 1000 children. Over the past ten years, the rates of substantiated victimization have stayed relatively stable, with a range of 11.8 to 15.3 per 1000 children (Goldman, Salus, Wolcott & Kennedy, 2003). The National Child Abuse and Neglect Data System (NCANDS) is the primary source of information for statistical data on child maltreatment that is known to Child Protective Service (CPS) agencies. The Third National Incidence Study of Child Abuse and Neglect (NIS-3) (Sedlak & Broadhurst, 1996) found that almost three times as many children are maltreated as are reported to CPS agencies. This study included over 5,700 community professionals who have contact with children and can provide more detailed information about child maltreatment reporting practices than can be obtained through the NCANDS data. In 1995, results from a Gallup poll that surveyed parents on disciplinary practices suggested that the number of those physically abused was approximately 16 times those of the official report of that time period (Goldman et al.).

The serious deleterious effects of child maltreatment have been explored extensively. Child maltreatment is associated with developmental, psychological, cognitive, behavioral, physiological, and social problems during childhood and

throughout adolescence (Wolfe, 1999). Long-term effects of child maltreatment have also been studied. They include a variety of medical, behavioral, and psychological problems in adulthood (Bugenthal, 2004; DeBellis, 2001; Dinwiddie & Bucholz, 1993; Kaufman & Charney, 2001).

The developmental problems seen in maltreated children are difficulties in (a) school performance; (b) social and emotional development at school, home, and in the community; and (c) adaptive behaviors of motor skills, personal care skills, and community orientation (Wodarski, Kurtz, Gaudin, & Howing, 1990). Children with a history of maltreatment are at higher risk for developing depression, dysthymia, post-traumatic stress disorder (PTSD), and generalized anxiety disorder (Kaplan et al., 1999; Lansford et al., 2002.) Academic problems in children with a history of abuse include lower performance, more suspensions, more disciplinary referrals, and delays in grade advancements (Kendall-Tackett & Eckenrode, 1996). The behavioral problems identified include aggression, negative relationships with peers, and delinquency (Salzinger, Feldman, Hammer, & Rosaria, 1993; George & Main, 1979; Kendall-Tackett & Eckenrode, 1996; Stouthamer-Loeber, Loeber, Homish, & Wei , 2001; Levendosky, Okun, & Parker, 1995). In addition, recent advances in neuroscience indicate there may also be biological effects (i.e., neuro-structural changes in the hippocampus and corpus callosum) associated with child maltreatment (Teicher, Andersen, Polcari, Anderson, & Navalta, 2002).

Among the social problems identified, children who have experienced maltreatment have been shown to have increased difficulty with peer relationships

and peer acceptance (Bolger, Patterson, & Kupersmidt, 1998). Howes and Espinoza (1985) studied 26 physically abused children in a day care setting and compared their peer interaction in a known, well-established group to a newly formed group. They found that the abused children's peer interaction was less competent in newly formed groups and less competent as compared to a control group of non-abused children in a newly formed group. However, the abused children had the same amount of peer interaction competence as compared to the controls in well-established peer play groups. They also identified that the abused children formed friendships with other abused children more often than non-abused children.

In another study, George and Main (1979) investigated social interactions among toddlers who were physically abused compared to non-abused matched controls. The toddlers who had been abused had significantly greater avoidance and aggressive behaviors toward other children and caregivers. In matched samples of maltreated school aged children (i.e., eight to twelve-year olds) compared to non-maltreated children, Salzinger, Feldman, Hammer, and Rosario (1993) found that maltreated children showed significantly lower peer status, less positive reciprocity with peers chosen as friends, more aggressive and less cooperative behavior with parents and teachers, and more insular and atypical negative social networks.

Models/Theoretical Framework

Although there is much evidence that supports the deleterious effects of child maltreatment, there are some children who have been abused that do not demonstrate behavioral problems. They appear to withstand the stress of abuse without apparent

harm. These children have been labeled r*esilient* or *invulnerable* children (Garmezy, 1971; Garmezy & Masten 1986; Rutter, 1985). The concept of *resiliency,* a construct described in the field of developmental psychopathology, will guide the framework for the intervention described in this study. Also, an *analysis of the behavioral and environmental conditions* - the process in which behavioral interventions can be developed individualized for the problem behaviors in affected children - will provide the support for understanding the contingencies maintaining the target problem behaviors displayed by the participant children in this study.

Resiliency Framework

Garmezy (1993) defines resiliency as:

> What is meant when one speaks of a person who regains functioning following adversity. The central element in the study of resilience lies in the power of recovery, and in the ability to return once again to those patterns of adaptation and competence that characterized the individual prior to the pre-stress period. (p. 129)

The resiliency construct contends that *risk* and *protective* factors influence the development of competent or maladaptive behavior (Garmezy & Masten, 1986). Risk factors refer to variables that may predict the onset, severity, and duration of psychopathology. By contrast, protective factors may increase resiliency and decrease vulnerability to maladaptive development and psychological functioning (Cicchetti, 1993).

Three primary categories of protective factors have been identified by Garmezy (1993), individual or temperament factors, a strong family structure, and external support systems. Individual or temperament protective factors include (a) the child's activity level (i.e., engagement in extracurricular activities), (b) positive responsiveness to others (i.e., elicited positive attention from family members as well as strangers), (c) cognitive skills (i.e., academic achievement and problem solving skills), (d) at least average intelligence level, (f) competence in communication skills (i.e., language and reading), (g) sociability (i.e., good-natured and easy to deal with) and (h) an internal locus of control (i.e., belief that events are determined by one's efforts rather than external circumstances) (Werner, 1989).

A family system that is characterized as warm, cohesive, and the presence of a caring adult who takes the responsibility in the absence of a responsive parent is considered a protective factor (Garmezy, 1993). The presence of some source of external support, such as seen in the presence of a strong maternal substitute has also been identified as a protective factor for children at risk - "this may be a teacher, neighbor, parent or peers, or even an institutional structure such as a church or caring agency" (Garmezy, 1993, p. 132).

Werner (1989) conducted a prospective 32-year longitudinal study of a multiracial cohort of 698 children. One-third of the children had been afflicted with significant adversity within the first two years of their lives. Among the adverse conditions identified were perinatal stress, poverty, a troubled family environment, desertion, parental alcoholism, and parental mental illness. Approximately 66% of

the at-risk children developed serious learning or behavioral problems by the age of ten. They had previous juvenile delinquency records, mental health problems, or teenage pregnancies. However, one-third of the at-risk children developed into competent, confident, and caring adults. It was determined that the latter individuals, who were considered *resilient,* had certain common characteristics within the individual, the family, and outside the family circle.

The individual protective factors identified by Werner (1989) were temperamental characteristics such as affectionate, very active, cuddly, good-natured, and easy to deal with. These children also had fewer problems with eating and sleeping habits. During the school-age years, the children got along well with their classmates, had broad interest areas, and engaged in several hobbies and activities. During adolescence, the youth had a positive self-concept and an internal locus of control. For the youth showing resilient characteristics, The California Psychological Inventory rating scale showed endorsement of a more nurturant, responsible, and achievement-oriented attitude.

Some environmental protective factors were also associated with the family and external support systems. These environmental factors entail a perception of adequate or increased social support or sense of connectedness. The specific familial factors that were considered to be protective were: (a) exposure to at least one caregiver who provided positive attention as an infant; (b) nurturing from a substitute parent if the parent was not available; (c) first–born sons; and (d) a home structure with rules, assigned chores, and a daily routine (Werner, 1989). Protective “external

support" factors include: (a) having at least one and usually several good friends, especially in girls; (b) having an informal network of family or neighbors for counsel and support in crisis; (c) an adult role model, friend, or confidant; (d) participating in extracurricular activities, especially of a cooperative nature; and (f) emotional support and help from a youth leader, minister, or church group that helped the children acquire the belief that their lives had meaning and that they had control over their fate (Werner).

Attempts to measure the resiliency construct uses assessments of competencies related to developmental tasks (Garmezy, Masten, & Tellegen, 1984; Masten et al., 1999). Garmezy and colleagues suggest that exposure to psychosocial adversity is considered a threat to development through disruption of processes that underlie adaptation. Adaptational success is defined as competence in important developmental tasks. Luthar (1993) described the construct of resiliency as "behavioral success at negotiating salient developmental tasks, in spite of major stressors and possibly underlying emotional distress" (p. 442).

Tusaie and Dyer (2004) consider resiliency an interactive process that includes coping responses, personality characteristics, social support, and genetically-determined biological reactivity. The individual is viewed not only within the immediate context, but the history of the individual is also considered. A cultural perspective that includes age cohort, social class, gender, religion, spirituality, and nation/race are further factors that may be protective and may be supportive of resiliency. Finally, the family history, genetic predisposition, and immunological

status are also considered important individual biological factors that may be protective and support resiliency in children.

Analysis of Behavioral and Environmental Conditions

An understanding of the behavioral and environmental conditions that influence behavior is the initial step to identify promising interventions. Through a functional assessment, the antecedents, behavior, and the consequences maintaining the behavior are examined (O'Neill et al., 1997). Analyzing the behavioral conditions requires defining the problem, identifying the frequency and severity of the problem, identifying the targets and agents of change, and determining what the agents of change can do to improve the situation.

The environmental conditions are analyzed to determine how the environment affects the behavioral problem and the possibility of a feasible intervention. The resources and assets in the environment are assessed. The social environment is evaluated for availability and continuity of social support and ties, availability of appropriate services, and availability of resources. The physical environment is examined for access to resources, factors that may be contributing to the problem, and overall conditions. Other environmental factors that may influence the child's behavior include policies and rules within the school, institution or family (O'Neill et al., 1997). Once the behaviors and the environmental conditions for the behavior problem are analyzed, evidence-based and promising strategies and components are selected for an intervention (Horner, 1994).

An increase in emphasis of research on direct treatment for the individual maltreated child has been recommended by Graziano and Mills (1992). Recommendations for individual treatment includes testing the application of a variety of techniques to improve self-control, improve social skills, peer acceptance, and increase self-esteem.

Evidence-Based and Promising Treatment Interventions for Child Maltreatment

Thomlinson (2003) conducted a systematic review of interventions or services intended to reduce child maltreatment and/or treat problem behaviors of children who experienced maltreatment. The criteria for inclusion in the review were those studies that: (a) evaluated a distinct intervention or service intended to reduce or prevent child maltreatment or the problem behaviors associated with maltreatment; (b) focused the intervention toward the target population of children, adolescents, parent-child, parent, and family; (c) included a comparison group; and (d) measured a reduction in child maltreatment or the problem behaviors of maltreated children and their parents (Thomlinson, 2003). Only a few studies have been identified as *well-supported and efficacious* (Hahn et al., 2003; Thomlinson, 2003). Among these are prevention interventions for at-risk families (Olds et al., 1999; Olds, 2002) and interventions focused on treatment through parent-training (Hughes & Gottlieb, 2004; Webster-Stratton & Taylor, 2001). Only one child-focused study has been identified as well-supported and efficacious for child sexual abuse - trauma-focused cognitive behavioral therapy (Cohen, Deblinger, Mannarino, & Steer, 2004; Cohen, Mannarino, Berliner, & Deblinger, 2000*).*

Early intervention foster care (Fisher & Chamberlain, 2000; Fisher, Ellis, & Chamberlain, 1999) and multi-systematic family treatment (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998) have been shown to be *probably* efficacious. Project 12-Ways, a behavioral ecological intervention (Gershater-Molko, Lutzker, & Wesch, 2002; Lutzker, Bigelow, Doctor, & Kessler, 1998; Lutzker & Rice, 1987), has been identified as a *promising and acceptable* treatment specific to neglectful families. Social support network interventions (Guadin, Wodarski, Arkinson, & Avery, 1990-91) and a resilient peer training program (Fantuzzo et al., 1996) have been identified as *supported and acceptable* treatment interventions.

The Resilient Peer Training (RPT) (Fantuzzo et al.,1996) intervention was conducted on socially withdrawn maltreated preschool children. The RPT involved pairing a withdrawn child with a resilient peer in a structured play session under the supervision of a parent assistant. The results showed an increase in positive interactive peer play behavior and a decrease in solitary play in the treatment group compared to the control group. Fantuzzo, Weiss, and Coolahan (1998) suggested that treatment outcome research for children who have been maltreated should identify individuals, who display high levels of adaptive functioning, to promote peer learning opportunities and to serve as role models for child victims.

Purpose of the Study

The current study was developed to identify an intervention that focused on treating the individual maltreated child. Consistent with the resiliency framework as

described by Garmezy (1993), the goal of the study was to determine if an intervention that addresses two protective factors (i.e., social skills and an enhanced social support system) would support the development of behaviors supportive of resiliency in three children who have faced adversity. Using an analysis of behavioral and environmental conditions, the intervention was intended to increase prosocial interactions (i.e., increased engagement in positive verbal interactions and social activities) of three children with a history of child maltreatment. The components of the intervention included: (a) enhancing services and support through initiation of a peer mentoring program, (b) providing information and enhancing skills through a social skills program, and (c) changing the consequences through positive reinforcement for attending and completing the social skill training. It was expected that the increase in social skills and an enhanced support system would improve the children's communication skills, social competence, and social connections. The following literature review describes the components utilized in this intervention.

II. Literature Review

Peer Mentoring Interventions

Mentoring programs are a means to provide external support for children who may not have support through family, friends, or other significant adults. Most mentoring programs for children rely on an adult as the mentor (DuBois & Karcher, 2005). However, there is evidence that children who mentor other children may be as successful or even more successful in producing the desired outcome (Fantuzzo et al., 1988).

Early studies examining peer mentoring in maltreated children were conducted by Fantuzzo, Stovall, Schactel, Goins, and Hall, (1987) and Fantuzzo and colleagues (1988). Fantuzzo and colleagues (1987) studied four withdrawn maltreated preschool children and two maltreated children with prosocial behaviors in an analogue preschool classroom. The children with prosocial behavior were trained to carry out a Resilient Peer Training (RPT) intervention (i.e., child suggested or directed play activities, and sharing during play). The results of the study showed a significant increase in positive social behavior among the children with withdrawn behaviors.

Fantuzzo et al. (1988) replicated this work in a larger-scale study with 36 maltreated preschool children. The children were randomly assigned to three groups: (a) resilient peer treatment (RPT), (b) adult-treatment, or (c) control condition. The RPT intervention was the same as previously cited (Fantuzzo et al., 1987). In the adult condition, a familiar adult conducted the play activities with the

maltreated child. The children in the adult and control condition showed significant decreases in prosocial behavior, but the maltreated children in the RPT group showed considerable improvement in social behavior and improved levels of psychological adjustment.

In 1996, Fantuzzo and colleagues conducted the resilient peer training (RPT) intervention in a natural environment, a community Head-Start program, primarily serving children who had been maltreated. The intervention took place during free play in the regular classroom. Head-Start staff and parents were involved in supervising and conducting the intervention. The results of the study showed that the children in the RPT intervention showed significantly higher rates of interactive play (i.e., measured by direct observation and teacher ratings on a Peer Play Interactive Checklist) and less solitary play than children in the control group.

A community program (Alaggia, Michalski, & Vine, 1999) was developed to enhance support for parents of sexually abused children and the victimized youth. The peer support program used paid nonprofessionals who were previously affected by sexual abuse and a team of trained volunteers to provide support and services to the parents. Individuals were trained to be either a Parent Support Person or a Youth Support Person. The activities of the Parent Support Person included: (a) providing an “ear and voice”, (b) assisting in locating and gaining access to resources, (c) accompanying the parents to professional appointments and translating of information if needed, (d) advocating within the system, (e) being present at court, and (f) visiting in the homes. The Youth Support Person met with clients in venues

of the youth's choice. The locations primarily included malls, restaurants and shops. In addition, a significant amount of contact took place via telephone. One-third of the clients served by the program were evaluated by a consumer report interview. The parents who utilized the program had positive comments regarding the program, especially in the areas of flexibility, sensitivity, and support when attending appointments and court proceedings. The evaluation of the program by the youth were less favorable, but individual children remarked on the helpfulness of the availability and sensitivity of the staff and the importance of being able to meet the Youth Support Person in the community versus in an agency or office.

Although not specifically focused on children with maltreatment, numerous studies have shown support for peer-mentoring among youth in prevention of high-risk behaviors, and in management of school-related academic and social problems. Sheehan, DiCara, LeBailly, and Christoffel (1999) described a peer mentoring program aimed to preventing violence by altering the attitudes and behaviors of preadolescents at risk for violent acts. The mentors were adolescents involved in a Children Teaching Children (CTC) program in an inner-city urban community. The adolescent mentors designed lessons to teach about violence prevention. They provided the information through use of skits, music, and games. The results showed that the participant's attitudes which support violence were avoided, along with a decrease in aggressive behaviors.

Another community-based drug prevention program, Project K. I. C. K. (Kids in Cooperation with Kids) (Rollins et al., 1994), involved a peer mentoring program

which trained seventh grade “peer models” and paired them with third graders. The program objectives were to enhance self-concept, decision-making, drug refusal skills, and enhance drug knowledge. The curriculum utilized art work, discussion, role playing, music, and creative activities to maximize interactions between the pair of children. The sessions occurred twice a week for 20 minutes during one academic year. The results of the study showed a significant improvement in life management and decision making skills, and increased levels of physical activity for the third graders. However, compared to a control group, there were no significant differences in self-concept, drug knowledge, family functioning, or positive family/child relationships.

Numerous school-based peer-mentoring programs have been developed and focus on helping younger or disadvantaged children. A peer-mentoring and peer-tutoring program, the “Big Buddies’ Program” (Dennison, 2000), involved junior and senior level National Honor Society high school students assigned to fourth and fifth grade students who were at risk for eventual school drop-out. The mentors spent 45 minutes twice a week for one school year with the at-risk youth, helping with school work and spending free time with them on the playground. Every six weeks, a formal outing was planned. Proximal outcomes measures included rating scales reflecting self-esteem, attitudes toward school, and twelve major behaviors associated with effective classroom functioning. Although no statistical significance was noted between pre- and post testing on the Piers-Harris Self-Concept rating scale, the Attitudes toward School measure, or the Behavioral Functioning rating scale, all

rating scales showed changes in the positive direction. The teachers of the high-risk students provided informal feedback and reported that the majority of the children had academic improvement and showed more cooperative behavior in the classroom.

A "peer-mediation" intervention (Knapczyk, 1989) was evaluated to determine if regular education peers/mentors could improve the cooperative play behavior of students with moderate mental retardation. The regular classroom peers underwent training, and play activities were subsequently structured to maximize opportunities for social interaction. The results showed that cooperative play (i.e., being an active participant in a group sports activity, playing a board game with a peer, working with other students on a craft, or talking with a peer) increased by 48-62% in three participants with moderate mental retardation.

A school-based multi-component intervention (Atkins et al., 1998) was designed to maximize mental health capabilities in schools and extend mental health services to large numbers of children. The intervention included a peer mentoring component involving fourth graders mentoring third graders with the goal of decreasing aggression during recess. The fourth grade children received classroom-based instruction on peer mentoring skills, sportsmanship, and skills necessary to support positive play during the recess activities. The third and fourth graders completed a diary on positive play and items related to victimization and aggression. The results showed a 23% reduction ($p < .05$) in victimization during the peer-mentored recess period compared to the standard recess period.

A second peer-mentoring component of the Atkins et al. (1998) project included training sixth grade students in peer-mentoring activities, who then collaborated with a teacher to increase productive class time for second graders. Specifically, the goals were to increase participant motivation in academic activities, reduce aggression, and provide peer support for academic and social goals. The outcomes of the programs were measured by teacher and mentor diary recordings of the mentor's abilities in the trained skills of being helpful, staying calm, listening, and demonstrating a positive attitude. The mentors were rated by the teacher with scores greater than 82% for the four skills observed. The mentors and the second graders reported on their satisfaction level with the program and their desire to continue with the program. Most of the second graders (i.e., 92%) and the mentors (i.e., 93%) reported they wanted to continue with the program.

Similar to Atkins et al. (1998) study, Dearden (1998) developed a peer mentoring program for sixth grade students who were transitioning from primary school to a secondary-level (i.e., high) school. The goal of the project was to develop friendship links between older and younger students, extend the circle of friends and learning opportunities for the younger children, and support development of self-confidence and interpersonal skills. A secondary objective was to develop awareness and responsibility in older children's abilities to help others. The peer mentors, who were in the tenth grade, met with sixth graders 30-45 minutes per week in their primary school. Evaluation of the program consisted of a Likert scale questionnaire assessing student satisfaction with the program, levels of personal development, and

interpersonal skills. Ninety percent of the sixth grade students reported an increase in personal development, and 80% agreed that their own interpersonal skills improved. All the youth reported satisfaction with the program and enjoyed working with their mentors. The Likert scale questionnaire for the mentors showed that 65% of the students agreed their personal development had increased, and 70% agreed that their own interpersonal skills improved. Almost all the mentors (95%) agreed that they had helped the younger students feel less concerned about entering the secondary school. Teacher reports and comments were favorable, and no negative comments or concerns were conveyed.

A study by Morris, Messer, and Gross (1995) evaluated a "peer-pairing" procedure for first- and second grade children who were considered peer neglected. Peer-neglected children were identified by interviewing each of the children in the classroom. Each child was asked to name three children who they most and least liked to play with. Those children who were never identified by other children as someone they liked or didn't like to play with were considered peer-neglected. The peer-pairing procedure consisted of pairing a popular child with a peer-neglected child during normally scheduled recess hours. The session consisted of the children participating in one-on-one interactive games (e.g., card and board games) for twelve 15-minute play sessions over a four-week period. At the end of the study, 50% of the peer-neglected children in the treatment group were found to have positive interactions (i.e., verbalizations, excluding screams, yells, and whining; cooperative responses; and hugs and holding hands) above the mean for average status subjects.

None of the peer-neglected children in the control group had positive interactions above the mean for average status subjects. Conversely, 50% of the children in the treatment group had solitary play scores below the mean of average subjects compared to 0% of the children in the control group. These findings remained consistent one month after the study intervention was completed. Overall, positive interactions increased by an average of 27% in the peer-neglected children. Additionally, the popular children demonstrated an increase in positive interactions of 11.8%.

In summary, peer mentoring interventions have shown mixed results. Several of the studies had significant methodological limitations. In three studies (Alaggia et al., 1999; Atkins et al., 1998; Sheehan et al., 1999), outcome data were subjective and relying on self-report data or social validation of the program. Many of the studies had small sample sizes, few had randomization, and some studies had no control group. Although the resilient peer training intervention studies (Fantuzzo et al., 1987, 1988, 1996) had few methodological limitations, generalization is limited because the population consisted of preschool children only. Nonetheless, resilient peer training has been identified as supportive and a promising treatment intervention (Thomlinson, 2003).

Social Skills Training

Social skills training is a well-researched intervention that can affect social competence and improve peer relationships in children with behavioral problems (Spence, 2003). Although social skill training has been regarded as a valuable

therapeutic approach, it is usually utilized only as a component of more complex behavioral interventions (Spence, 2003). A meta-analysis (Quinn, Kavale, Mathur, Rutherford, & Forness, 1999) of interventions for social skills training in children with emotional and behavioral problems showed an effect size of .199. This is considered a small effect size, and indicates that approximately 58% of the children who are given a social skills intervention will benefit. The projected benefits suggest an approximately 8% increase on outcome measures related to social skill improvement. However, social skills training programs that focused on targeting anxiety and those that promoted specific social skills (i.e., cooperating, social interactions, and social problem solving) showed a greater effect size (.26 - .42).

To date, only one study (Kolko, 1986) has specifically focused on social skills training for a maltreated (i.e., sexually abused) child. However, Howing, Wokarski, Kurtz, and Gaudin, (1990) identified specific components appropriate for a social skills training program for maltreated children. The components included strategies that focused on self-control, interpersonal communication, problem solving, appropriate assertiveness, and stress management.

Common social skills deficits observed among maltreated children include aggression and withdrawal behaviors (Kendall-Tackett & Eckenrode, 1996). Although not specifically focused on maltreated children, numerous studies evaluating social skills training in children have targeted these behaviors. La Greca and Santogrossi (1980), Bierman and Furman (1984), Mize and Ladd (1990) studied the effects of social skills training on children who were considered to have low peer

acceptance. The results of the studies demonstrated significant improvement in social skills that promoted peer interactions and an increased peer acceptance. In contrast, Tiffen and Spence (1986) studied the effect of social skills training on children who were considered isolated and rejected by peers, but no statistically significant improvement was noted in social competence, self-reported social problems, direct observations of social behaviors, or teacher ratings of improved social interactions. Similar procedures for the social skills training were implemented among these studies.

A social problem-solving training program for third and fourth graders (Nelson & Carson, 1988) focused on the teaching of: (a) affective social skills (i.e., understanding and recognizing feelings), (b) specific social behaviors (i.e., friendship making and getting along with others), and (c) cognitive problem solving (i.e., dealing with conflict). The dependent measures were a social skills knowledge test, a social skills role play test, and a teacher-child behavior rating scale. The results of the study were mixed, with the third graders showing increases in problem behaviors and self-efficacy but a decrease in peer acceptance compared to a control group. The fourth grade students showed an increase in social competency and self-efficacy, but no difference in affective social skills and cognitive problem solving. The study was repeated with several revisions; in particular, a group was added that was taught by the classroom teacher instead of the researcher. The students in the experimental conditions were then instructed to complete daily journals monitoring their behavior along with their engagement in joint work and play activities. This replication study

showed no differences in the rating scale results between the experimental and control group.

A study by Hepler (1994) examined the effects of a social skills program for an entire classroom which included both rejected peers and popular peers. The goals of the program were to increase (a) the peer acceptance of rejected peers, (b) the children's use of positive and appropriate social skills with peers, and (c) the child's perception of when to use the social skills. The study results showed a significant increase in peer acceptance as measured by peer nominations (i.e., how much children liked to play with a particular peer) in the treatment group compared to the control group. The children with average peer social status showed an increase in peer nominations, and those with low-peer social status showed a decrease in negative nominations. The females in the low peer-social status group demonstrated increased rates of verbal interactions, while the low-social status males showed no change in verbal interactions. The low-social status children indicated they perceived they were spending more time playing with average-status peers after the training compared to the control group. The children in the treatment group agreed they spent more time playing with a desired peer compared to the children in the control group.

Numerous studies have examined the effects of social skills training for children with aggressive behaviors. Bornstein, Bellack, and Hersen (1980) studied four children in an inpatient psychiatric setting with history of extreme levels of aggressive behavior. Each participant received social skills training focusing on a

target behavior. All participants showed improvement in eye contact, voice tone and overall assertiveness. The effects were maintained for three of the four participants for a period of up to 6 months.

A peer-coping skills training program (Prinz, Blechman, & Dumas, 1994) involving a social skills curriculum aimed at improving information giving and listening with the teacher, and prosocial coping and problem-solving skills among aggressive first and third grade children. The study showed significant increases in teacher-rated information exchange and social skills compared to a control group. However, rates of internalizing behaviors and ratings of peer acceptance did not change. Small, but statistically significant changes were noted in teacher-rated prosocial coping and rates of aggression in the children.

Maloney, Harper, Braukmann, Fixsen, Phillips, and Wolf (1976) trained four pre-delinquent adolescent females in conversational-related behavior skills. The girls were scored on verbal answer-volunteering criteria and nonverbal communication skills. The results demonstrated a substantial increase in both answer-volunteering and nonverbal communication skills in all four adolescents studied.

The effects of two methods of social skills training were studied with juvenile offenders (Long and Sherer, 1985). A structured social skills training method was compared to an informal discussion social skills training session with high-frequency and low-frequency juvenile offenders. The findings were compared to a control group of juvenile offenders that had no social skills training. A pre-treatment and post treatment social skills checklist was used to measure behavioral social skills.

The results showed that low-incidence offenders scored significantly better on the social skills checklist with the "discussion group" training sessions, but the high-frequency offenders scored better with the structured social skills training sessions.

DeLange, Barton, and Lanham (1981) developed and conducted a behavioral social skills training program along with a problem-solving skills training with incarcerated juvenile offenders. Anecdotal reports from students and staff evaluating the training curriculum were positive. One of the youth reported "feeling very good" about how she handled a situation more effectively and positively after the training compared to how she would have handled the situation before the training period.

The variable results identified in the social skills studies reviewed may be reflective of the methods used to teach the social skills, the nature and severity of social skills deficits, the individual's cognitive functioning, and the subject's speed of learning (Spence, 2003). Evidence-based *behavioral* social skills training programs that have been shown to be effective include those with methods of giving instructions, discussion, modeling, role-playing, behavioral rehearsal, feedback, and reinforcement (Spence). A set of basic skills (i.e., eye contact, voice tone, posture, facial expression, and gestures) are taught along with more complex performance skills. Younger children and those with greater severity of behavioral and emotional problems may also require longer sessions and require training over several months with more frequent repetitions (Spence). Positive reinforcement using a modified token economy system contingent upon completion and meeting specified criteria for the social skills training was implemented in the present study.

Token Economy Reinforcement

Token economy reinforcements has been well researched (Kazdin & Bootzin, 1972; Kazdin, 1982) and identified as a successful intervention in changing behaviors that have been resistant to instruction (Cooper, Heron, & Heward, 1981). The token economy entails three aspects: (a) defining the behaviors to be reinforced, (b) selecting a medium of exchange as a symbol, and (c) providing a backup reinforcer that can be purchased with the token (Cooper et al., 1981). Although the technology of token economy reinforcement has been well-established, there has been criticism of offering token economy reinforcement for children. Critics are concerned that once reward for behavior related to learning are faded-out, there is a greater probability for a decline in quality of post-reward performance (Kohn, 1993). For example, Greene and Lepper (1974) found a decrease in performance in preschool children who were given token economy reinforcements for participation in completing artwork once the rewards were faded out. However, Vasta and Stirpe (1979) found that contingent reward with token economy reinforcement on children's participation in an academic activity (i.e., math) showed no evidence of a decrease in level of interest or participation once the token economy was faded. Two participants showed an immediate, but transient, decrease in post token economy performance.

McGinnis, Friman, and Carlyon (1999) recently studied the effect of token economy reinforcement on two males completing their math home-work assignments. The time spent on math home-work after token economy reinforcement

was initiated increased from moderate levels to 100%. The effects were sustained during fading and eventual withdrawal of token reinforcements.

When used alone, each of the components in the current study - - peer mentoring, social skills training, and positive reinforcement with use of a modified token economy system- - have shown success in producing a desired behavioral change. No previous studies have been conducted that combine these components into a multi-component intervention for children with history of maltreatment and socially-withdrawn behaviors.

The research questions for this study are: (a) What are the effects of a multi-component Peer Engagement Program (peer mentoring, social skills training, and positive reinforcements) on maltreated children with low levels of verbal interaction and engagement in social activity (i.e., socially withdrawn behaviors)?; (b) What effects does this intervention have on social competence and problem behaviors identified through the Child Behavior Checklist – Parent Version (Achenbach & Rescorala, 2001) rating scales?; (c) What effect does the intervention have on social skills identified through the Social Skills Rating Scale (SSRS) (Gresham & Elliot, 1990)?; (d) What effect does the intervention have on prosocial and aggressive behaviors identified through the U. S. Centers for Disease Control Prosocial and Aggressive behavior survey?, and e) Is the intervention socially valid (i.e., rated as socially important, feasible, and significant)?

III. Methodology

Setting

The study was conducted at Operation Breakthrough, an after-school program in the urban core of a large midwestern city. The after-school program serves approximately 350 children per day. Virtually all of the children attending the after-school program live in poverty, 40% live in foster care, and 95% live in single-parent households. The mission of the after-school program is to help children who are living in poverty develop to their fullest potential by providing a safe, loving, and educational environment.

Selection of Participants

The target participants were selected by the staff at the after-school program based on the following criteria: (a) typically developing children aged 7-14 years, (b) history of child abuse or neglect, and (c) staff report of behavior problems. The after-school staff approached the parents of the selected children and requested permission for the researcher to have access to their child's medical, school, and enrollment records (see Appendix A). Once permission was obtained, the researcher contacted the parents and obtained informed consent (see Appendix B). An assent form by the child was obtained (see Appendix C). The peer mentors were selected by the staff at the after-school program based on the following criteria: (a) within two years of age of the target participant, (b) same gender, and (c) general observation of demonstrating good role modeling skills. Good role modeling skills were defined as being a positive leader, demonstrating pro-social behaviors, following rules, and

showing cooperativeness. The same protocol for permission, informed consent, and assent for the peer mentors was followed as described for the target children. The target children will be referred to as *participants* and the peer mentors will be referred to as *peer mentors* throughout the rest of the paper.

Participants

There were three participants and three peer mentors in the study. All participants were of African-American ethnicity. The first participant, Jane, age 7, had a history of physical abuse during her first three years of life. During the time of the study she was living with an adoptive mother. The behavior problems displayed by Jane were avoidance of attending and staying in her assigned peer group setting (i.e., she wandered alone in the hallways or sat in the director's office). She also demonstrated very low levels of verbal engagement and activity involvement with other children. Occasionally she would suck her thumb and cry when it was demanded of her to attend and stay with her assigned peer group.

Participants Nan and Nora, aged 10 years old, were monozygotic twins and a history of neglect through their first six years of life. During the time of the study, they were under guardianship of their maternal grandmother. They displayed similar behaviors of very low levels of engagement in verbal interaction or involvement in activities with other youth while in their assigned group at the after-school program. Although they consistently sat near each other, they did not interact with each other or with any other children in their group setting. Their grandmother reported that Nan had shown aggressive behaviors at school, and had several "in school

suspensions" and one "out of school suspension" for initiating fights with other children. This aggressive behavior was not observed at the after-school program. Nora had no significant history of behavior problems in school.

The peer mentor matched with Jane was Jen, a seven year old, typically developing child with very pleasant and positive social interactions. Her academic skills were average to low average, but she displayed highly appropriate social skills with other children and adults. She was outgoing, she often initiated activities with other children, and was very courteous. There were no reports of history of abuse or neglect. She lived at home with her single mother and was the oldest of three other children in the home.

Mary, the peer mentor matched with Nan, was 10 years of age and a pleasant, cheerful child who showed very good academic achievement in school. She was involved in many activities at the after-school program as well as other extracurricular activities (i.e., drill team and dance). She had no history of abuse or neglect and lived at home with her parents and four younger siblings.

Rose, a 12 year old child, was the peer mentor matched with Nora. Rose was a mature and very bright twelve-year old. She demonstrated strong leadership skills and appropriate social skills with adults and other peers. She was pleasant and considered popular among her peer group. She had no history of abuse or neglect, was the third child in the family, and lived at home with her parents and three sibling brothers.

Measurements

Direct observation

Three behaviors were measured by direct observation: a) positive verbal interaction, operationally defined as verbally interacting with another child using a pleasant or neutral voice tone; b) positive social activity, operationally defined as interaction with another child while involved in an activity with cooperation and abiding by rules; and c) positive interaction with an adult, operationally defined as positive verbal interaction and listening and/or participating in activity.

The direct observation behaviors were measured while the child was in their age appropriate "group setting" which was supervised by after-school staff personnel. There were no "structured activities" arranged at this time (i.e., the direct observation behaviors were not measured during a time the child was engaged in a scheduled "structured activity" such as African Dance, Tennis, Choir, etc.).

Pre- and Post Intervention Rating Scales

The parent/guardian of each participant completed the Achenbach Child Behavior Checklist – Parent Version (Achenbach & Rescorla, 2001) and the Social Skills Rating Scale – Parent Version (Gresham & Elliot, 1990) before and after the intervention. The after-school teachers completed the U.S. Centers for Disease Control and Prevention (CDC) Aggressive Behavior- Checklist and Pro-Social Behaviors of Children rating scales before, intermittently during the intervention, and after the intervention on the participants.

Social Validity

A social validity assessment was obtained that considered the social significance of the goals, the social appropriateness of the procedures, and the social importance of the effects. The youth, parent/guardians, the after-school personnel, and three experts in the field of behavioral and child psychology completed Likert scales to assess the social validity of the intervention (see Appendix D).

Data Collection Procedures

The direct observation data, including participants and peer mentors, were collected in the following manner. Since participants arrived at various times at the after-school program, the order in which the children were observed was determined by the order that each participant was located during each session. The first child encountered had data collected on her first. This child was observed for a 5-min interval, and the occurrence of the target behaviors was recorded in 15-s partial interval recordings. After 5-min of data had been recorded for the first child, the researcher located and observed a second child. After five minutes of data had been recorded on the second child, the third child was located and five minutes of data was recorded using the procedure described above. Once five minutes of data had been collected on each child, the researcher began the process again, using the order of the children that had been determined for that day. This was done until 15 - 20 minutes of data had been collected on each child for that day or until the children were unavailable to be observed (i.e., the child went home or attended a structured activity). Data were collected using this procedure two or three times a week for the

participants. Once a week, data were collected on the peer mentors. When peer mentors were included in the data collection, they became part of the data collection process described above.

Inter-observer reliability

Inter-observer reliability was obtained on the observed behaviors during 27.6% of the data collection. The researcher collected the primary data and another trained graduate student independently and simultaneously collected reliability data. The graduate student was trained in the data collection procedure until the researcher and the trainee consistently obtained 95% inter-observer reliability over three data collection sessions. The inter-observer reliability results for positive verbal interactions were 85.5%, for positive social activity 93.2%, and for adult interaction 91%. The overall reliability for all three behaviors was 89.8%.

Independent Variable

The independent variable – the Peer Engagement Program -- included three components: (a) peer mentoring, (b) social skills training, and (c) positive reinforcement for attending and completing each session of social skills training.

Peer Mentoring Component

Peer Mentoring Training. Materials used in the peer mentoring training are shown in Appendix E. Once a stable baseline was obtained on the participant, the peer chosen to mentor that target child received the peer mentoring training. The training sessions were taught by the researcher. Mary and Rose received the same peer mentoring training curriculum, but Jen, who was seven years old, received a

modified, simpler form. The peer mentoring training took the same format as followed in the Asset manual (see Hazel, Schumaker, Sherman & Sheldon, 1995): (a) A Description of the Skill, (b) Rationale, (c) Example Situation, (d) Examination of Skills Steps, (e) Modeling of the Skill, (f) Verbal Rehearsal, (g) Behavioral Rehearsal and Feedback, and (h) Criterion Performance. The training topics included: (a) What is a peer mentor?, (b) Relationship building, (c) Being a good role model, (d) Building trust, (e) Dealing with bad behavior, (f) Activities to do, and (g) Discussion topics (see Appendix E). A criterion performance of at least 90% was obtained on five role play exercises in the topics of Relationship building, Role modeling, Building trust, and Dealing with bad behavior. For Jen, only three role play exercises were taught, which included Relationship building I and II, and Building trust. At the completion of the training, the peer mentor completed a quiz and once criterion performance of at least 90% was achieved, the peer mentoring intervention was initiated.

Peer Mentoring Procedure. Each pair of children met in a designated playroom for the initial sessions. The peer mentor initiated an activity or conversation as instructed in the relationship building peer mentoring training session. If needed, the researcher prompted the peer to initiate the activities in the first few sessions. The prompt consisted of a statement to the peer mentor such as "Jen, would you like to suggest an activity to do today?" The children met for approximately 40 minutes each session during the intervention period. During the initial 16 sessions the children met together alone in the playroom with the researcher observing, but not

interacting except for an occasional neutral prompt. See Appendix F for the task analysis of the peer mentoring sessions.

Fading Procedure. After 16 sessions of interacting one-on-one in the peer mentoring sessions, the pair of children was instructed to interact together in the usual assigned age appropriate group. Although the children were instructed to continue to engage in activities together, they also were encouraged to engage in other activities with other children in their group. The researcher prompted the peer mentor as needed to continue to participate in an activity with the target child, but encouraged the mentor to include other children in the activities. The pair of children met together in the group setting at least one time per week for three or four sessions or until levels of verbal engagement and engagement in social activities were comparable to the peer group.

Social Skills Component

Each pair of children received social skills training by the researcher based on the Asset – Social Skills Program for Adolescents (Hazel et al., 1995) and the Boys Town *Teaching social skills to youth – A curriculum for child-care providers* (Dowd & Tierney, 1995). The social skills training occurred concurrently with the peer mentoring component. One social skill was taught each week, and the final week all the skills were reviewed. The social skill training was initiated the same week as the peer mentoring component.

The social skills taught were: (a) Saying thanks or giving compliments, (b) Accepting criticism or negative consequence from an adult, (c) Disagreeing

appropriately with a friend, (d) Resisting peer pressure, (e) Problem solving, (f) Negotiation, (g) Following instructions, (h) Conversation, and (i) Anger control strategies. One social skill was taught each week by the researcher. The last sessions consisted of a review of all skills learned. The format for the training included: (a) A Description of the skill, (b) Rationale, (c) Example situations, (d) Examination of skill steps, (e) Modeling of the skill, (f) Verbal rehearsal, (g) Behavioral rehearsal and feedback, and (h) Criterion performance. The criterion performance was based on 90% successful completion of the skill steps on three consecutive role-play situations (See Appendix F for task analysis of Social Skills Training).

Positive Reinforcement Component

A modified token economy system was used as positive reinforcement for the completion of each social skills training period. The children each received $1.00 for completion of the social skills session. The money was typically used for a snack from a vending machine. After completing the 10 social skills sessions, each child received a gift for participating in the sessions. The peer mentors also received $1.00 after the completion of the peer mentoring training program, which was usually used for a snack. Each of the child's health records were screened to assure there was no contraindication (i.e., food allergy, diabetes, etc.) to receive a snack.

Research Design

The research design was a multiple baseline across participants in a single-subject study design. Baseline (before intervention) data was taken for all participants.

After a stable baseline occurred for one participant, the intervention began. Baseline measures continued for the other participants. After the first participant demonstrated a positive change in behavior, the intervention began for the second participant while baseline measures continued to be taken for the other two. This process continued until all participants received the intervention.

IV. Results

Overall, the results of the study showed that three children with history of child maltreatment significantly increased engagement in verbal interaction and social activities with their peers as a result of the Comprehensive Peer Engagement Program. Further, levels of internalizing and externalizing behaviors decreased and an increase in competence among the three participants were noted. Social skills performance based on rating scale scores was increased for all three participants. Specific results follow.

Dependent Variables

Participant Children

The direct observation data showed increased levels of positive verbal interaction and participation in social activities with peers in all three participants after the initiation of the Peer Engagement Program (i.e., peer mentoring, social skills training and positive reinforcement) (see Figures 1 and 2). The increased rate of engagement in verbal interaction and activity participation persisted in the follow-up period (4-6 weeks after intervention was completed). The rates of engagement in verbal interaction, listening and participation in activity with an adult decreased in participant #1 (Jane) (see Figure 3), which was a desired response. Jane had spent the majority of the time with teachers rather than her peers during the baseline data collection period. Adult interaction with participants Nan and Nora increased during the intervention phase but did not sustain (see Figure 3) during follow-up.

Figure 1.

Child participants' percent of frequency of verbal interaction with peers.

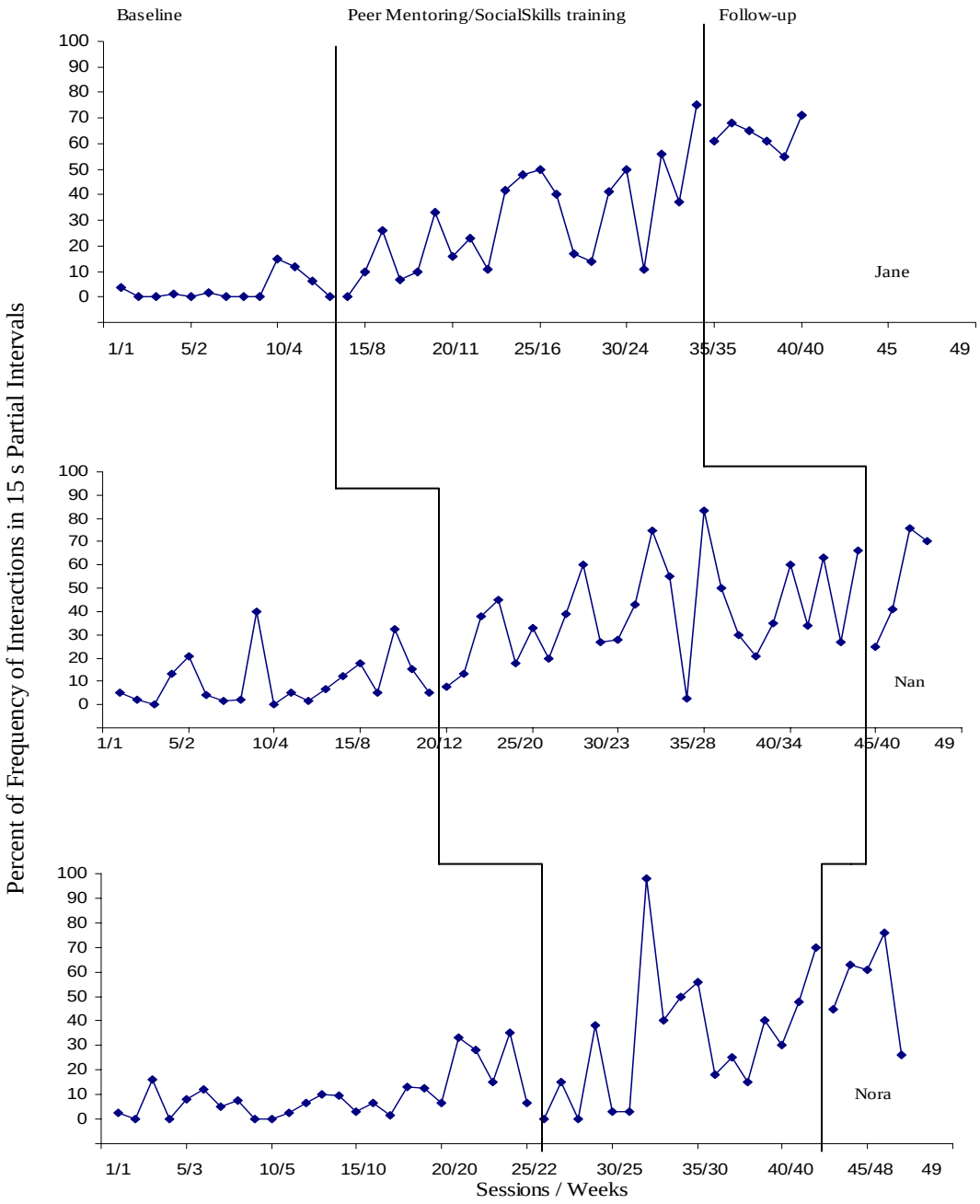


Figure 2.

Child participants' percent of frequency of social activity with peers.

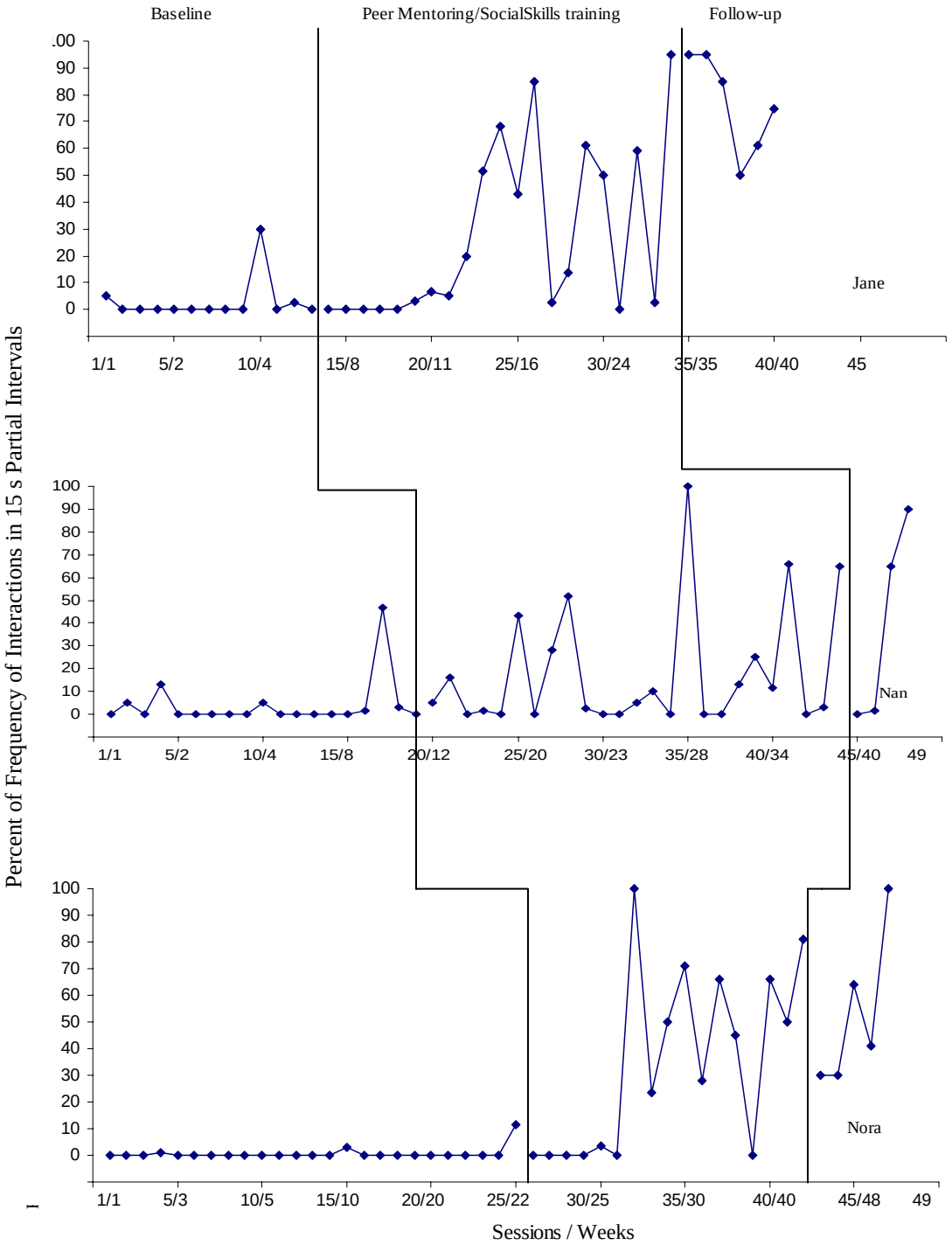
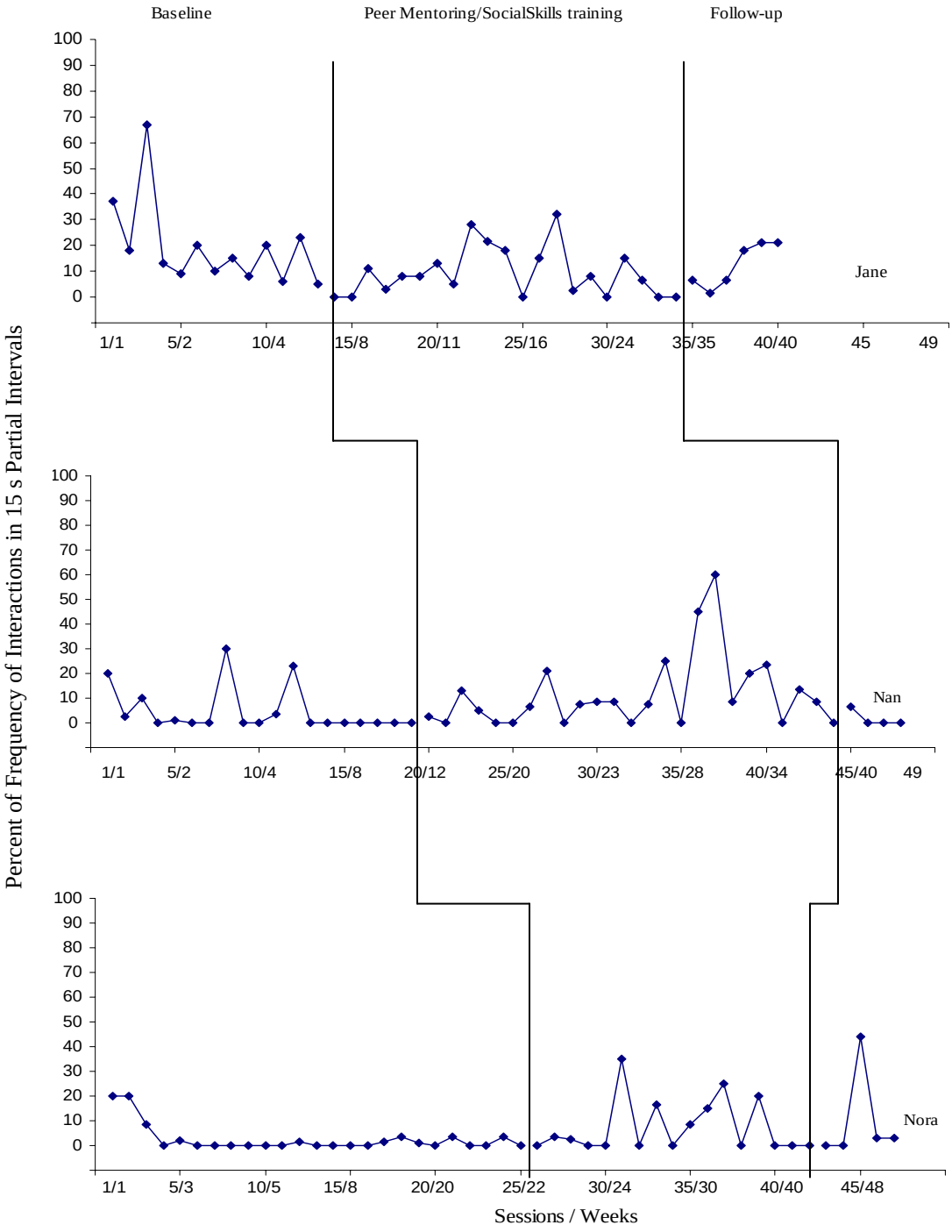


Figure 3.

Child participants' percent of frequency of verbal and social activity with adults.



The pre- and post intervention results of the CBCL-P are depicted in Figure 4. Jane showed clinically significant levels (T score greater than 65) in total problems, internalizing, and externalizing behaviors pre-intervention. Clinically significant

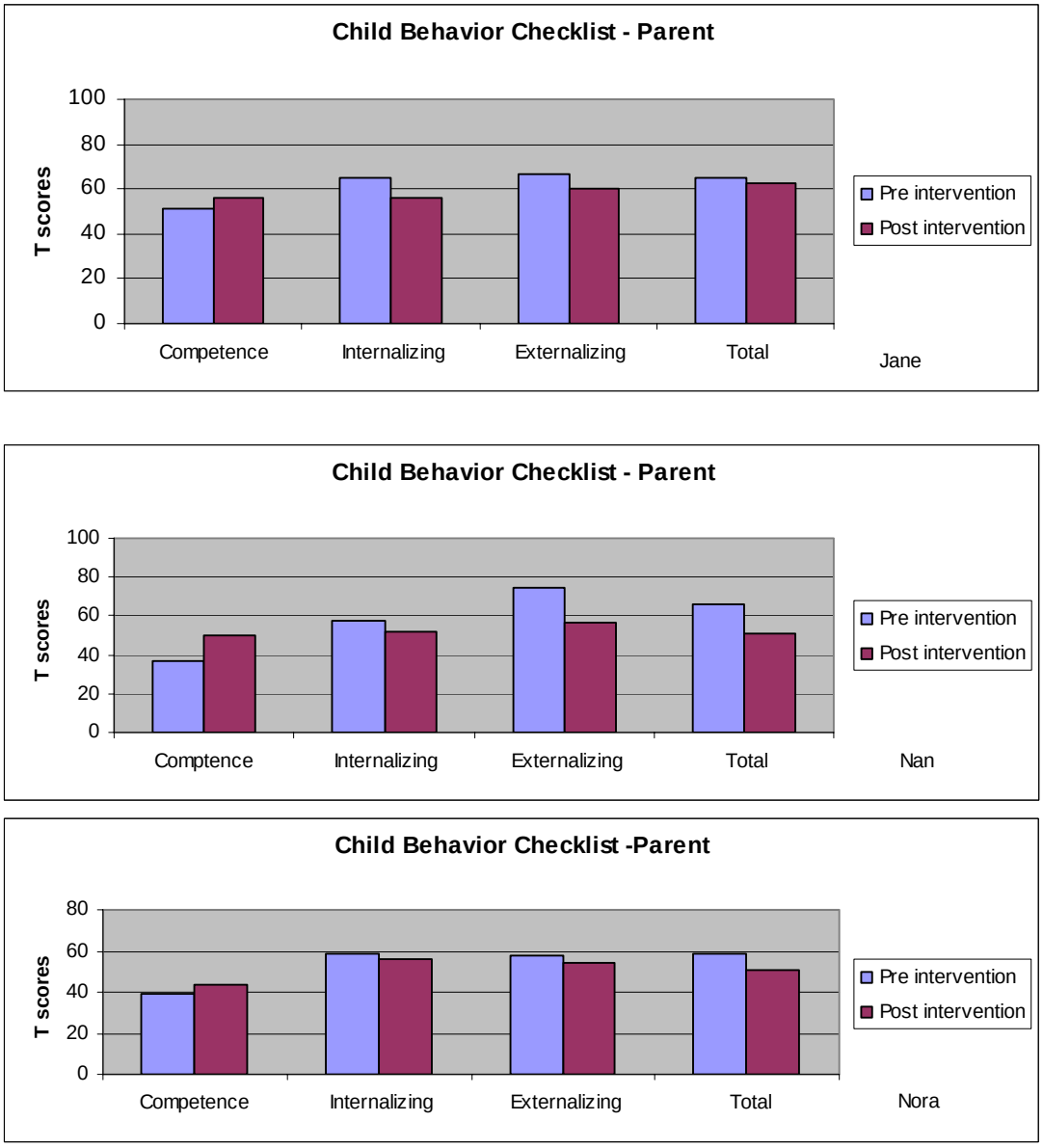


Figure 4. Results of Achenbach Child Behavior Checklist – Parent Version. T scores of levels of competence, internalizing behaviors, externalizing behaviors and total problem behaviors on the participants pre- and post intervention.

levels of anxious/depression symptoms (subscale of internalizing behaviors) and borderline levels of rule-breaking and aggressive behaviors (subscales of externalizing behaviors) were also noted pre-intervention. The post intervention results showed total problems and externalizing problems were in the borderline clinical range. There were no clinically significant problem behaviors at post intervention.

On The Social Skills Rating Scale –Parent version (SSRS-P) (see Figure 5), Jane showed an increase in social skills from the 10th percentile for social skills in the pre-intervention period to the 18th percentile post intervention. The results of the CDC Prosocial and Aggressive Behaviors (see Figure 6) scored by the after-school personnel showed an increase in the Prosocial behaviors from 62% to 75%, and the scores for Aggressive Behaviors showed a decrease from 11% to 7% of total possible score (i.e., 30).

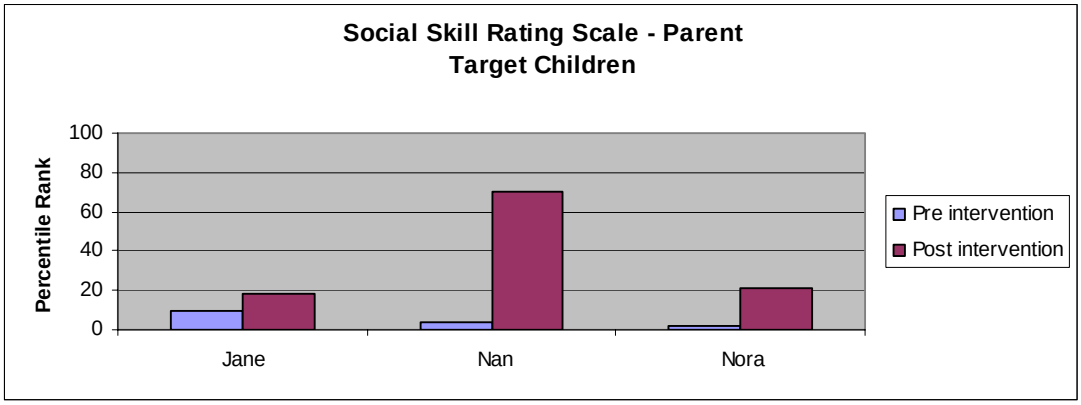


Figure 5. Results of Social Skills Rating Scale – Parent version. Percentile rank of pre- and post intervention scores on participants.

The results for Nan showed that at baseline, the CBCL-P endorsed competence,

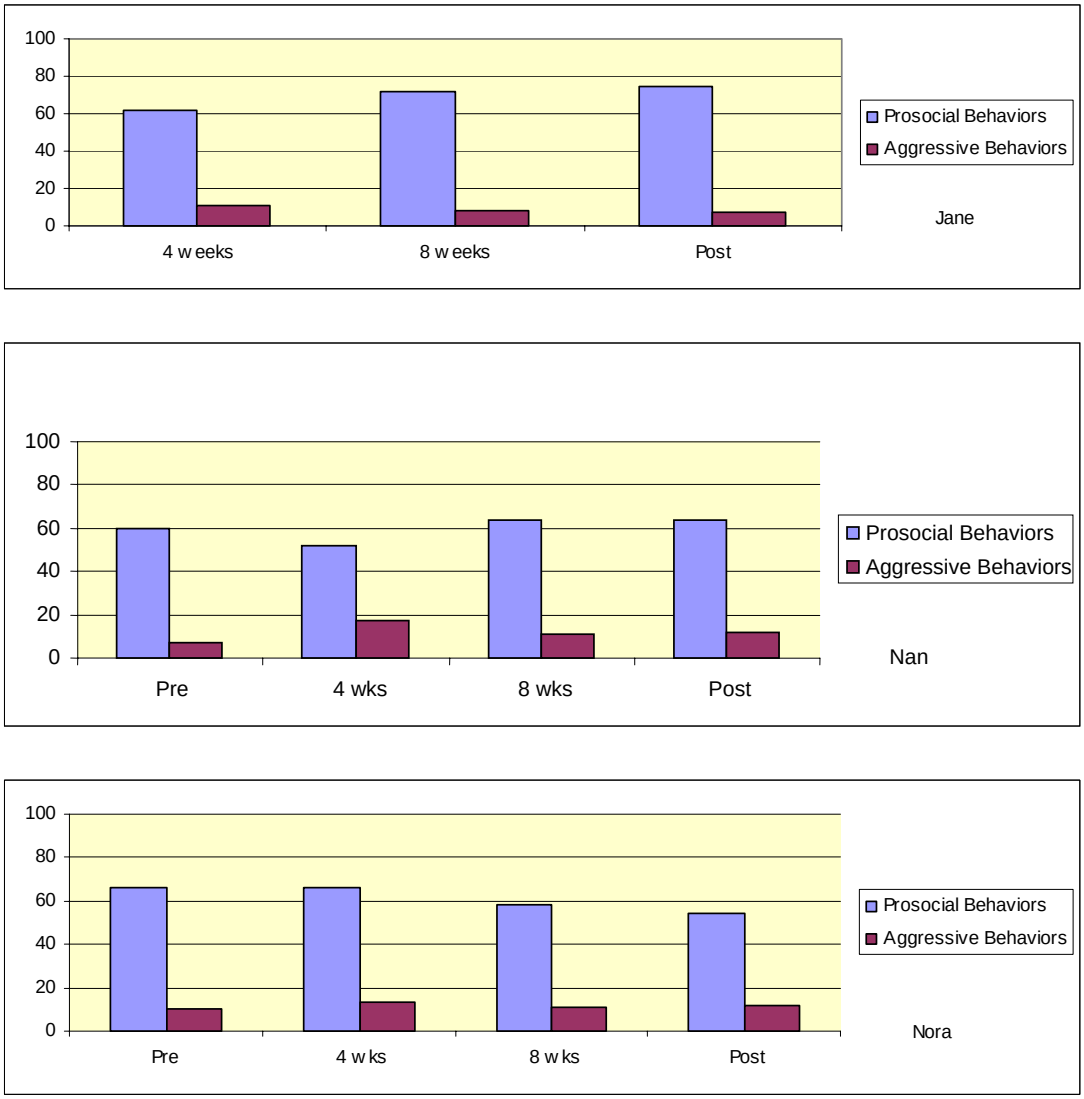


Figure 6. Staff ratings on the Center for Disease Control Ratings of Prosocial and Aggressive Behaviors on Participants.

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externalizing behaviors, and total problems in the clinically significant range. Rule-breaking and aggressive behaviors were in the clinical range, and there were borderline levels of withdrawn/depressed and social problems. Post intervention CBCL-P scales showed no clinically significant or borderline levels of behavior (see Figure 4). Social Skills Rating Scale - P showed an increase in social skills from the

4th percentile in the pre-intervention period to the 70th percentile post intervention (see Figure 5). The CDC prosocial ratings by the after-school personnel increased from 60% to 64%, and the aggressive behaviors showed an increase from 7% to 12% (see Figure 6).

Nora's results on the CBCL-P showed borderline clinical levels on the competence score in the pre-intervention period and borderline clinical scores in the affective and oppositional defiant problems. Post intervention CBCL-P showed the competence score was within the normal range, and there were borderline clinical scores on the withdrawn/depressed behaviors. SSRS-P results showed an increase in social skills from less than the 2nd percentile at pre-intervention to the 21st percentile post intervention (see Figure 5). The CDC rating scales by the after-school personnel for Prosocial Behaviors decreased from 66% to 54% of total possible score, and the Aggressive Behaviors increased from 10% to 12% of total possible scores (see Figure 6).

Peer Mentors

The peer mentors' levels of engagement in verbal interaction and participation in social activity with peers and adults are depicted in Figures 7, 8, and 9. Peer mentor # 1 (Jen) showed generally high levels of engagement in positive verbal interaction and high levels of engagement in social activity during baseline and after initiation of the intervention. Peer mentor #2 (Mary) showed variable levels of verbal interaction and participation in social activities with the rates of interaction generally ranging

Figure 7.

Peer mentors' frequency of verbal interaction with peers.

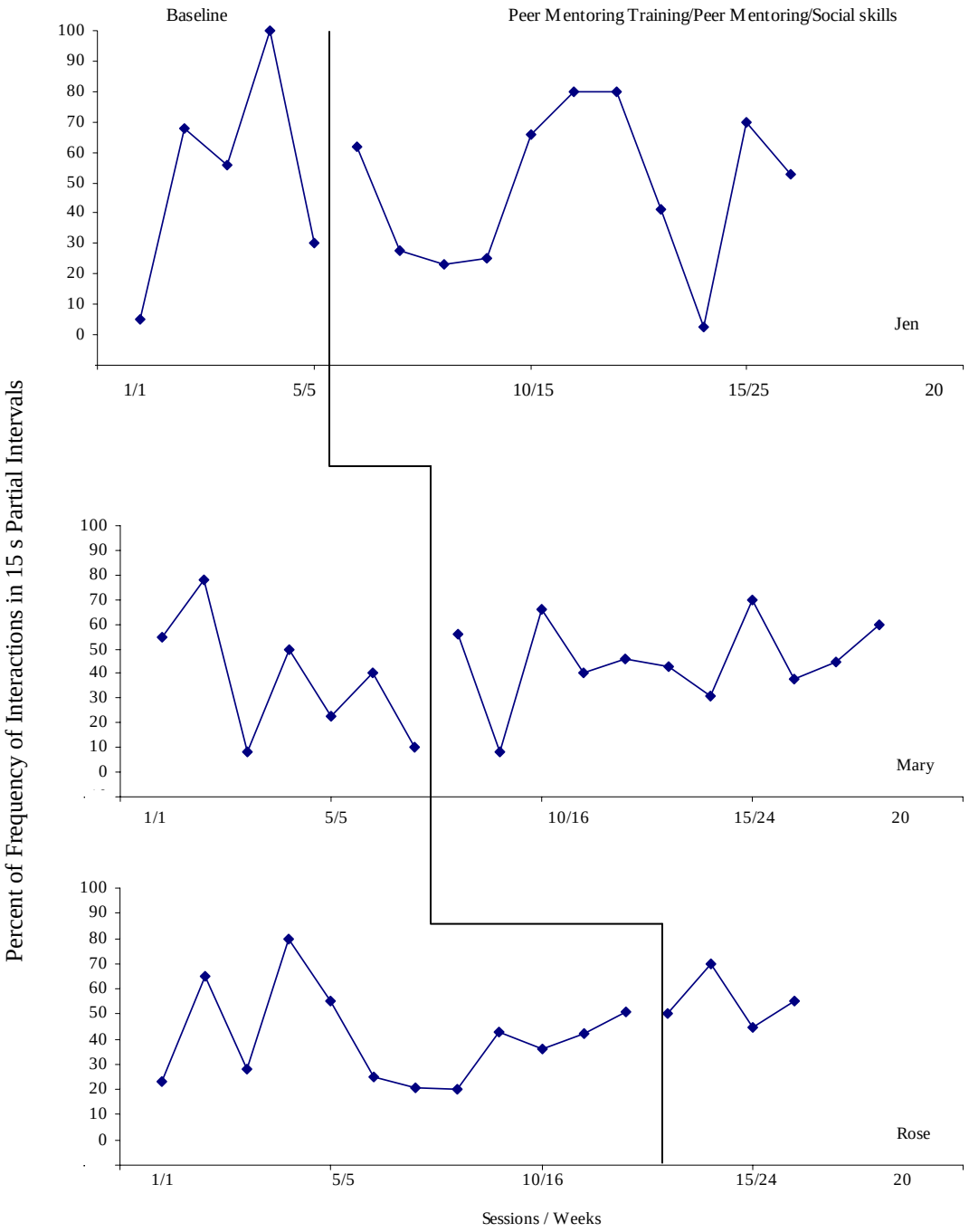


Figure 8.

Peer mentors' frequency of social activity with peers.

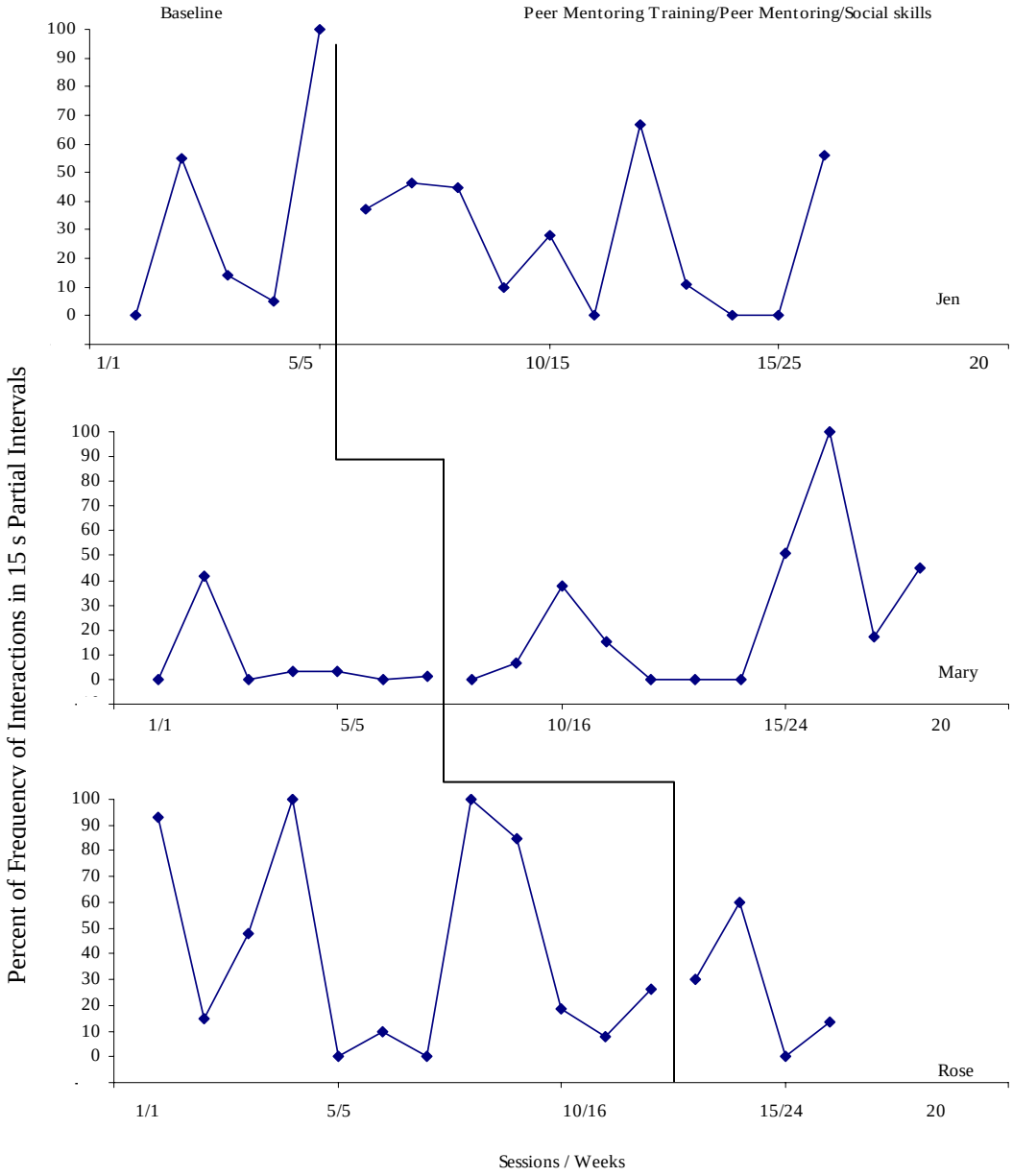
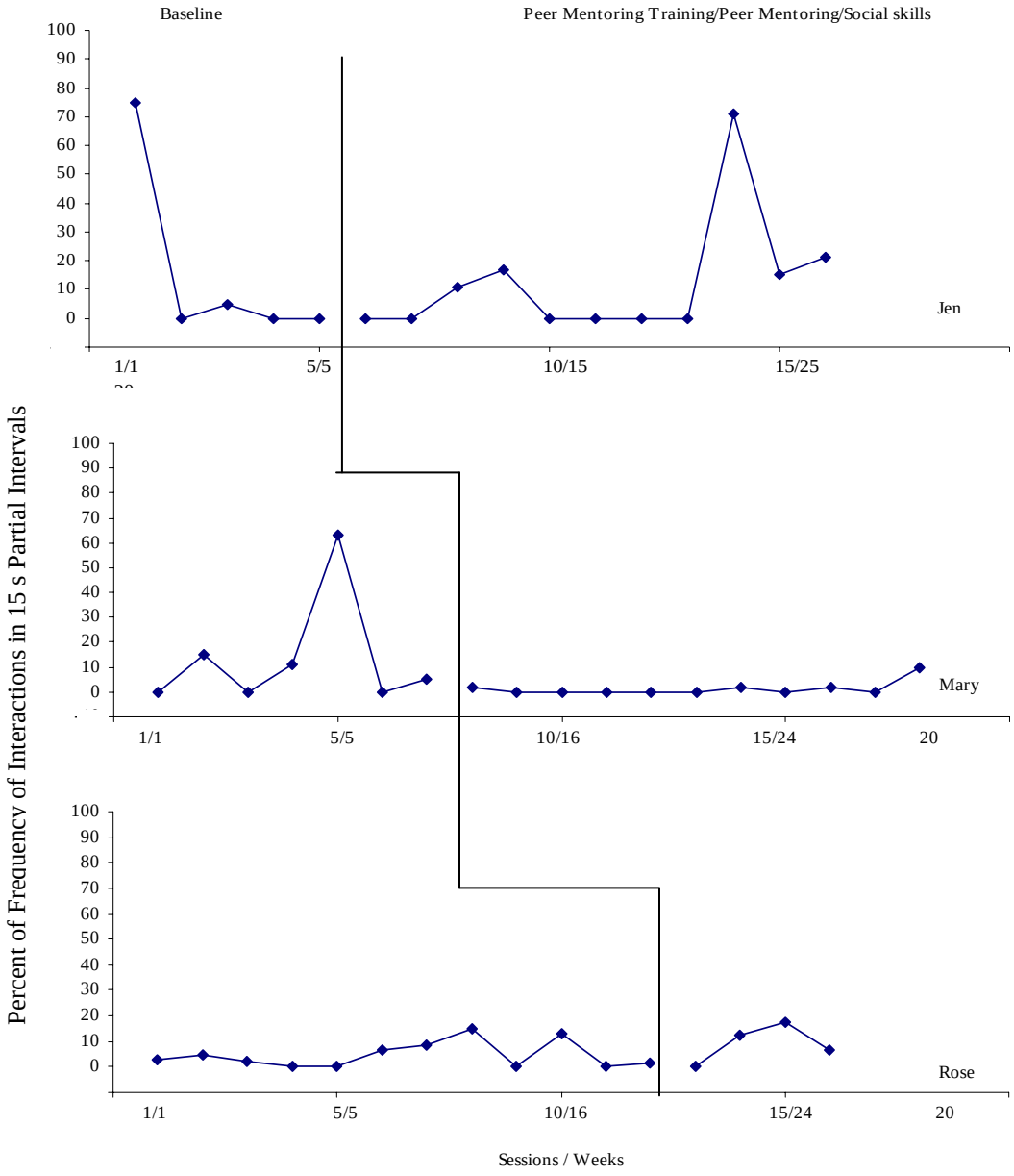


Figure 9.

Peer mentors' frequency of positive or neutral interactions with adults.



from 30 to 70% of the 15-s partial intervals. Peer mentor #3 (Rose) showed consistent levels (approximately 40-50% of 15-s partial intervals) of verbal interaction and engagement in social activities with peers before and after initiation of the intervention. All three peer mentors showed generally low levels of interaction with adults, which was considered the norm for typically developing children in this setting.

The pre- and post intervention results of the CBCL-P showed the three peer mentors all scored within normal range in the competence levels, internalizing and externalizing behaviors, and total problem behaviors. There were no borderline or clinically significant levels in any of the domains for the three mentors. The three mentors' pre-intervention mean T scores for competence was 46, for internalizing behaviors the T score was 39, and externalizing behaviors, the mean T score was 42. The pre-intervention mean total T score for problem behaviors was 44. The

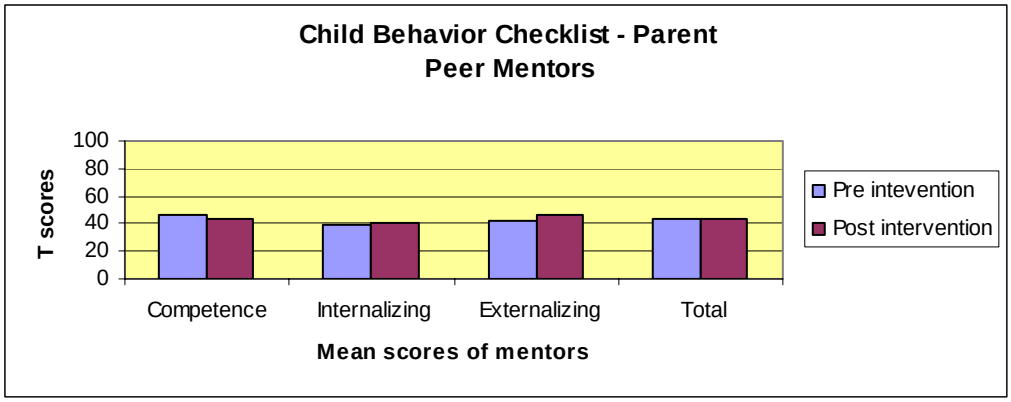


Figure 10. Results of Achenbach Child Behavior Checklist – Parent Version. T scores of competence, internalizing behaviors, externalizing behaviors and total problem behaviors on the peer mentors pre- and post intervention.

mentors' post intervention scores for competence was 43, internalizing behaviors was 40, and the T score for externalizing behaviors was 46. The total problem behaviors mean T score was 44 (see Figure 10).

The peer mentors' pre-intervention mean scores on the Social Skill Rating Scale was at the 63rd percentile. The post intervention mean scores were at the 68th percentile (see Figure 11). The pre-intervention mean scores on the CDC Prosocial behaviors rating scale assessed by the after-school personnel was 71%, and the Aggressive Behaviors mean pre-intervention score was 10%. The post intervention mean score for Prosocial Behaviors was 74%, and the Aggressive Behavior mean score was 6% of total possible scores (see Figure 12).

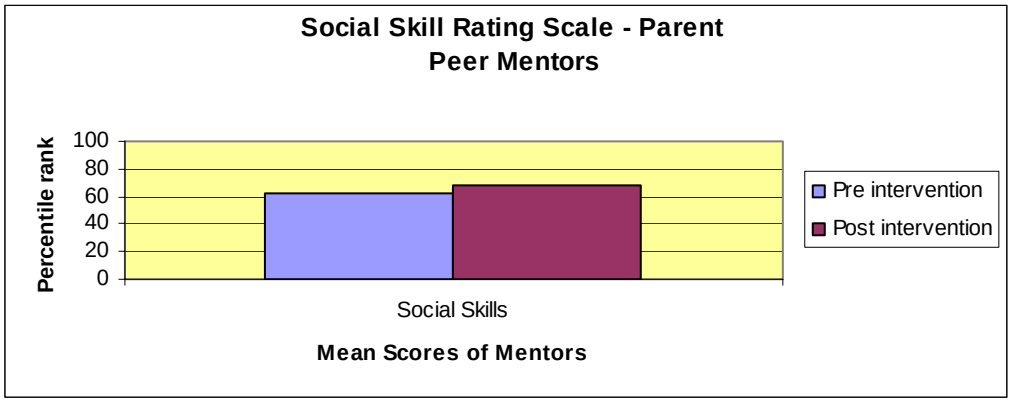


Figure 11. Mean percentile rank of the social skills rating scales pre- and post intervention of the peer mentors.

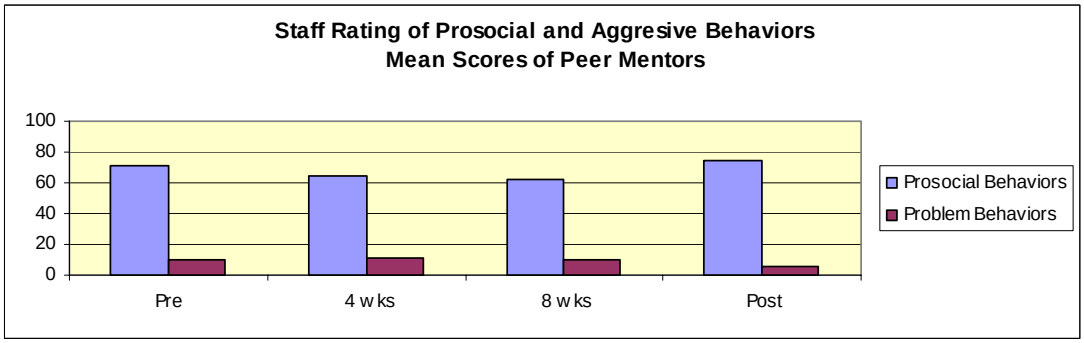


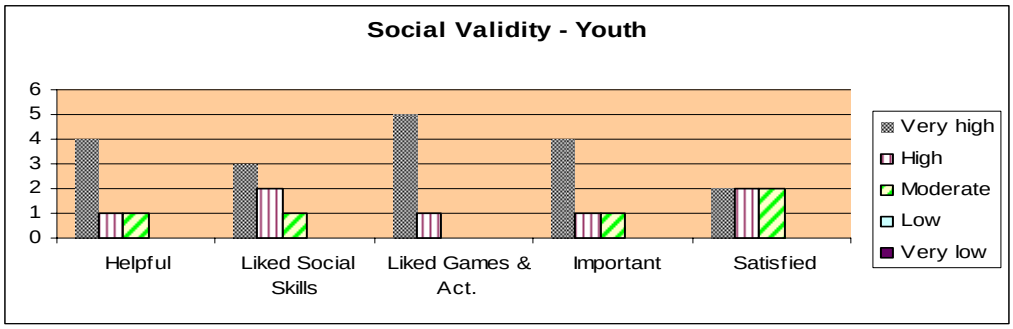
Figure 12. Staff ratings on the Center for Disease Control Ratings of Prosocial and Aggressive Behaviors on Peer Mentors.

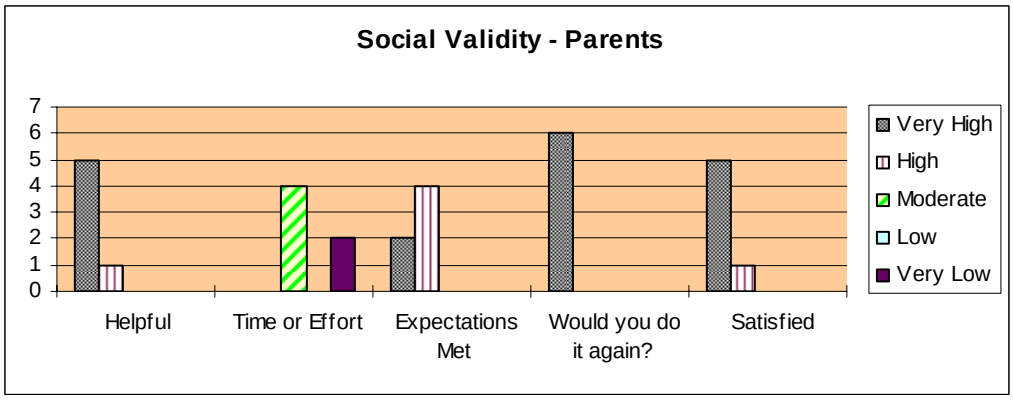
Social Validity

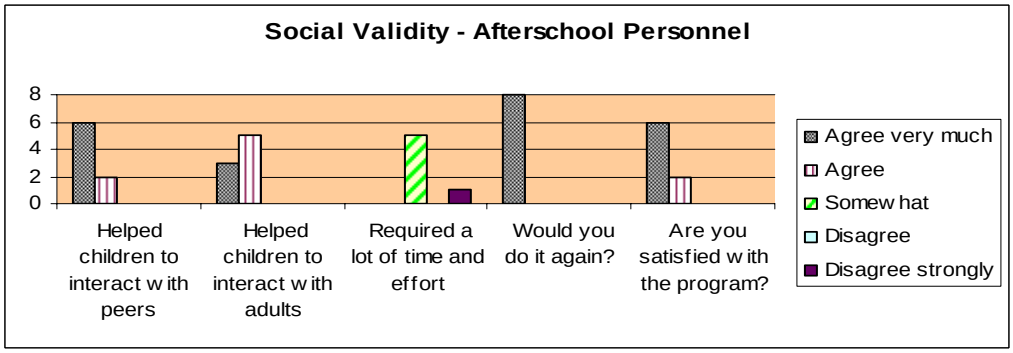
The social validity for the social significance of the goals, social appropriateness of procedures, and importance of the effects (Wolf, 1978) were evaluated by the youth, parents, after-school personnel, and experts in the field of Developmental and Child Psychology. These consumers completed a Likert rating scale with a range of one to five. One was assigned to a very low score and five assigned to a very high score. The results of the social validity questionnaires are shown in Figure 13.

Youth. The following are the youth mean scores for the social validity ratings: (a) Helpfulness of the intervention - 4.5, (b) Liked social skills training - 4.3, (c) Liked playing games and activities - 4.8, (d) Importance of learning to get along with other - 4.5, and (d) Satisfied with the program - 4.0. Five of the children responded that the amount of time spent in the project was “about right”, and one responded it was “too much time.” Four children responded they would do the project again if they had the opportunity, and two responded they would not. The comments by the participants describing the helpfulness of the project were generally positive. One

child reported that she “learned how to talk to other kids in my age group”. Another reported that the program helped her “to get along with other children”. The third reported that it “wasn’t helpful for her”. The peer mentors comments for helpfulness were all generally positive. The comments included “I helped someone get better at involving in activities”, “I learned how to solve problems and how to play games like







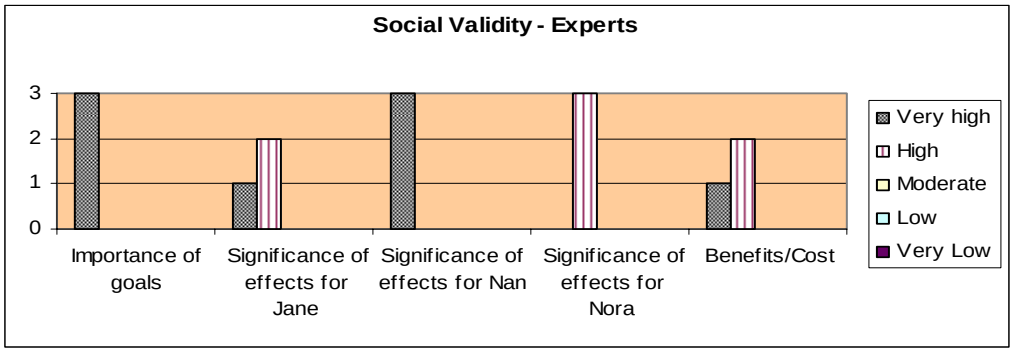


Figure 13. Social validity ratings of youth, parents, after-school personnel and experts in the field on the social significance of the goals, appropriateness of procedures, and importance of effects.

Mankala", and "I learned a lot of things, such as working a conflict out" (see Appendix G for further social validity comments).

Parents/Guardians. The following are the parents/guardians social validity mean scores for (a) Helpfulness of the intervention - 4.8, (b) Amount of time or effort required - 2.3, (c) Expectations met - 4.3, and (d) Satisfied with the program - 4.8. All six parents/guardians responded they would enroll their child in a similar program again (see Appendix G for parent/guardian comments).

Afterschool Personnel. The social validity mean scores by the after-school personnel were: (a) Helpfulness to talk and play with other children - 4.75, (b) Helpfulness to interact with adults - 4.3, (c) Required a lot of time and effort - 2, and (d) Satisfied with the program - 4.75. All eight personnel responded they would like to see a similar program continue at the after-school program (see Appendix G for further after-school personnel comments).

Experts in the Field. Three experts in the field of Developmental and Child Psychology were surveyed and all three ranked the importance of the study's goal "to increase positive verbal interactions and social activity among socially withdrawn children" as very important. Two of the experts rated the clinical significance of the effects for Jane to be important, and one responded that the effects were very important. All three experts ranked the significance of Nan's clinical effects to be very important and ranked Nora's clinical effects to be important. Two of the experts responded "yes" to the question of whether the benefits of the procedure outweighed the costs, and one responded that the benefits "very much" were worth the costs. Comments written by the experts were "each child demonstrated clinically significant improvement – Nan- dramatic improvements," and "while the benefits are evident in a fairly brief follow-up time period- and there are important benefits, we don't know if the benefits will persist for longer periods of time or will extend much beyond the setting where they were observed."

Data from the Independent Variables

Peer Mentoring Training

All three mentors met 90% criterion in the behavioral rehearsal role play exercises within three trials. One mentor (Jen) met 90% criterion on the written quiz, and the other mentors (Mary and Rose) obtained 100% criterion on the written quiz.

Social Skills Training

All but one of the participants met 90% criterion for each of the social skills taught after three or four trials of behavioral rehearsal and feedback. Nan was the exception, requiring six trials of the anger management skill before 90% criterion was obtained.

Peer Mentoring Sessions and Group Mentoring Session.

The levels of frequency of engagement in verbal interaction and engagement in activities were obtained during the one-on-one peer mentoring sessions and during the group peer mentoring sessions (see Figures 14, 15, and 16). Jane and Jen showed levels of verbal engagement consistently greater than 50% of the 15-s partial intervals, with the typical level of engagement at approximately 70% during the one-on-one peer mentoring sessions. The levels of engagement in social activity were very high (100% of 15-s partial intervals) at the beginning of the one-on-one sessions and remained high throughout the remaining session. Jane's levels of verbal interaction dropped to 70% at the onset of the group peer mentoring sessions, but quickly increased to a high level.

The frequency of verbal interaction with Nan was low throughout the first ten one-on-one sessions with the peer mentor Mary. Mary's verbal interaction frequency was also low. After session five, the researcher prompted Mary to initiate more verbal interactions with Nan. However, there was not a significant improvement in levels of interaction. At session seven, the researcher introduced games requiring verbal interaction resulting in a slight increase in verbal interactions. At sessions 10 – 16, the levels of verbal interaction for Nan increased to

approximately 70-80 percent of the 15-s partial intervals. Mary's levels of verbal interactions were approximately 30% (which was lower than her typical level of verbal engagement with other peers her age) of the 15-s partial intervals. During the group peer mentoring sessions, Nan's levels of interaction remained elevated at 70-100%. Mary's levels of interactions were slightly lower than her typical rates of engagements with peers.

Nora's levels of engagement in verbal interaction during the peer mentoring one-on-one session started low but increased after the fourth session to an average of 60-70% of the intervals. She engaged in high levels of interaction in the activities throughout most of the sessions. High levels of engagement in both verbal interaction and social activity remained high in the group peer mentoring sessions.

Rose had variable levels of interaction throughout the peer mentoring sessions. At session eight, the researcher introduced interactive games which initially increased the levels of verbal interaction and engagement in activities for Rose. The researcher prompted Rose to increase the initiation of verbal interactions and improve engagement in activities at session 13. A discussion with Rose and her mother about Rose's interest in continuing to serve as a peer mentor also occurred at session 13. Rose expressed concerns that she felt like she wasn't making a difference in helping her mentee. After showing Rose the data collected of Nora's (i.e., her mentee) levels of increased engagement in verbal engagement and social activities with peers, she showed greater interest and levels of engagement thereafter.

Figure 14.

Child participant and peer mentor frequency of verbal interaction and engagement in social activity during the peer mentoring sessions.

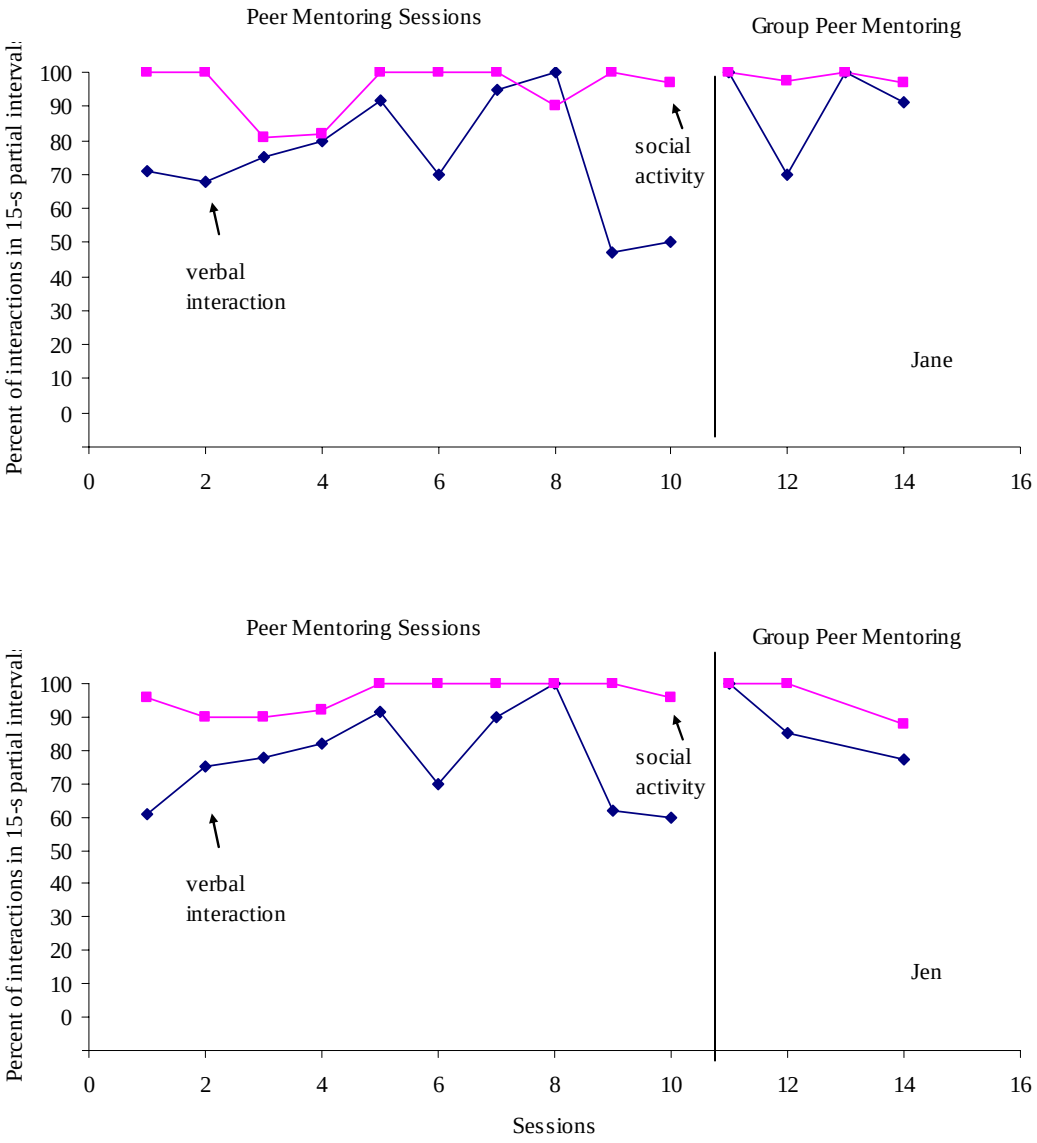


Figure 15.

Child participant and peer mentor frequency of verbal interaction and engagement in social activity during the peer mentoring sessions.

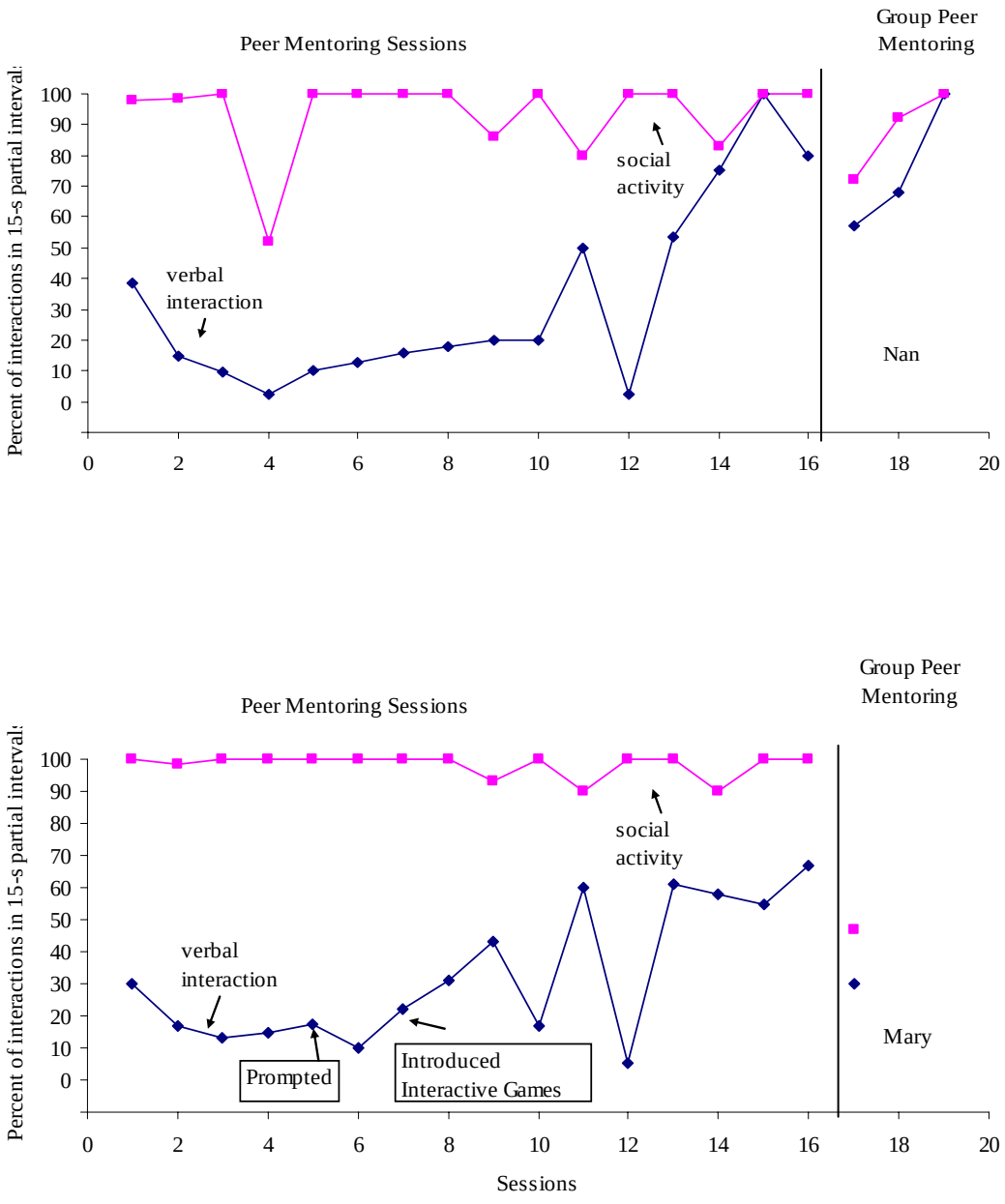
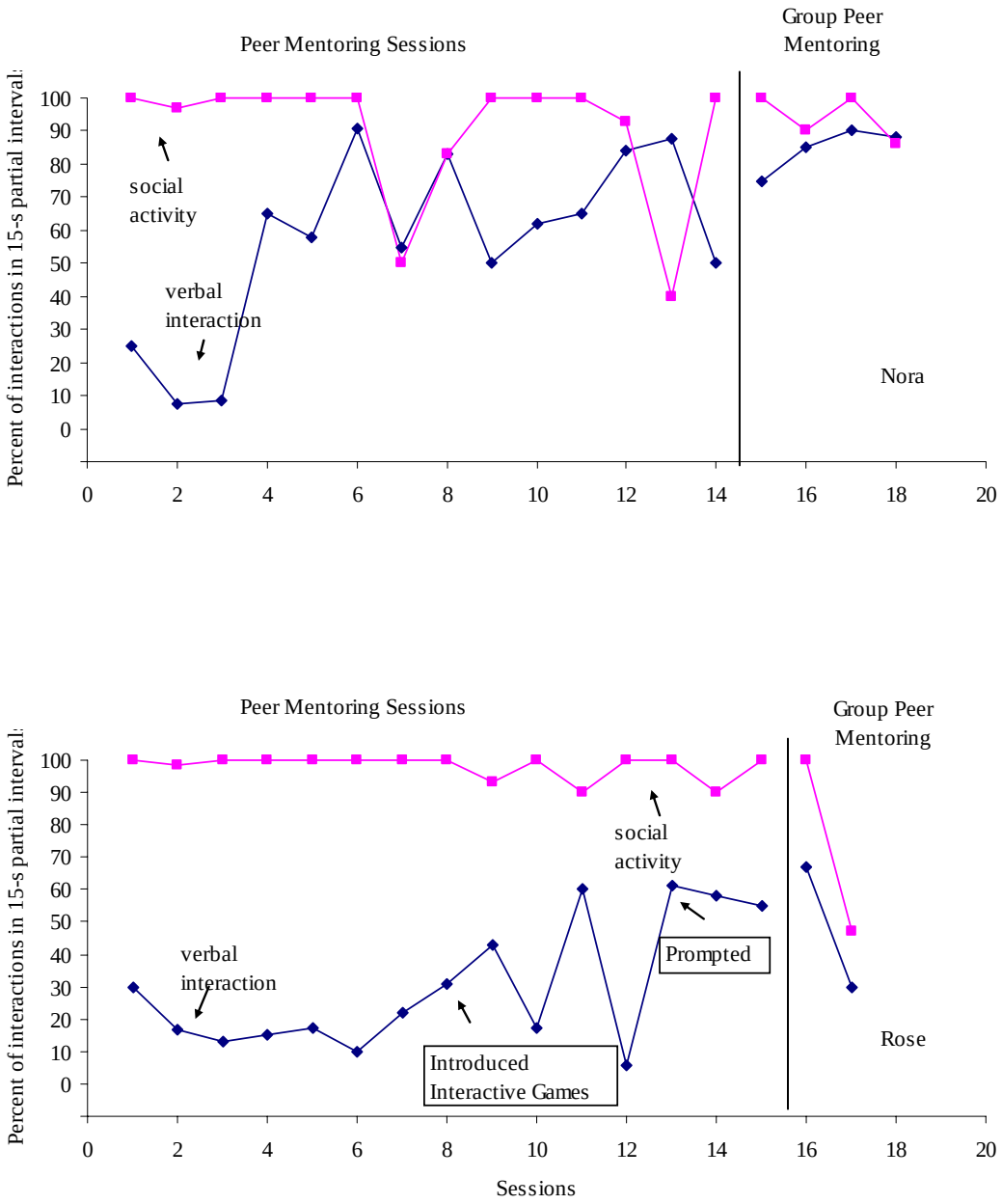


Figure 16.

Child participant and peer mentors frequency of verbal interaction and engagement in social activity during the peer mentoring sessions.



V. Conclusions

Primary Conclusions

The peer mentoring program and social skills training with positive reinforcement increased the frequency of peer interactions and improved the social skills of the participants. After three to four weeks of exposure to the interventions, levels of verbal interaction and engagement in social activities in the target participants were comparable to the levels of engagement of the peer mentors. In addition, the behaviors persisted in the follow-up period four to six weeks after completion of the intervention. Anecdotal reports from the after-school staff 15 months after completion of the study indicated that all three children continued to demonstrate prosocial behaviors and did not demonstrate socially withdrawn behaviors. The staff reported that Jane showed engagement with her group almost 100% of the time, and Nan and Nora continue to be engaged with their peers in the group setting at a rate similar to that of their peers.

In all three participants, social competence increased while internalizing and externalizing behaviors decreased. For Jane, the levels of internalizing, externalizing, and total problems behaviors on the CBCL – P were in the clinically significant range prior to intervention. At post-intervention, the internalizing and total problems were within normal limits, and externalizing behaviors had fallen to the borderline clinically significant range. For Nan, levels of competence, externalizing problems and total problems on CBCL – P were clinically significant pre-intervention but in the normal range post–intervention. Nora showed clinical

levels of competence and borderline clinically significant levels of withdrawn/depressed behaviors in the pre-intervention. Competence levels were within normal limits in the post intervention period, although withdrawn/depressed behaviors persisted in borderline levels. Externalizing behaviors and total problem behaviors decreased in the post intervention period. All three children showed an increase in percentile ranks on the social skills rating scale after intervention.

The exposure to the peer mentors directly resulted in increased peer connections, which increased the participant's external social support system. Social support networks are one of the protective factors that Werner (1989) and Garmezy (1990) identified as predictors of resiliency. Berkman (1995) has described those with external support systems as having a strong social capital. Strong social capital is associated with positive health outcomes for people within their social contexts. Social capital may also increase competence, self-efficacy, and a sense of belonging. The present study is one of the first to demonstrate psychological and behavioral benefits from improving social support networks for at-risk children with history of maltreatment.

Secondary Conclusions

It is important to note that there were incidental findings in the study that may have contributed to the participants' improved behavioral outcomes. Environmental props or materials such as specific interactive board games, a pool table, and interesting crafts activities served as prompts and stimuli for increasing engagement in both verbal and social activity interactions. The peer mentors, and eventually the

participants initiated the social activities (e.g., typically game playing) and sustained high levels of activity throughout the sessions. However, it was necessary for the researcher to introduce specific props that required verbal interaction and stimulated discussion during the peer mentoring sessions in order to increase and sustain levels of verbal interaction for Nan, Mary, Nora, and Rose. Jane and Jen engaged in verbal interaction throughout the mentoring session without any specific props.

Another possible explanation for the behavioral changes observed in the participants is that the increased opportunities for recreation provided through the peer mentoring sessions may have served as reinforcers. Social interactions with the mentors were most likely the reinforcers and the natural contingency of contact with the reinforcers was a likely function of the behavioral changes. However, the exposure to tangible entertainment from the recreational activities may also have been a reinforcer that helped sustain the behaviors through the intervention and in the follow-up period. Pierce and Risley (1975) found that manipulating the amount of time youth had access to recreational equipment in an urban recreation center decreased disruptive behaviors and served as a potent positive reinforcer for recruitment of teens to the center. Initially, although the social interactions and the opportunities for the recreational activities through the games and access to the peer mentors were contrived, it seems that the natural contingencies of these reinforcers maintained the behaviors for continued engagement throughout the intervention session and in the follow-up period.

The peer mentors of the study were chosen by the afterschool program clinical staff (i.e., licensed counselors with graduate degrees in Social Work) based on positive behaviors, role-modeling, and leaderships skills noted over time at the after-school program. Once the peer mentors were identified, they were asked to participate in this study. Although the children gave assent to participate, one peer mentor, Rose (matched with Nora) showed ambivalence about continuing participation as a mentor several weeks into the intervention phase. She reported that the reason for not wanting to continue as a mentor was because she felt she wasn't making a difference for the participant and she preferred to spend more time with her friends in her own age group (i.e., Rose was two years older than Nora). Rose also reported that her peers were "teasing her" about being involved in the "special project". However, Rose's mother would not allow her to stop participating in the project. After further discussion with Rose and her mother, and after allowing Rose to see the improving observational data of Nora's behavior, Rose agreed to continue participation in the study.

Most peer or adult mentoring programs are conducted on a volunteer basis. Although the peer mentors were given an option to participate in this study, they may have had a sense of responsibility or been compelled to participate because of parental pressure and/or acceptance by staff personnel. A volunteer peer mentoring program may have resulted in peer mentors who were more verbally interactive and offered a more supportive social network. This may have impacted the outcomes of the study, possibly in a more beneficial way.

Anecdotal reports from parents, youth, and staff offer further support for the positive results of this study. Although participants' social skills were not directly observed pre- and post intervention, Jane's mother reported to the researcher that Jane had revealed a concern about a disagreement with a close friend. Jane tried some common strategies to resolve the conflict, such as apologizing, but didn't feel like the issues were resolved. She subsequently initiated the social skill she had learned several months previously, "Disagreeing Appropriately with a Friend" and reported to her mother happily that she was able to resolve the issue with her friend through the use of this social skills strategy.

Another anecdotal report from Nan's grandmother was that prior to the intervention, Nan had never been invited nor ever invited another child over for a "sleep-over". Shortly after the intervention was complete with Nan, she invited a friend (not the peer mentor) for a sleep-over. Nan's grandmother also reported that after the intervention began, Nan had no further aggressive acts or school suspensions. Nan also initiated joining a drill team club once the intervention was complete.

Finally, an afterschool staff member reported that she had never seen Nora smile or initiate interactions with the staff prior to the intervention. Fifteen months after the intervention, the staff reported, "we are enjoying interacting with and having Nora in our group".

Methodological Challenges

Obtaining rating scales of the participant's behavior from the after-school personnel (day care teachers) presented numerous methodological problems. The CDC rating scales for Prosocial and Aggressive behaviors were completed by the day care teachers pre-intervention, at approximately every four week intervals during the intervention, and during the post intervention period. One significant problem was frequent rotation of the teachers to different age group classrooms at the center. As a result, different teachers rated the participants over the course of the intervention. This may have accounted for Nan and Nora's scores indicating an increase in problem behaviors as the intervention went on. Another possible explanation for this unexpected rating was that prior to the intervention, Nan and Nora showed only withdrawn behaviors with no social interactions. It may be that as the intervention took place, Nan and Nora showed more verbalizations and other behaviors typical of their peers in the after-school setting. Finally, there was poor reliability among teachers on the ratings given to one of the peer mentors. For example, one teacher ranked the mentor with a very low score on the Prosocial Behaviors rating scale, while during the same time period, another teacher ranked her very highly.

Inconsistent and erratic attendance at the center by several participants presented another challenge. A portion of the data collection and intervention period occurred during summer months during which attendance was inconsistent due to parental schedule conflicts. The peer mentors and one participant also took part in numerous

scheduled activities offered by the after-school program, some of which were held off site from the after-school program. The peer mentoring sessions and social skill training sessions had been planned to meet three times weekly, but because of the inconsistent attendance, occasionally the pair of children met only one or two times a week. The mentoring sessions then were stretched out over four to five months rather than the expected 10 weeks as originally planned. The intervention continued until there were 20 peer mentoring sessions and all nine social skills were taught.

Finally, attrition of one of the participants presented another methodological challenge. A ten year old male with history of physical abuse was enrolled in the study. However, in the midst of the intervention phase his mother decided to remove him from his elementary school and the after-school program and enroll him in a correctional center for boys.

Strengths of Study

The most salient strength of this study is this systematic measurement of behavioral changes that showed an increased level of the participants' verbal interaction and participation in social activity with other peers. Nan had significant positive changes in levels of competence, decreased externalizing and total problem behaviors and a significant increase in social skills per parental rating scales. Jane and Nora also had positive changes on both rating scales.

Another strength of the study is that it included assessments of social validity. The purpose of social validity assessment is to evaluate the acceptability and social/clinical significance of a program. The elements of assessing social validity

include determining the importance of the goals, the acceptability of the techniques to the consumer, and the satisfaction and effectiveness of the outcomes without untoward side effects (Schwartz & Baer, 1991). Since peer mentoring programs are not as common as adult mentoring programs and this specific intervention had not been previously tested, assessing the social validity of the study was considered an important secondary measure of success.

The youth and parents rated their satisfaction with the intervention very highly, supported the importance of the goals, and did not believe the intervention was too costly in terms of time or effort. Most responded they would participate in the project again. Likewise, the staff at the after-school program rated the program highly for helpfulness and satisfaction. They reported that the program did not require a great deal of effort and all agreed they would do the project again. The experts in the field also reported that the goals of the study were significant, the results showed clinical significance, and the benefits outweighed the costs.

Viability of the program is another consideration when measuring social validity. While evidence for viability of the program has not yet been collected, the director of the after-school program commented that she would like to see a center-wide peer mentoring program initiated within the after-school program. The clinical staff at the after-school program requested the Peer Mentoring Training and Social Skills Asset program for review and possible use for sustaining the project. However, to this date no formal program has continued.

A further strength of the study is the relatively low cost of the program. Although the time involved in this study was considerable for the researcher (approximately nine to 12 hours per week), a similar project could be implemented in a group setting with trained staff that may not be as time consuming. If the peer mentoring and social skills training were conducted in a group setting, the supervision would be less time consuming and the benefits of the mentoring and social skills training could serve a larger group of children.

A final strength of this study is the effective engagement of peers as support for other children's engagement. For the peer mentors, opportunities to help other children may have functioned as natural reinforcement to sustain their involvement in the project. Enlisting and recruiting youth to serve others is an important learning opportunity for community service. Providing opportunities for youth to help others allows youth to function as a change agent for the benefit of other youth, and consequently to come in contact with the potential reinforcer of accomplishment. A positive experience may encourage the youth to seek further opportunities to volunteer in community service experiences. Youth involvement may also decrease costs and defray time and expense for the after-school staff and program. Finally, children in this school age group may be more likely to follow prosocial peer role-models than adult role-models.

Implications for Future Research

This study is unique in that it is one of few to show clinical improvement in behavior for children with a history of child maltreatment. Few studies show the

effectiveness of a peer mentoring program, with most research conducted on the effects of adult-child mentoring programs (DuBois & Neville, 1997; Dubois, Holloway, Valentine, & Cooper, 2002; Dubois & Karcher, 2005; Parra, DuBois, Neville, & Pugh-Lilly, 2002). A recent meta-analysis (Dubois et al., 2002) found that the overall effect size for adult-child mentoring programs was small to modest (.14 to .18), although the effect size was greater (.25 to .26) for those at highest risk for individual and environmental risk factors. Programs that addressed specific outcomes (e.g., emotional/behavioral, high-risk/problem behavior, social competence) also showed a greater effect size (.25 to .33). Future research should explore the effects of volunteer peer mentoring program for youth (similar to Big Brothers/Big Sisters). These might be located in high-risk local after-school settings, schools, Boys and Girls clubs, or religious communities. Research on such programs would provide more information on the effectiveness and sustainability of peer mentoring. It would be important, however, to assure that the peer mentors were screened carefully, that the project included direct observation of prosocial behaviors, and that the children were committed to the program. Research has shown that "deviant" peers in group settings may produce negative effects (i.e., deviant training) on peers by role modeling of the negative behaviors (Dishion, McCord, & Poulin, 1999). Appropriate supervision of the program to avoid possibility of untoward effects would be necessary.

The present study examined the effects of three components (peer mentoring, social skills training, and positive reinforcement) on behavioral problems in

maltreated children. Social skill training has been studied extensively and generally has shown to be an effective intervention among many youth, especially those with behavioral problems. Future research may include a component analysis to examine the effects of each of the components separately and determine which component may be more powerful.

The participants seemed to value the opportunity to earn a reinforcer for an activity. For example, the youth often asked the researcher if they could learn a social skill rather than doing a mentoring session, because they would earn a dollar for completing a social skills session. The modified token economy system for social skills training may have enhanced the youth's on-task behavior and improved the accuracy and efficiency of learning the social skills. Future research in social skills training could compare training with and without the use of positive reinforcement.

Another area for future research related to peer mentoring is to examine a "matching process" for the mentors and the participant youth similar to Big Brothers/Big Sisters. A systematic method to match the youth (based on similar interests, age range, gender, socioeconomic status, and even life circumstances) may enhance the mentoring experience for both the mentor and the participant. In addition, it would be of interest, similar to Fantuzzo et al. (1987), which paired prosocial preschool children with history of maltreatment to those maltreated children who were withdrawn. Mentoring programs for adult individuals with

similar chronic health related issues have shown effectiveness in improving support for those involved (Lorig et al., 2001; Riegel & Carlson, 2004).

The peer mentoring and social skills intervention in the present study was intensive with respect to the amount of time, duration, and one-on-one contact between the researcher, the peer mentors, and the participant youth. The peer mentor spent approximately 45 minutes two times a week with the participant in one-on-one interaction while supervised by the researcher. The researcher taught the social skills to the pair and spent approximately one hour with the pair of children for each skill learned. The children were required to learn the skills to 90% criterion, which typically required two or three repetitions of rehearsals. Further research should be conducted to determine if a "weaker dose", with less intensive time involvement, would still produce the desired effects. The peer mentoring sessions could be held with supervision of several pairs of children in a group setting, and likewise, the social skills training could be conducted in a group setting of six to eight children. The intervention effects may affect more children and thus be more cost efficient in terms of time and personnel resources.

Finally, the peer mentors in this study received formalized training from the researcher before initiating the peer mentoring sessions. Further research on peer mentoring may consider whether formal training is needed or whether more intensive training would be beneficial. The goal of the training session in this study was to assure the mentors knew how to build a relationship, what to do during the sessions, and how to handle difficult situations. It was not intended to instill "counseling"

skills or assume responsibilities greater than those appropriate for a school-aged peer. More intensive training could be implemented by providing "mini" updates. Further, providing scheduled opportunities for the mentor to discuss problems or issues with the researcher or an adult supervisor may be beneficial to offer ongoing support for the mentor.

Implications for Practice

This study offers numerous implications for clinicians and researchers in the practice of behavioral and child psychology. The results of this study suggest that improving social capital (i.e., external social support systems and social networks) may produce changes in behavior and enhance psychological well-being. Social competence increased while withdrawn behaviors, externalizing, and total problems decreased to varying degrees in three children by increasing their social support system and increasing their social skills. Clinicians should continue to assess the social networks and supports available to at-risk youth with these behavioral problems. They should also identify those social networks that may not be utilized or determine ways to help clients access social supports. Group activities in schools and communities should be encouraged and supported. For those who lack social acceptance and demonstrate withdrawn social behaviors, specifically directed programs such as peer mentoring may be a building block for developing a wider social network.

Youth who demonstrate success in social interactions and appropriate social skills are generally more appealing to other youth and adults (Spence, 2003).

Clinicians have an important role in assessing and teaching appropriate social skills to youth with behavioral problems. Children with a history of maltreatment may not have experienced positive reinforcement for appropriate social skills. For example, a child who attempts to initiate a conversation and does not receive reciprocal engagement in conversation with others may be reluctant to initiate conversation in the future. In addition, some children may have received positive reinforcement for inappropriate social skills. An example may be a child who goes along with another youth in a deviant act, such as stealing, and who receives positive reinforcement from that youth while never receiving the appropriate negative consequence for the behavior. Clinicians should not only teach appropriate social skills within contexts, but also assist in guiding youth to engage in positive contextual experiences where positive consequences for appropriate social skills will likely occur.

A strong social support network, along with good social skills has previously been identified as protective factors for youth who have endured adversity (Werner, 1989). Protective factors contribute to the 'resiliency' of the child in a particular context or within a particular developmental stage (Garmezy & Masten, 1986). The impetus for this study was to determine if "protective factors" could be instilled or developed among high-risk youth who have experienced adversity to increase their levels of resiliency. This study has shown that social networks and behavioral social skills may be enhanced through rearranging the environment, enhancing services and support, and providing contingencies for behavior.

Children who are considered resilient generally meet appropriate developmental roles and expectations, and generally are without significant behavioral problems. Although the results of this study indicate that the peer mentoring program increased protective factors, it may be premature to predict behaviors consistent with resiliency among this group of high-risk youth. However, some of the expected behavioral and developmental expectations for levels of competence for the three children in this study are meeting academic expectations, few or no school-related behavioral problems, and friendships with a least a few peers. All children in the study increased or improved these levels of expectations as a result of the intervention. Anecdotal reports and specific questions on the CBCL-P also confirmed an increase in friendships in all three children and a decrease in school suspensions of the one child who had multiple previous school suspensions.

Other indicators of resiliency are psychological measures such as levels of internalizing behaviors, externalizing behaviors and other problem behaviors (Cicchetti, Rogosh, Lynch, & Holt, 1993). The psychological outcomes of this study were measured within several weeks of the intervention, and revealed that internalizing, externalizing and total problem behaviors decreased from clinically significant levels to normal or borderline levels in two of the three children. A longitudinal study may determine how long these effects are sustained or what further interventions may be required to maintain the effects. In clinical practice, most children with highly adverse situations, such as the occurrence of child maltreatment, need intensive or chronic therapeutic treatment. An intensive dose of

an intervention as delivered in this study may produce a significant change, but it is likely that follow-up will be necessary on a longer term basis. Periodic (but hopefully a less intensive dose) treatment may be necessary to support and enhance protective factors and support resiliency among these high-risk children.

Although the focus of this research study was to intervene with children already identified with behavioral problems associated with a prior history of child maltreatment, a key societal goal is to prevent child maltreatment from ever occurring. Clinicians, as well as family and community members, are challenged with the responsibility of not only identifying when child abuse has occurred but to identify those children who are at risk. Identified risk factors for child maltreatment include unrealistic parental expectations about child behavior, substance use in the home, inability to provide high-quality child care, and a belief in the effectiveness and social acceptability of harsh physical punishment (World Health Organization [WHO], 2006). For children at risk, interventions that have shown evidence of effectiveness include parent training, referral to home visiting programs, and educating children to recognize and avoid potentially abusive situations (WHO, 2006). Promising components of community preventive interventions include reducing environmental risk factors (e.g., substance use, lead and other environmental toxins that affect child behavior), changing social and cultural norms that support violence (e.g., social norms for harsh punishment), and ensuring access to quality health care and education for all (e.g., access to health services and wellness programs, universal early child development programs).

Clinicians and researchers working with children with a history of child maltreatment are well aware of the deleterious effects that may be present in the later school age and adolescent years. Social incompetence, school failure, teen pregnancy, delinquency, and mental disturbances are among the common problems seen. Those working with abused children should continue efforts to identify interventions to support and instill protective factors, minimize and reduce risk-factors, and enhance the youth's resiliency.

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Appendix A

Invitation Letter to Parents or Guardians

Operation Breakthrough, Inc.
3039 Troost
Kansas City, MO 64109

Dear _____

Date _____

Operation Breakthrough is participating in a research project sponsored by the University of Kansas, in which two children are paired together to do activities, have some free time together, and also be in a social skills training program. The goal of the program is to help children practice in behaviors such as complimenting, thanking, and sharing with others and to decrease disruptive behaviors such as hitting, fighting or calling names. Children will also learn to work cooperatively with one another

We would like to consider your child, _____, for this program.

So, the researcher, Terri Mathews, from the University of Kansas requests your permission to allow her to review your child's records at Operation Breakthrough, including medical, psychiatric, enrollment, and therapeutic records (if available).

This information would be kept completely private.

Thank you,

Operation Breakthrough, Inc.

_____ I am the natural parent and /or legal guardian of the child named above.

_____ Yes, I allow Terri Mathews to review my child's records which include his or her medical, psychiatric, enrollment and therapeutic.

_____ Yes, I allow Terri Mathews to contact me regarding this research project.

_____
Child's Name

_____ _____
Signature of parent or legal guardian Date

Appendix B

Consent Form

INFORMED CONSENT STATEMENT

INTRODUCTION

The Department of **Human Development and Family Life** at the University of Kansas supports the practice of protecting people who participate in research. The following information is provided for you to decide whether you wish to have your child participate in the present study. You may refuse to sign this form and not participate in this study. You should be aware that even if you agree to participate, you are free to withdraw at any time. If you do withdraw from this study, it will not affect your relationship with this unit, the services it may provide to you, or the University of Kansas.

PURPOSE OF THE STUDY

The purpose of the study is to determine if a peer mentoring program, and social skills training with a reward for participation will decrease aggressive behaviors and increase healthy social behaviors in children. The aggressive physical behaviors will include such behaviors as hitting, kicking, pushing, biting, scratching, pinching, pulling hair, and destruction of property. The aggressive verbal behavior will include swearing, ridiculing, yelling in a loud inappropriate manner, criticizing and threatening statements. The healthy social behaviors will include complimenting, greeting, thanking, sharing, starting conversations, and offering help to others.

PROCEDURES

Five pairs of children will be matched and expected to spend approximately 2 hours per week together at Operation Breakthrough. One child will be taught to be a good role model, show leadership skills, and guide the other child toward positive behaviors. This child will be called a peer mentor. The mentors will receive at least two training sessions that explain the general expectations and responsibilities of the role. The training will be held over two 50 minutes sessions. Once the mentor is trained, the pair of children will spend approximately 1 ½ hours per week doing activities together and approximately 20 minutes per week in free time. The pair of children will spend one hour per week learning social skills with the researcher. The social skills training consists of learning seven social skills, a problem-solving skill, and an anger management skill.

It is expected that this project will last five to six months. The usual staff at the St. Vincent's Day Care and the researcher will be present during the program. The children will be observed throughout this time frame and possibly longer to measure

changes in behavior. The behaviors measured are the same as those listed under *Purpose of the Study.*

RISKS

There are no anticipated risks to this program. The program will take place at Operation Breakthrough and will include those children who already attend the Day Care.

BENEFITS

The children may benefit directly from this program by improving healthy social behaviors and decreasing aggressive behaviors. This may lead to better acceptance by friends, family and teachers. It may also lead to better school performance or decrease in problems with community members. The child may also improve their sense of well-being, and feel more comfortable in the school, home, and community.

PAYMENT TO PARTICIPANTS

There will be no payments to the participants. The children who participate in the social skills training will receive snacks from the vending machine after each week of completion of the social skills training.

INFORMATION TO BE COLLECTED

Information will be collected from the study activities that are listed in the Purpose and Procedures sections of this consent form. Information will also be collected from your child's medical, psychiatric, enrollment and therapeutic records. The type of information collected may be your child's history of injuries, current and past medications, therapeutic treatments, and demographic data.

Your name will not be associated in any way with the information collected about you or with the research findings from this study. The researcher will use a study number, initials, or a pseudonym instead of your name.

The information collected about you will be used by: Therese L. Mathews, the primary researcher; Steven B. Fawcett, members of the research team; and the University of Kansas Research committee that oversee research activities.

In addition, Therese L. Mathews and her team may share the information gathered in this study, including your information with: Operation Breakthrough and Therese L. Mathew's dissertation committee at the University of Kansas. Additionally, the results of this study may be presented in a professional presentation or published

study. Again, your name would not be associated with the information disclosed to these individuals

The researchers will not share information about you with anyone not specified above unless required by law or unless you give written permission.

REFUSAL TO SIGN CONSENT AND AUTHORIZATION

You are not required to sign this Consent and Authorization form and you may refuse to do so without affecting your right to any services you are receiving or may receive from the University of Kansas or to participate in any programs or events of the University of Kansas. However, if you refuse to sign, you cannot participate in this study.

CANCELLING THIS CONSENT AND AUTHORIZATION

You may withdraw your consent to participate in this study at any time. You also have the right to cancel your permission to use and disclose information collected about you, in writing, at any time, by sending your written request to: Therese L. Mathews, Department of Human Development and Family Life, 4001 Dole Center, Lawrence, KS. 66045. If you cancel permission to use your information, the researchers will stop collecting additional information about you. However, the research team may use and disclose information that was gathered before they received your cancellation, as described above.

PARTICIPANT CERTIFICATION:

I have read this Consent and Authorization form. I have had the opportunity to ask, and I have received answers to, any questions I had regarding the study and the use and disclosure of information about me for the study. I understand that if I have any additional questions about my rights as a research participant, I may call (785) 864-7429 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email dhann@ku.edu.

I agree to take part in this study as a research participant. I further agree to the uses and disclosures of my information as described above. By my signature I affirm that I am at least 18 years old and that I have received a copy of this Consent and Authorization form. (Use the 18 years old disclaimer only if the study population may include participants under the age of 18).

_____ _____
Type/Print Participant's Name Date

_____ _____
Type/Print Parent or Guardian Date

_____ _____
Parent or guardian signature indicate parent or guardian

[If signed by a personal representative, a description of such representative's authority to act for the individual must also be provided, e.g. parent/guardian.]

Researcher Contact Information

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Appendix C

Children's Assent Letter

Operation Breakthrough, Inc.
3039 Troost
Kansas City, MO. 64109

Date _____

Dear _____,

Operation Breakthrough is going to be doing a special project and we would like you to be a part of it.

The purpose of the project is to help children learn to get along with each other better, to learn how to help others, and to develop good friendships.

The children who are in the project will spend time with another child doing activities and getting to know each other better. We would expect you to meet with the other child three times a week for about an hour. One of the days you will also go to a special class with another child, and at the end of the class you will be able to get a snack from the vending machine. This project will last at least 10 weeks. At the end of the project, you will be able to receive a special toy.

<u>You do not have to participate in this project. If you decide to participate, but change your mind later and want to quit the project, you may stop participating at any time.</u>

_____ Yes, I want to participate in this project.

Appendix D

Social Validity Rating Scales and Results for Youth, Parents, Afterschool Personnel, and Experts

Mentoring and Social Skills Project

RESULTS

Youth

1. How helpful was the "Mentoring and Social Skills" project to learn to talk and interact with other children?

Very unhelpful Unhelpful Somewhat **-1** Helpful **-1** Very helpful - **4**

2. How much did you like learning the social skills?

Not at all Not very much Somewhat **-1** I liked it **-2** I liked it very much **-3**

3. How much did you like playing games and doing activities?

Not at all Not very much Somewhat I liked it **-1** I liked it very much **-5**

4. How was the amount of time spent on the "Mentoring and Social Skills project"?

Too little It was about right **-5** Too much **-1**

5. How important was it to learn how to get along with other children better?

Not important at all Not very important Somewhat **-1** Important **-1** Very Important **-4**

6. Would you do the project again, if you had the opportunity?

No **-2** Yes- **4**

7. Overall, how satisfied are you with the "Mentoring and Social skills" project?

Not satisfied at all Not very satisfied Somewhat **-2** Satisfied **-2** Very Satisfied**-2**

8. Please describe how this project was helpful to you.
I help someone get better at involving in activities.
I learned how to talk to other kids in my age group.
To get along with other children.
Learned how to solve problems. Learned how to play games like Mankala.
I learned a lot of things, such as working a conflict out.
It wasn't helpful.

9. Please describe how the project might be improved to be more helpful to the youth.

"It good enough when I did it."
"The project can improve to the youth because some people can learn how to calm down when they have a problem at school".
"It could of been longer."
"Spend more time with group now that I know it."
"Spend a little less time."
"New games."

10. Please add comments*:*

" I can be in more activities."
"This was one thing I like best was when we plad the games and when we did the sheets."
"I wouldn't do it again because even though I enjoyed the program and helping others, I also enjoy being with my friends."

Social Skills and Mentoring Project

Parents

1. Do you think the "Mentoring and Social Skills" project was helpful for your child?

Very unhelpful Unhelpful Somewhat - Helpful - **1** Very Helpful - **5**

2. How much time or effort was involved for you to have your child in this project?

Not at all - **2** Somewhat - **4** Too much

3. Were your expectations of the project met?

Not at all Not very much Somewhat Yes - **4** Very much - **2**

4. If you could enroll your child in a similar project in the future, would you do it?

No Yes - **6**

5. Overall, how satisfied are you with the program?

Not at all Not very much Somewhat Satisfied - **5** Very Satisfied - **1**

6. Please describe how the project was helpful for your child.

"I feel it helped to build self-esteem and confidence; also helped with social skills which was very much needed."
"She (mentor) helped another child interact with others and that was good for that child."
"It increased social interaction." (Mentor's mother)
"She (my daughter) is no longer 'helpless' when she faces conflict with another child. She has used the skills many times at home and school."
"It made her to become more concern about other feelings and make sure everybody feel like they belong." (Mentor's mother)
"Positive improvements in behavior and growth."

7. Describe what you would do to make the project more helpful for your child.

"Make the social skills learning a little more fun for the kids."
"Nothing!"
"The only possible improvements had to do with the busy schedules of Jane's and the other kids involved."
"Nothing, I think it was excellent the way it is – no improvement needed."

"Don't know."

8. Please add comments:
"I think Ms. Teri has been a great influence on the children. Your expertise has been appreciated."
"Teri is great! Great with my child!"
"I'm glad we had you Miss Terry!"
"We would like to do a similar project with their brother."

Peer Mentoring and Social Skills Project

Operation Breakthrough Personnel

1. Do you think the "Mentoring and Social Skills" project helped the children to talk and play with other children better?

Not at all Not very much Somewhat Yes, it helped - **2** It help a lot - **6**

2. Do you think the "Mentoring and Social Skills" project helped the children to interact with adults better?

Not at all Not very much Somewhat Yes, it helped - **5** It help a lot **-3**

3. How much time or effort was involved for you to have the children involved in this project?

Too little - **1** Somewhat - **5** Too much

4. Would you want to have a similar project continue at Operation Breakthrough?

Yes - **8** No

5. Overall, how satisfied are you with the Peer Mentoring and Social Skills program?

Not at all Not very much Somewhat Satisfied - **2** Very satisfied - 6

6. Please describe how the project was helpful to the children.

"Our kids often do not learn the social skills they need to make it."
"Children (2) opened up more with adults."
"Increase eye contact, increased cm skills."
"The project was very helpful and I see a major change in 2 of the students."
"Increased their social skills. Allowed them to be a part of a new program/experience."
"This gave the at-risk kids a chance to relearn/re-experience skills they missed possibly due to their rocky backgrounds and now they have the skills to function well with others."
"Improved social skills and interactions with adults. Great service experience for mentors to contribute to peers."
"Some of them will come to me and talk more. We laugh more together."

7. Please describe how the project might be improved to be more helpful to the children.
"I would like to see a center-wide mentoring project."
"The project is already very helpful."
"Take volunteers". "Make it culturally appropriate". "Also match them with an adult/staff coach or mentor."
"Involve some teachers with the children."

8. Please add comments:
"Great job." " Nice work."

Social Validity for Experts in the Field

1. Social Importance of Goals- (Please consider the overall purpose).
How important is the study's goal "to increase positive verbal interactions and social activity among socially withdrawn children with history of maltreatment"?

Very Unimportant	Unimportant	Neither Important nor Important	Important	Very Important - **3**

2. Clinical Significance of Effects
Please consider for each child: a) Post intervention effects in Figure 1, and b) Pre and Post Intervention Ratings on the Child Behavior Checklist, and c) Social Skill Rating Scale (Chart # 1).

How clinically significant are the effects for:

Child # 1 (Jane)

Very Unimportant	Unimportant	Neither Important nor Unimportant	Important - **2**	Very Important - **1**

Child # 2 (Nan)

Very Unimportant	Unimportant	Neither Important nor Unimportant	Important	Very Important - **3**

Child # 3 (Nora)

Very Unimportant	Unimportant	Neither Important nor Unimportant	Important - **3**	Very Important

3. Cost- Benefit Assessment (Please consider the overall cost and effects.)
We estimate that for a total cost of $1250, this intervention could be implemented in a small group format (with 6-8 children) by one staff member. (The average staff member salary is $15.00/hour, the time required is approximately 8 hours per week for a total of 10 weeks, and the cost in materials is $50.00.) Considering these costs and associated benefits (see the results): How satisfied are you that the benefits are worth the costs?

Not at all	No	Neutral	Yes - **2**	Very much - **1**

4. Comments:

"While the benefits are evident in a fairly brief follow-up time period – and these are important benefits – we don't know if the benefits will persist for longer periods of time or will extend much beyond the setting where they were observed."

"Each child demonstrated clinically significant improvement – Nan – dramatic improvements."

Appendix E

Peer Mentoring Training

Peer Mentoring - Jen

What is a peer mentor?

A peer mentor is a teaching friend. The peer mentor is about the same age as another child.

You have been chosen to be a peer mentor because you have good behaviors.

What are examples of peer mentors?

People who help each other when they first start a new job.

Children who help another child when they have difficulty with doing something.

How will I be a peer mentor?

You will be a peer mentor by setting a good example and helping other children with getting along with others.

Relationship Building

What is relationship building?

Relationship building is two people who spend time together and do things together. They may become friends.

Why do we build relationships?

Relationships make people happy and make life more enjoyable.
Relationships are important so that people can help each other during difficult times.

What are examples of relationships?

- Children who are friends and play together.
- Adults who like to talk to one another.
- Children and their parents.
- Children and their brothers and sisters.
- People who work together.

How do I build a relationship?

Greet or say "hi" to your friend.
Smile when you see your friend.
Be positive and happy when you are with your friend.
Ask them how things are going at school and at home?
Listen.
Find out what kinds of things they like to do.
Tell them what kinds of things you like.
Find out if you both like any of the same kinds of activities and arrange to do them.
Offer to help with schoolwork, projects, or anything else they may need.

What if she doesn't want to talk to me or do stuff with me?

Sometimes other kids have a hard time talking to others.
But everyone needs friends.
It is important to be there for your friend.

What do I do?

Ask how she is doing today?
Wait for your friend to talk.
It will be important to be patient.
Ask if something is upsetting her, if she looks upset.
Listen and show concern.
If you know something she likes to do, ask or comment about it.
If she still doesn't answer you, say "Okay, maybe we can do something later."

Being a Good Role Model

What is a good "role-model"?

A good role model is someone who acts in a manner that people like.
Good role models set a good example in the way they behave.

Examples of good role-models are :

- Someone who is kind to others.
- Someone who is a leader.
- Someone who follows the rules.
- Someone who gets along with others.
- Someone who doesn't use "bad language".
- Someone who doesn't use alcohol, cigarettes or drugs.

Building Trust

What is trust?

Trust is when you can count on some one's actions.
Trust is believing in another person.
It is important for your friend to be able to trust you.
Relationships are better when people can trust each other.

Examples of trust are:

- When you do something you say you're going to do.
- When people tell the truth.
- When people do what they are expected to do.

How do I do that?

Developing trust may take a long time.
The most important things to do are:
Keep promises.
If you can't keep a promise, tell her and let her know why.

Say only positive things about your friend to others; never say anything bad about him or her.
Always be honest.
Play fair.

Dealing with BAD Behavior

Sometimes your friend may do things that are harmful to others or themselves. They may break the rules or make trouble.

Examples of bad or harmful behaviors are:

- hurting themselves or others by hitting or calling names.
- being a bully (teasing or trying to control others.)
- not obeying the rules.

What should I do then?

If the behavior is not harmful, it may be best to ignore the behavior.
If the behavior is harmful, you should calmly tell him to stop the behavior, in a concerned way.
Tell her you will have to go tell an adult if continue to hurt someone or hurt themselves.
Then go get help.

Try not to be bossy, but gently let them know if you don't like their behaviors.
Try not to make them feel bad if they do something wrong.
It is most important to offer a lot of praise when they show good behaviors.

Activities to do with Your Friend

What kind of things are we supposed to do?

The activities you and your friend may be different each day.

You will be able to go outside and play on the playground.

You may play board games, with dolls, marbles, or other toys.

You may ask your friend if she needs help with homework or other school projects.

It is important that you play and work on the games and activities together.

Help your friend play with other friends.

Topics for Discussion

During your free time, you may want to spend time talking with your friend.

What kinds of things do we talk about?

Some things to talk about:

- what kinds of things have you been doing?
- what kinds of sports, games or activities do you like?
- what tv shows do you like?
- who is in your family?
- how is school going for you? what school subjects do you like?
- what kind of food do you like to eat?

Ask how they feel about things like:

- getting along with friends.
- any problems they are having.

Peer Mentoring – Mary and Rose

What is a peer mentor?

A peer mentor is a teaching friend.
The peer mentor is about the same age as another youth.
A peer mentor doesn't teach in a formal way like your school teacher does but teaches in a way by setting good examples to other youth.
You have been chosen to be a peer mentor because you have behaviors that are positive and would be a good example to other youth.

Why might you want to be a peer mentor?

So you can help other youth.
You may also learn skills that will help you later.

What are examples of peer mentors?

- Youth who help new students in a school.
- Youth who help others when starting a new job.
- Youth who help each other when having difficulty with doing something.
- Youth who are new in learning an activity or new to a group.

What do I do to be a peer mentor?

It is important that you continue to show positive and good behaviors to other youth.
You can show positive and good behaviors by frequently greeting other youth, helping them out when needed, sharing your ideas, and being friendly to all the other youth in your group.

Relationship Building I

What is relationship building?

Relationship building is two people who spend time together and do things together. They may become friends.

Why do we build relationships?

Relationships make people happy and make life more enjoyable.

Relationships are important so that people can help each other during difficult times.

Relationships are important because often we learn from each other.

What are examples of relationships?

- Youth and teens who are friends and do things with one another.
- Youth who like to talk to one another and do activities together.
- Youth and their parents.
- Youth and their brothers and sisters.
- Youth who work together.

What do I do to build a relationship?

Greet or say "hi" to your friend.

Smile when you see your friend.

Be positive and happy when you are with your friend.

Ask them how things are going at school and at home?

Listen.

Find out what kinds of things they like to do.

Tell them what kinds of things you like.

Find out if you both like any of the same kinds of activities and suggest an activity to do together.

Offer to help with schoolwork, projects, or anything else they may need.

Throughout, listen to what the other person is saying.

Relationship Building II

(Building a Relationship Even When a Person Seems Uninterested.)

What is building a relationship even when a person seems uninterested?

Building a relationship when other youth don't seem interested means still talking with them and asking them to do an activity with them.

Why is it important to continue to build a relationship when someone doesn't respond?

Some youth have a hard time talking to others.
Some youth have a hard time participating in activities with others.
But everyone needs friends.
It is important to be there for your friend.

What are examples of when to build a relationship with someone who doesn't respond?

- When a youth is with youth who do not participate during the group activities.
- When a youth is with youth who do not talk or who avoid people when in a social gathering.
- When a youth is with youth who do not talk when approached by another person they know.

What do I do when someone doesn't respond?

Ask how she is doing today?
Wait for your friend to talk.
It will be important to be patient.
Ask if something is upsetting her if she looks upset.
Listen and show concern.
If you know what she likes to do, ask or comment about it.
If she still doesn't answer you, say "Okay, maybe we can do something later."

Being a Good Role Model

What is a good "role-model"?

A good role model is someone who acts in a manner that people like. Good role models set a good example in the way they behave.

Why should I be a good role model?

So others may learn from me.

What are examples of good role-models?

- Youth who help younger children on the play-ground.
- Youth who organize books in the library.
- Youth who clean the group areas.

What do I do to be a good role-model?

Be kind to others.
Be a leader.
Participate and get involved in activities.
Have a positive attitude.
Follows the rules.
Get along with others.
Help others when needed.
Don't use "bad language."
Don't use alcohol, cigarettes, or drugs.

Building Trust

What is trust?

Trust is when people can rely on each other to tell the truth.
Trust is when you can rely on each other to do what they say they will do.

Why is it important to build trust?

Youth like to be with youth whom they trust.
Relationships are better when youth can trust each other.

What are examples of building trust?

- When you say you are going to call a friend and you do.
- When a friend asks you a question, and you answer honestly.

What do I do to build trust?

Developing trust with other children sometimes takes a long time.
The most important things to do are:
Be there when you say you will.
Keep promises. If you can't keep a promise, tell her and let her know why.
Say only positive things about your friend to others; never say anything bad about him or her.
Always be honest.
Play fair.

Dealing with BAD Behavior

What is dealing with bad behavior?

Sometimes youth do things that are harmful to others or themselves. They may break the rules or be disruptive.

Dealing with bad behavior is handling the behavior in a way that helps your friend. It is important to remember that it is the behavior that is bad – not the person.

Why do I need to know how to deal with bad behaviors?

You're not responsible for others' behavior.

Sometimes, however, you may be able to prevent slightly bad behaviors from becoming worse.

You may have the opportunity to help others when they are not behaving well in a situation.

You may be able to teach others about how to handle situations better.

What are examples of bad or harmful behaviors?

- Youth hurting themselves or others by hitting or calling names.
- Youth who are bullies (teasing or trying to control others.)
- Youth who do not obey the rules.

What do I do when bad behavior occurs?

If the behavior is not too harmful, it may be best to just ignore the behavior.

If the behavior is harmful, you should calmly tell her to stop the behavior

Tell her you will have to go tell an adult if she continues to hurt someone or hurts herself.

Then go get help.

Try not to be bossy, but gently let her know you don't like her behaviors.

Try not to make her feel bad if she does something wrong.

It is most important to offer a lot of praise when she shows good behaviors.

Throughout, show concern.

Activities to do with Your Friend

During the activity time, you and your friend will spend time doing activities.

What kind of things are we supposed to do?

The activities you and your friend do may be different each day.
You will be able to go outside and play on the playground. You might want to suggest basketball or other physical activities.
You may play board games, Mankala, or card games.
You may ask your friend if she needs help with homework or other school projects.
It is important that you play and work on the games and activities together.
After spending time together for a few weeks, you will join the rest of your group and help your friend play with other youth in your group.

Topics for Discussion

During your free time, you may want to spend time talking with your friend.

What kinds of things do we talk about?

The following are topics that might help in starting a discussion:

What kinds of things have you been doing?
What kinds of sports, games or activities do you like?
What TV shows do you like?
Who is in your family?
How is school going for you? What school subjects do you like?
What kind of foods do you like to eat?
What are your plans for the summer?

Peer Mentoring Quiz

Circle T for True and F for False

1. T or F A peer mentor is someone who teaches by setting good examples of behavior.

2. T or F It is best to always allow others to learn things on their own without helping them.

3. T or F It is okay to talk about yourself and tell others what kinds of things you like to do.

4. T or F Most youth learn from others when building relationships.

5. T or F Relationships often cause people more hardship than happiness in their life.

6. T or F If your friend doesn't talk to you after first greeting her, it is best to just leave her alone.

7. T or F A positive role model is someone who gets along well with others and follows the rules.

8. T or F An important way to build trust is to do what you say you are going to do.

9. T or F If you see someone bullying others or hitting others, it is best to leave them alone.

10. T or F If another youth acts kind to others, it is important to Praise him or her.

11. Name 3 activities you could do with the other children when you are a peer mentor:

1. _____
2. _____
3._____

12. Name three topics for discussion you could bring up with your friend:

1._____
2._____
3. _____

13. Name two ways to build trust:
    1. _____
    2. _____

14. Name two examples of a positive role model:
    1. _____
    2. _____

Appendix F

Peer Mentoring and Social Skills Sessions Task Analysis

Task Analysis of Peer Mentoring Activity Sessions

Introduction - First session.

1. Greet appropriately.

2. a. Explain process of the activity sessions. ("Thank you, girls (and boys) for joining this activity. Today we are going to start our activity sessions. We will be meeting two times a week for about two and half months. We also will be meeting one other time a week, and it will be a time that I will be teaching both of you a special class on social skills. The reason we are meeting together is to make it easier to get along with each other, to learn to help each other, and to develop better friendships."

"During this time, you will be able to choose an activity that you both would like to do. It would be best if you decide together what activity you would like to do, but if you can't decide, then you can take turns choosing the activity."

b. (Cue to Peer Mentor). "JM, do you want to ask JP about what type of activities she likes?"

c. (Cue to Target Child) "JP would you like to ask JM what types of activities she likes to do?"

d. Encourage them to decide on an activity today.

.

3. Prompt and guide play activities. Offer suggestions as needed.

4. Record activities and discussion. Monitor time frames.

5. Allow approximately 20 to 30 minutes for play time. Encourage the children to wrap up the play time when there is about 2 or 3 minutes left.

6. Stop play time if not already done, and suggest discussion time. "Okay, JM and JP, time is up for the play time." "I think it would be best if we spend some time talking now."

7. Initially, allow 5- 10 minutes for talking. We may extend that time in later sessions.

8. Continue to record discussion topics and duration of time.

9. Close session after ten minutes by praising girls for cooperative play and discussion. Discuss the next date and time that we will meet.

Subsequent Activity Sessions

1. Greet appropriately.

2. Tell the children what type of session is scheduled for today, an activity session or a social skills session. “Today is a day that we spend together doing activities. Each session, alternate asking each child to suggest an activity. (JP, do you want to suggest an activity that you both like to do?”)

3. Follow steps # 3 -9 above.

Fading of Peer Mentoring

1. Greet appropriately.
2. Tell the pair of children that the end of the activity sessions together is drawing near. At this time, the pair of children are expected to continue to play games or do activities together in their normal age assigned group. The researcher will prompt the peer mentor to initiate activities if needed while in the group setting. The peer mentor will also be prompted to encourage other children to participate in the activities with the other group members.

Social Skills Sessions

1. Greet appropriately.

2. Tell the children what type of session is scheduled today. “Today we are going to do social skills training.”
(First session only):
<u>Explain the purpose of social skills training</u>.

List skills to be taught.
Provide rationale for the program, emphasizing how the skills will benefit the participants.
Explain how skills will be taught.
Discuss the format of the sessions.
Discuss time frame and hours of the projected number of meetings.

<u>Explain the rules of social skills training.</u>

Listen carefully and pay attention to what is taught.
Take home your “Home Notes”, and bring them back next week.
At the end of the session, you will be given $1.00 if you complete the session and learn the skill.

3. Begin social skill training according to the following format.

(First session only.)

a. Explanation /description of the skill to be learned:
   -Define the skill.
   - Give a complete explanation of the skill.
   - Ask participants for their understanding of the skills and/or ask participants to describe in their own words.

b. Discussion of rationales:
   - State that a rationale is a reason for using the skill.
   - Give one good rationale for the skill.
   - Ask each participant for a rationale and lead the participants to mention the following and perhaps other rationales.

c. Discussion of example situations:
   - Describe important cues or characteristics of situations that require the skill.
   - Provide an example from your own life.
   - Ask each participant for an example situation.
   - Lead participants to mention some of the following examples of giving positive feedback.

d. Examination of skill steps:
   - Distribute skill sheets.
   - Describe skill sheet - displays the steps that are necessary for completing the skill.
   - Explain first skill step.
   - Give rationale for first skill step.
   - Have participants in turn read a step and give a rationale.
   - Check the participants' understanding of each step.

e. Modeling of the skill:
   - The teacher will perform the skill with one of the children.
   - The teacher may leave a step out and ask participants what steps were performed correctly and which ones were left out.
   - Ask participants what steps could be added or improved.
   - Teacher will re model the skill with a child and demonstrate all skills correctly.
   - Ask participants to provide specific feedback.

f. Verbal Rehearsal :
   - Have group members name each step in the skills.
   - Go through skill sequence at least twice.

g. Behavioral Rehearsal and Feedback:
- Have two participants at a time role play a situation.
- Participants provides positive and corrective feedback to each person on his/her performance.
- Continue rehearsal until each participant has practiced the skill at least once.
- Each participant need to identify novel situations for his/her own role play practice.

h. Criterion Performance:
- Explain that each child must perform all the steps of the skill.
- Have the participants being tested turn their skill sheets over on the table or chair.
- Have two members role play a new situation.
- Use the Criterion Checklist to score the performance of the person being tested.
- Continue until both children have met 90% criterion performance of each skill on three consecutive role-play situations.

i. Home Note Assignment:
- Make sure that all participants have their Home Notes (on the flip side of the skill sheet).
- Discuss potential situation in which to use the skill.
- Give a rationale for the home assignment.
- Remind the participants to return their Home Notes at the next session.

Subsequent sessions

a. Review of Home Notes:
- Collect Home notes.
- Review and role play one practice situation from each participant's Home Note; ask how people reacted when the participant used the skills.

b. Review of Previously Learned Skill:
- Have participants describe situations in which they used the skills.
- Role play at least one example of each previously learned skill.

c. Resume and follow the remainder steps as listed above from a - i.

Final Session

a. Review of All Skills Learned in the Program

- Have all participants take turns verbally stating the steps in a given skill.
    Then have each person role play the skill.
    - Continue until each child has practiced this skill.

b. End the session with a special gift and $1.00 for each child.