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Increasing Positive Social Interaction Among Kindergarten Students

Scott M. Trinh

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Educational Specialist in School Psychology

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ABSTRACT

Increasing Positive Social Interaction Among Kindergarten Students

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The current literature lacks empirically-supported preventative approaches for kindergarten students who are socially withdrawn and behind in the development of social skills. Furthermore, parents are underutilized in interventions during this critical period of social development. In response to this need, a classroom-based intervention consisting of (a) social skills training, (b) self-evaluation and reinforcement, (c) home notes and parent involvement, and (d) adult mediation was implemented to increase the positive social engagement of three kindergarten students. The effects of this intervention were evaluated on the playground during recess using partial interval recording of target students' positive or negative engagement with at least one peer. Improvements of social interactions on the playground were demonstrated by each target student during the implementation of the intervention, but only one student maintained these improvements in the follow-up phase. Future studies should investigate whether addressing the limitations of this study would yield stronger results with this under-identified population of students.

Keywords: social withdrawal, emotional behavioral disorder, social engagement, social skills, parental involvement

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INTRODUCTION OF THESIS STRUCTURE

Following the introductory pages (title page, acknowledgments, abstract, table of contents, and list of tables), this thesis is segmented into two major sections: (a) the article ready for submission to a journal (pp. 1-45) and (b) the literature review, starting on page 46.

This thesis contains two reference lists. The first reference list, starting on page 34, contains the references included in the journal-ready article. The second reference list, starting on page 65, includes all citations used in both the journal-ready article and the section titled “Review of the Literature.”

This first portion of the thesis is prepared in a “submission ready” journal format. A more extensive literature review is included in Appendix A. The informed consent form and materials used in this study are included in Appendices B through H.

Background

Students who face internalizing difficulties (e.g., anxiety, social withdrawal) continue to be overlooked for treatment due to the covert nature of the symptoms, whereas students with externalizing behavior problems are often referred (Peacock & Collett, 2010). Both internalizing and externalizing behavior disorders are subtypes of emotional and behavioral disorders (EBD). Despite different displays of negative social behaviors in both subtypes, students with internalizing and externalizing behavior lack the necessary social skills to do well in academic settings. Indeed, research suggests a strong association between social competency and successful academic outcomes (Kerr & Nelson, 2006; Walker, Ramsey, & Gresham, 2004). In order to address deficits in these two areas, educators must consider utilizing parents as an aid in intervention approaches and researchers need to develop empirically supported treatments that increase social competency in children with internalizing and externalizing symptoms, specifically those who withdraw from the peer group.

Typical manifestations of externalizing problems are aggression, hyperactivity, and disruptive behaviors, whereas significant anxiety, somatic complaints, and excessive shyness are common characteristics of individuals with internalizing symptoms (Peacock & Collett, 2010). Given these symptoms, it is no surprise that children with either disorder are likely to be disliked or rejected by peers and adults (Rubin, Bukowski, & Parker, 2006). For instance, children with internalizing difficulties are inhibited from positively expressing themselves, which can negatively impact those around them. Similarly, children with externalizing behavior problems may not only cause distress for peers and adults, but may be harboring internal difficulties as well. Indeed, substantial co-morbidity exists between internalizing and externalizing behavior

problems (Weiss, Jackson, & Süsler, 1997). For example, violent children may experience anxiety and, conversely, children with depression also may exhibit conduct problems.

Social Withdrawal in Children

Social withdrawal is defined as the tendency to withdraw one's self from the peer group for whatever reason (Coplan & Rubin, 2010). Rubin and Asendorpf (1993) have suggested that these reasons originate from internal factors, such as anxiety, self-perceived social difficulties, and negative self-esteem. While social withdrawal is not listed as a clinical disorder in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association [APA], 2000), it can be found as a symptom in a number of mental disturbances. Withdrawal and shy behavior are closely related to social anxiety disorder (SAD), which is characterized by "a marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others" (APA, 2000, p. 456). In fact, investigators have noted an increased risk for extremely withdrawn children to develop this anxiety disorder in later adolescence (Hayward, Killen, Kraemer, & Taylor, 1998; Schwartz, Snidman, & Kagan, 1999).

Social withdrawal is not only a risk factor for poor academic outcomes and later development of anxiety disorders, but also for negative peer treatment (e.g., victimization, rejection) and the adverse emotions resulting from such treatment. Enduring friendships form an important developmental context for children because it is in these experiences that they acquire a number of skills, behaviors, and attitudes that influence their adaptation throughout the lifespan. Therefore, poor peer relationships in childhood can be detrimental to both concurrent and long-term adjustment. Unfortunately, socially withdrawn children have great difficulty in forming friendships with individual people (Pedersen, Vitaro, Barker, & Borge, 2007). In

addition, researchers have found that, compared to their well-adjusted peers, withdrawn children experience more peer rejection and exclusion (Chen, DeSouza, Chen, & Wang, 2006; Nelson, Rubin, & Fox, 2005), tend to be actively disliked by their peers (Gazelle & Ladd, 2003; Ladd, 2006; Oh et al., 2008; Rubin et al., 2006), and are at greater risk for victimization (Erath, Flanagan, & Bierman, 2007; Hanish & Guerra, 2004). Such isolation and exposure to chronic negative treatment by the peer group may lead to feelings of low self-worth, extreme loneliness, anger, depression, social anxiety, and alienation (Boivin, Hymel, & Bukowski, 1995; Grills & Ollendick, 2002).

Negative peer treatment is believed to be the result of peers' perception of shy children as easy targets due to their lack of the necessary social skills (Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). McFall (1982) has defined these social skills as specific behaviors one must demonstrate to perform competently on a given task, such as inviting another student to join a group or raising one's hand and waiting to be called upon. In contrast, social competency has been defined as a "judgment call" as to whether an individual has performed the task adequately. That is to say, being socially competent is based on an observer's evaluation of how well one has demonstrated prosocial behavior. Rubin, Bowker, and Gazelle (2010) extended this definition, noting that there must be a consistent demonstration of positive social skills across settings and over time. However, a measure of one's social competency is not only left to observers, but the construct may also be self-evaluated. Consistent with this idea is a finding by Rubin and Krasnor (1986) in which socially withdrawn children attributed their social failures to personal characteristics rather than to external causes or events. In other words, they assessed themselves as being unsociable. Conversely, rejected externalizing children tend to place blame

on their peers for negative interactions and will maintain poor expectations for future social experiences with such peers (Guerra, Asher, & DeRosier, 2004).

Parental Influence on Social Development

Researchers in the area of attachment theory have long maintained that in order for normal social and emotional development to occur, an infant must develop a secure relationship with at least one primary caregiver (Ainsworth & Bowlby, 1991; Bowlby, 1979). Thus, an insecure attachment with the primary caregiver can be expected to set a child on a course of social difficulties. Indeed, researchers have found that an insecure anxious-ambivalent attachment predicts internalizing behavior (Finzi, Cohen, Sapir, & Weizman, 2000; van Brakel, Muris, Bögels, & Thomassen, 2006), and is the result of experiences of parental neglect in the form of inconsistent availability and minimal responsiveness (Cassidy & Berlin, 1994).

Similarly, maternal involvement has been shown to be positively related to both internalizing and externalizing children's prosocial behaviors (Day & Padilla-Walker, 2009).

A number of studies have reported predictive links between both parents' overprotection, overcontrolling, and intrusive behavior and child shyness and other internalizing symptoms (Coplan, Prakash, O'Neil, & Armer, 2004; Lieb et al., 2000; McShane & Hastings, 2009; Mills & Rubin, 1998). Rubin and colleagues (2009) explained that this association may be due to parents' controlling behavior acting as a restriction to their children's independence. As a result, these children do not acquire the necessary problem solving and coping strategies for developing adequate social competency. Of course, the reverse effect may also be true. That is, the reason parents act so overly protective, and controlling may be due to their child's reticent behavior. In fact, it has been reported that such withdrawn behavior is predictive of later parental control (Hastings & Rubin, 1999; Rubin, Nelson, Hastings, & Asendorpf, 1999). Nevertheless, it is

imperative that parents understand the repercussions their behavior may have on the developmental trajectories of their children so that secure relationships can be fostered to promote positive outcomes.

Parent Involvement in School-based Intervention

While it is imperative for parents to strengthen a secure relationship with their child, it may also be equally important to keep parents informed of their child's progress during school-based intervention. One method of doing this is through a school-home note, or simply home note. A home note serves as a form of communication between the teacher and parent, with the intent that parents encourage and reward their child for the successful performance of target behaviors (McGinnis & Goldstein, 1997). Schools can notify parents about social skill training efforts through a home note component, with the likelihood that parents will practice and reinforce the skills in the home setting (Siperstein & Bak, 1988). This inexpensive and simple home-based strategy encourages greater parent involvement, making it a valuable tool in schools. Nevertheless, the use of home notes is an underutilized approach despite research demonstrating the advantages of interventions based on home-school collaboration (Cox, 2005).

Suggested School-based Strategies

Students should also acknowledge their own progress and performance during intervention. Through a self-evaluation method, a student compares his or her performance of a target behavior against a predetermined goal (Cooper, Heron, & Heward, 1987). A final step of the school-based self-management procedure involves receiving feedback from a teacher as to whether or not the teacher agrees with the student's evaluation. In a recent study, it was found that pairing a self-evaluation and school-home note method was successful in decreasing externalizing behavior (McGoey, Prodan, & Condit, 2007). However, the effects of combining

these efficacious interventions have not been widely assessed and need to be further researched to demonstrate positive outcomes in children who exhibit internalizing and/or externalizing behaviors.

Educators commonly implement interventions following identification of maladaptive behaviors, e.g., aggression and other difficulties related to academic performance. However, little research has been devoted to the treatment of childhood social withdrawal despite evidence of the risks associated with this internalizing symptom. This is troubling considering that social difficulties often co-occur with other internalizing problems, including depression (Kupersmidt & Patterson, 1991) and anxiety (Bowen, Vitaro, Kerr, & Pelletier, 1995), and are often co-morbid with externalizing difficulties (Weiss et al., 1997). Fortunately, a number of behavioral and cognitive-behavioral strategies have been used to reduce anxiety and improve social competency during childhood and adolescence (see Greco & Morris, 2001 for a review). Among these techniques are modeling, reinforcement, and self-management. Many of these strategies have been utilized in a multimodal approach known as social skills training (SST), arguably the most widely used treatment for developing social competency in schools.

Statement of the Problem

A review of the literature reveals a number of risk factors associated with social withdrawal and/or behavior that limits development of positive social relationships. From the beginning of infancy, parental neglect and low responsiveness have been shown to be predictive factors for the development of insecure anxious-ambivalent attachments (Cassidy & Berlin, 1994), increasing the risk the child will experience social difficulties and internalizing problems (Dykas, Ziv, & Cassidy, 2008; Finzi et al., 2000). Socially withdrawn children also face deficits in their social skills repertoire that make it difficult for them to form sustaining friendships. In

fact, solitary behavior actually increases the likelihood that they will be targeted for victimization (Erath et al., 2007) and become more actively rejected and excluded from peer groups (Chen et al., 2006). Such treatment by peers has the potential to produce a number of negative feelings, including loneliness, anger, and depression (Boivin et al., 1995).

Social and emotional difficulties are among the greatest struggles of socially withdrawn individuals. Additionally, those burdened with these challenges in childhood, often experiences academic problems and poor school adjustment in school (Ladd & Asher, 1985). Moreover, if socially withdrawn behaviors are not addressed during youth, the possibility of continued dysfunction (Coie & Dodge, 1983) and the development of social anxiety disorder remains high (Hayward et al., 1998; Schwartz, et al., 1999). Results from a recent meta-analysis suggests that social skills instruction yields strong results when provided during early childhood, particularly in kindergarten-aged children (January, Casey, & Paulson, 2011).

Marchant and colleagues (2007) conducted a study examining the effects of a social skills treatment package designed to increase positive communication and peer-play behavior of elementary-aged socially withdrawn students. The independent variable consisted of (a) social skills training, (b) peer and adult mediation, and (c) a self-management system that included positive reinforcement. Results indicated increases in both positive communication and play behavior across a first-grade female, and two fifth-grade males. The current study extended the previous research through the addition of a home note component designed to include parental involvement. In addition, a specific population of participants was utilized (i.e., kindergarten students), positive and negative social behaviors were examined, and a follow-up phase was incorporated. Due to the poor results achieved from peer mediators in the previous study, it was judged that stronger results would be obtained if adult mediators were used rather than peers.

Statement of Research Purpose

The evidence cited above suggests a strong need for the early and effective treatment of individuals who appear to be socially withdrawn and are behind in the development of social skills. However, the literature lacks research-tested approaches targeting this specific population of students. Further research is needed to verify previous findings and to document the effects of interventions designed to increase prosocial behavior in students who tend to withdraw from the peer group. Thus, the purpose of the current study was to respond to the need for additional research by evaluating the effects of a social skills intervention designed to improve the social interaction of kindergarten students who exhibit socially withdrawn behavior on the playground.

Due to (a) the significant influence that caregivers have on the developmental trajectory of their children, and (b) the documented evidence of the influence of parental characteristics on the maintenance of child psychopathology, it would seem important to include parents in interventions designed to promote sustainable and positive treatment outcomes. Indeed, it has been shown that compared to teacher-only approaches, parent-involved interventions for shy youth have resulted in positive treatment outcomes that demonstrated a higher degree of permanence and durability (Spence, Donovan, & Brechman-Toussaint, 2000) and greater generalization between home and school settings (Sheridan, Kratochwill, & Elliott, 1990). Still, extant literature has not sufficiently investigated the benefits of treatments for children utilizing parental involvement (Barmish & Kendall, 2005; Peacock & Collett, 2010). As such, a secondary purpose of the study was to involve parents in social skills training through a home note intervention.

Research Questions

This study was guided by two research questions:

1. What are the effects of a social skills intervention on positive social behaviors on the playground of kindergarten students who tend to withdraw from the peer group?
2. What are the effects of a social skills intervention on negative social behaviors on the playground of kindergarten students who tend to withdraw from the peer group?

Method

Participants

A selection procedure was used in the identification of candidates to participate in the current study. All candidates were selected from a single kindergarten classroom located at a suburban university laboratory school in central Utah. The following describes the selection procedure, as well as the measures used to identify participants.

Selection criteria. Candidates were first identified via teacher nominations and rankings using stage one of the Early Screening Project (ESP; Walker, Severson, & Feil, 1995). In stage one of the ESP, teachers rank order their students who exhibit behavioral characteristics of internalizing (e.g., low activity) or externalizing (e.g., defiance) behaviors. Five students were initially identified through stage one. Following rank ordering, a behavior questionnaire and informal teacher interviews were used to further identify those who had the greatest social skill deficits among the five students.

Screening instrument. The ESP is a multiple-gate child-find tool used to identify young children, ages 3-5, at-risk for internalizing and externalizing behavior disorders. The majority of

this proactive child-find process is composed of two stages; an optional third stage involves observations of identified students. Only stage one was used for the purposes of this study due to the use of a statistically stronger behavior questionnaire (the PKBS-2) and the baseline observations collected prior to training.

Analyses of reliability and validity have shown that the ESP demonstrates adequate psychometric properties. Inter-rater reliability in stage one ($r = .42-.70$) and fall-to-spring test-retest reliability ($r = .75-.91$), was shown to be adequate for screening purposes. Additionally, content, concurrent (Behar & Connors; $r = .19-.95$), and discriminative validities reveal accurate identification of behavioral disorders in young students (Walker et al., 1995). Users of the ESP have also reported effective identification of at-risk children in early childhood (Feil, Walker, Severson, & Ball, 2000; Trout, Epstein, Nelson, Synhorst, & Hurley, 2006). A thorough review of the ESP and its psychometric properties can be found in Plake and Impara (2001).

Assessment instrument. The Preschool and Kindergarten Behavior Scales, Second Edition (PKBS-2; Merrell, 2002) is a 76-item behavior teacher rating scale designed to measure social skills and internalizing/externalizing behavior problems of young students, ages 3-6. The Social Skills Scale contains 34 items that address social cooperation (e.g., “gives in or compromises with peers when appropriate”), social interaction (e.g., “comforts other children who are upset”), and independence (e.g., “is confident in social situations”). The Problem Behavior Scale contains a total of 42 items, 15 of which are specific to internalizing problems and addresses social withdrawal (e.g., “avoids playing with other children”), somatic complaints (e.g., “becomes sick when upset or afraid”), anxiety (e.g., “is afraid or fearful”), and depressive symptoms (e.g., “seems unhappy or depressed”).

An analysis of the PKBS-2 by Merrell (2002) has demonstrated that it is an appropriate measure to use for the assessment of social, emotional, and behavioral difficulties of young students. Using both Cronbach's alpha and split-half coefficient formulas have resulted in internal consistency estimates that range from .90 to .97. Test-retest reliabilities were reported to be moderate to high at 3 weeks ($.58 \leq rs \leq .86$) and 3 months ($.69 \leq rs \leq .78$). The PKBS-2 also demonstrated high convergent validity with similar measures. For instance, Merrell (1995) reported strong correlations between the PKBS-2 and the preschool form of the Social Skills Rating System (Gresham & Elliott, 1990) on the total social skills scores ($r = .76$) and problem behavior scores ($r = .83$). A thorough review of the PKBS-2 and its psychometric properties can be found in Spies and Plake (2005).

Description of participants. Of the five students identified using stage one of the ESP, the top three exhibiting the greatest social skill deficit in the area of social interaction on the PKBS-2 were included in the study. These three participants were Caucasian and from English-speaking, lower to middle-class socioeconomic families. Because students with special needs were excluded from the study, it was assumed that these target students were of average intelligence for their age group. Informed parental consent was granted prior to student participation (see Appendix B). The following provides anecdotal details about each participant, as well as the results of the PKBS-2 (see Table 1).

Billy. Billy, a 5-year old, Caucasian, kindergarten student, was frequently rejected by his classmates due to his aggressive play behavior. His teacher reported that he often became angry with both adults and other children when he did not get his way. During recess, he generally played by himself despite his requests to other children to play with him. These requests were usually met with rejection, which seemed to limit Billy's attempts to try to interact with others.

On a few occasions, Billy asked out loud, “Why does nobody want to play with me?” Scores on the Preschool and Kindergarten Behavior Scales, Second Edition (PKBS-2) indicated that Billy was in the high-risk category for Social Cooperation and Social Interaction, with standard scores of 65 (3rd percentile) and 60 (2nd percentile), respectively. In addition, he was at high-risk for Externalizing Problems with a standard score of 136, which falls in the 99th percentile.

Rachel. Rachel, a 5-year old, Caucasian, kindergarten student, was described by the teacher as a nervous and anxious child who had great difficulty separating from her parents at the beginning of each school day. Rachel was seen bursting into tears when her mother left her at school. She was described as being kind to other children, but not actively seeking out friendships. At recess, she was usually away from the peer group, playing quietly by herself. Rachel did not play with other children unless they approached her first. Her scores on the PKBS-2 indicated that she was at high-risk for Social Interaction and Social Independence, with standard scores of 67 (4th percentile) and 69 (4th percentile), respectively. Additionally, she was at high-risk for Internalizing Problems with a standard score of 137, which falls in the 99th percentile.

Lauren. Lauren, a 6-year old, Caucasian, kindergarten student, often wandered the playground staring observantly at other children playing around her. Her kindergarten teacher described her as being shy and having difficulty interacting with other children. At the end of the school day, she often avoided participating in reading activities or interacting with others as she waited alone for her mother to pick her up. Lauren’s PKBS-2 standard scores indicated that she was close to moderate-risk for Social Independence with a standard score of 85 (17th percentile). Despite her teacher referring her to the study as an internalizing student, Lauren’s Internalizing Problems standard score of 108 (72nd percentile) did not indicate that Lauren was clearly at-risk

for internalizing difficulties. However, the decision to include her in the current study was made at the request of the mother and teacher, who believed she would benefit from the intervention due to shy behavior and social difficulties.

Experimental Design

A multiple baseline design across participants was used to evaluate the effects of a social skills treatment package on the social engagement of kindergarten students. This section describes the phases of the study, the dependent and independent variables, and data collection procedures.

Phases of the study. The current study consisted of four phases: The baseline phase, the training phase, post-training phase, and follow-up phase. The treatment package was implemented during the training and post-training phases. The two phases will hereafter be referred to as the intervention levels. Data were collected on the playground throughout all four phases of the study. For the baseline, training, and post-training phases, data were collected for four consecutive days a week. For the follow-up phase, data were collected once a week for three weeks.

Baseline. Partial 10-second interval data were collected on the playground during recess to assess target students' social engagement with a peer or group of peers, whether positive or negative. Data were collected for at least four consecutive sessions for each student prior to implementing the intervention. When all baseline data showed acceptable stability in level and trend, the intervention was applied to the first baseline series with one participant while baseline conditions were continued for the others (Gast, 2010). Specifically, when the first student's behavior was stable for at least 3 consecutive sessions, the intervention was implemented with the second student. This procedure was followed until all of the participants had received the

intervention. In a multiple baseline, a functional relationship or experimental effect is demonstrated when a change in each participant's performance is obtained across each replication of the experiment at the time the intervention is introduced and not before (Kazdin, 1982).

Intervention levels. During the training phase, all components of the treatment package were implemented. The components of the treatment package consisted of (a) social skills training, (b) self-evaluation and reinforcement, (c) parent involvement through home notes, and (d) adult mediation. The section below provides greater description of how these components were implemented. In the post-training phase, social skills instruction was removed, while the three other components remained.

Follow-up. Baseline conditions were reinstated with all interventions removed during the follow-up phase. For this phase of the study, data were collected a month following the completion of the intervention for all target students. Rather than collected for four consecutive days a week as was done in all other phases, data were only collected once a week for three weeks.

Dependent variables. The dependent variables were the participants' positive and negative social engagement. These behaviors were recorded on the playground during recess.

Social engagement was operationally defined as the target student engaging a peer by initiating positive or negative interaction. These interactions were recorded as positive or negative engagement. Examples of positive engagement included asking a question or making a statement which clearly requested a response from the peer or a group of peers (e.g., "Hello," "How are you?," "You want to play with me?"), making a praise statement or giving a compliment (e.g., "Wow, you're good at that!," "I like your shirt," "Good job!"), and included

mutual engagement in an activity with a peer or group of peers (e.g., playing on the teeter-totter, chasing after one another, riding on tricycles together or side-by-side). Examples of negative social engagement included making a negative statement or comment to a peer or group of peers (e.g., “Shut up!,” “Leave me alone,” any name-calling comments, teasing, rude/aggressive tone of voice), and engagement in an activity with a peer or group of peers that included physical aggression (e.g., hitting, shoving, pinching, kicking).

To measure the dependent variables, six trained undergraduate students from a local university used a 10-second partial interval recording method to assess target student’s social engagement. Observation forms were developed and used to measure target students’ prosocial behavior on the playground (see Appendix C). During observations, each observer used an MP3 player to record 10-second interval data. Social engagement was recorded in a time interval if it occurred at least once. Observers identified target students’ social engagement as positive or negative based on the definitions provided earlier. Social engagement was not recorded in a time interval if interaction did not occur between the target student and at least one peer. In the event that a positive and negative interaction occurred during the same interval, a positive would be recorded rather than a negative due to the primary objective of the study being the increase of positive interaction in students who typically refrain from engaging in such prosocial behavior. However, observers did not report the occurrence of a positive and a negative behavior in the same interval over the course of the study. Trained observers were required to memorize definitions of the dependent variables at 100% accuracy and participated in a trial observation where they were at least 85% consonant with the researcher in recording positive and negative social engagement.

During all phases of the study, a second observer independently collected observational data during at least 20% of total students' sessions across all phases to determine inter-observer agreement. For each dependent variable, inter-observer agreement was calculated by dividing the number of agreements by the total number of agreements plus disagreements and multiplying by 100%. Intervals were considered an agreement between observers if identical scores were recorded within the same time interval. Observers maintained an average inter-observer agreement index of 92% for all phases of the study, with a range of 81% to 100%.

Independent variable: Implementation of the treatment package. The independent variable in this multiple baseline design was the implementation of a social skills treatment package. The following sections describe this intervention by discussing procedures for each component.

Social skills training. Target students were trained in the use of social skills and in monitoring their own interpersonal behavior only during the training phase of the study. All target students were instructed in the classroom and on the playground using lessons adapted from the *Boys Town* (Dowd & Tierney, 2005) and *Skillstreaming* (McGinnis & Goldstein, 1997) social skills curricula. Based on the needs of the target students and previous findings of a similar study (Marchant et al., 2007), lessons were largely focused on developing positive social interactions. Specifically, the researcher taught lessons on “*how to introduce yourself*,” “*how to talk to other*,” “*how to ask to play with others*,” and “*how to play appropriately with others*” (see Appendix D). It should be noted that social skills instruction was only implemented during the training phase of the study. It was removed at the beginning of the post-training phase, whereas self-evaluation with reinforcement, adult mediation, and home note intervention remained in place during the post-training phase.

Lessons were staggered over the course of the training phase. In other words, each social skill lesson was taught until target students mastered the recitation and implementation of the steps at 100% before moving onto the following lesson. Explicit instruction was used to teach target students individually. The researcher delivered the 15 minute instruction three days each week by (a) explaining the steps of the social skill (b) modeling the steps, (c) practicing the steps, (d) praising the target student on the successful execution of skill/steps in session, (e) correcting deficits in the execution of the skill/steps, and (f) discussing scenarios on the playground in which the social skill could be used.

Self-evaluation and reinforcement. During both intervention levels, Students were taught how to self-evaluate their behavior during the first social skill lesson. At the beginning of each recess period, an undergraduate student, serving as an adult mediator, set a goal with the target student. The student was asked what he or she would like the goal to be for that recess period (e.g., to ask someone to play in the sandbox, to talk to two classmates on the playground). If the target student was unable to formulate a goal, then the adult mediator would either help the child develop one, or suggest a goal if the student continued to have difficulty.

A script was used to guide the adult mediator in the meetings with the student (see Appendix E). At the end of recess, students self-evaluated whether they met their goal by selecting a face depicting a smile, a neutral expression, or a frown. A smile indicated that the target student met or exceeded the goal set at the beginning of recess, whereas a frown meant that he or she performed poorly and did not meet the goal. A neutral face represented a satisfactory attempt, but indicated the child still did not meet the goal. Following a brief discussion of the student's evaluation, the adult mediator evaluated whether the target student had met the goal and provided a rationale for his or her rating.

Any combination of mediator and student ratings resulted in praise and the receipt of a reward, even if the student chose a frown. The only time a reward was not provided was when the adult mediator evaluated performance as a frown; in this case, the child was encouraged to meet the goal next time. Acceptable rewards were identified in collaboration with parents and the teacher prior to beginning adult mediation with target students. These rewards included extra recess time, edible reinforcers, and coloring. Adult mediation and self-evaluation continued beyond the training phase, but was not provided during the follow-up phase.

Parent involvement through home notes. Following the delivery of each social skill lesson during the training phase, parents were given home notes when they picked up their student from school (see Appendix F). Home notes provided parents the name and steps of the lesson taught that day, requested that parents practice the skill with their child and provide recognition and praise for their child's skill use. A section of the home note was available for both the researcher and parents to write comments about the social skill, intervention, and/or their child's performance and progress. Parents were asked to sign and check off a list of items to report what methods they used to practice with their child (e.g., "role-playing the skill by having your child use the steps with you"). Parents were requested to return the home note to the teacher by a specified date.

Adult mediation. The role of the adult mediator was to observe each target students' social behavior during the entire playground session each school day to determine how well they performed in meeting their individual goals. The mediator also facilitated each student's selection of a goal and provided encouragement to engage in peer interaction. If appropriate, the adult mediator provided praise and the specified reinforcer for meeting the goal. One female undergraduate student studying special education, age 21, served in this mediating role.

Using the script as a guideline, the appropriate procedures for conducting meetings with individual target students was initially demonstrated by the researcher with the adult mediator present at the end of the first social skill lesson. The following day, the researcher observed the adult mediator use the script in her meetings with individual target students to determine whether she used the appropriate procedures. If the adult mediator was unsuccessful at any point in these initial meetings, the researcher corrected her mistakes through a demonstration, and allowed the adult mediator the opportunity to use the appropriate step as indicated in the script. Proficiency using the script was clearly demonstrated by the adult mediator prior to the researcher's exclusion from future meetings

Treatment Fidelity

Training sessions were conducted three days a week with individual target students. A trained undergraduate observed one session per week and used a checklist designed to report on the accuracy of implementation of social skills training (see Appendix G).

Social Validity

A social validity questionnaire was administered to teachers, parents, and students to determine the acceptability of goals, procedures, and outcomes of the study. Teacher and parent social validity was assessed using an adapted version of the Intervention Rating Profile-15 (IRP-15; Martens, Witt, Elliott, & Darveaux, 1985). The questionnaire consisted of 12 items with a 6-point Likert scale ranging from strongly disagree to strongly agree. Student social validity was assessed using an adapted version of the Student Self-Assessment of Social Validity (Lane & Beebe-Frankenberger, 2004). This questionnaire consisted of 8 items, 6 using a 4-point Likert Scale, and 2 open-ended questions. The Likert scale consisted of four options: a frowny face, a neutral expression, a smiley face, and a question mark for "I don't know." Items on these

questionnaires assessed perceptions of treatment outcomes, methods used, and advantages and disadvantages of the treatment package (see Appendix H).

Results

A single subject multiple baseline design across three participants was used to evaluate the effects of the social skills intervention package on the social engagement of kindergarten students who tended to withdraw from their peer group. Graphic (visual) analysis and effect size were used to interpret and summarize the data. Using a line graph, the researcher graphed and analyzed individual daily student performance four times per week in baseline, training, and post-training phases, and once a week during the follow-up phase. Visual analysis of graphic data allowed the researcher to evaluate participant performance on a continuous basis. Changes in level, trend, and variability were carefully noted across and within conditions to potentially identify an experimental effect. Baseline and intervention averages were calculated and compared. The research objective was to demonstrate a functional relationship between the social skills intervention package and positive and negative social engagement behavior. A functional relationship was demonstrated, evidenced by the replication of the experimental effect across two participants following the initial application of the intervention.

Participant Performance

Results are reported in terms of the following: (a) The mean percentage of the dependent variables (i.e., positive and negative social engagement) during baseline, (b) the difference score of dependent variables during intervention phase, (c) the percent increase/decrease of dependent variables, which was calculated by dividing the difference score from the mean of the baseline phase, and multiplying by 100%, (d) the percentage of data points exceeding the median of baseline phase (PEM; Parker, Vannest, & Brown, 2009), (e) the range of percentages in the

intervention phase, (f) the percentage of non-overlapping data (PND; Gast, 2010) in baseline and intervention phase and (g) the improvement rate difference (IRD) or effect size (Parker et al., 2009).

Figure 1 demonstrates the effects of using social skills instruction, self-evaluation with reinforcement, adult mediation, and a home note intervention on the percentage of positive and negative social engagement behavior of each participant. These data, collected in baseline, training, post-training, and follow-up phases, are summarized below as well as in Table 2. The goal of the treatment package was to increase the percentage of positive social engagement, while also decreasing the percentage of negative social engagement.

Billy. Billy often exhibited withdrawn behavior by playing alone in the sandbox, but on occasion he would request others to play with him. Peers would often deny these requests, which led to Billy asking his teachers why none of the other children like to play with him.

Baseline. The mean percentage of intervals in which Billy demonstrated positive social engagement during baseline was 26%, with a range of 17% to 38%. The median percentage of intervals for positive social engagement during baseline was 22%. Billy exhibited a baseline mean of 6% for percentage of intervals that included negative social engagement, with a range of 1% to 13%. The median percentage of intervals for negative social engagement during baseline was 7%.

Training. The initial data point at the beginning of the training phase was consistent with the social engagement behavior displayed in baseline. Following this first data point, Billy displayed an increase in positive social engagement and a decrease in negative. Training data showed a gradual upward trend.

In the training phase, the mean percentage of intervals of positive social engagement was 54%, while the median percentage of intervals for positive social engagement was 56%. The percentages of positive social engagement ranged from 26% to 74%. The mean percentage of intervals for negative social engagement was 2%, and the median percentage of intervals of negative social engagement was 1%. The percentages in the training phase of negative social engagement ranged from 0% to 8%.

Post-training. During the post-training phase, social skills instruction was removed, but self-evaluation with reinforcement, adult mediation, and home note intervention remained in place. Billy was absent due to illness during the collection of the third and fourth data points in the post-training phase. The data point following his absences showed an immediate decrease in positive social engagement. Data were not recorded on the following day because Billy refused to go outside for recess, stating that he did not want to play with his classmates.

Following each training phase, Billy successfully demonstrated his knowledge of the social skill lessons by restating and modeling the steps. Due to his refusal to go to recess, Billy's failure to apply the nearly learned skills was speculated to be a performance rather than a skill deficit; in other words, Billy appeared to lack the motivation to play with others. Because of the decline in performance as well as the apparent lack of motivation, it was decided to implement an additional intervention phase.

Billy received additional intervention during the post-training phase over the course of four days. During these 5 minutes sessions with the researcher, he was shown his data on a line graph that represented the progress he was making in speaking and playing appropriately with other children on the playground. How the data graph represented the way in which he was interacting with peers was explained. Following this brief explanation, the researcher and Billy

discussed whether he felt he could increase his positive communicative and peer-play behavior. He responded with great enthusiasm and a desire to increase his performance. Despite these indications of increased motivation, data collected following the intervention's implementation did not reflect increased skill application. However, a noticeable improvement in positive social engagement was observed following the second time Billy was shown data indicating his previous day's performance. This positive upward trend in positive social engagement remained stable until the completion of the post-training phase.

During post-training, and including the additional intervention, Billy's mean percentage of positive social engagement was 70%, and his median percentage was 71%. Percentages of positive social engagement in the post-training phase ranged from 47% to 92%. The mean percentage of negative social engagement was 2% and the median was 0%, with a range of 0% to 10%.

Intervention levels. The intervention levels comprise of training and post-training phases. As such, the effect size of the intervention was determined using data from both phases for each participant.

In these intervention phases, Billy's mean percentage of positive social engagement was 60%, with a difference score of 34% and a 131% increase from baseline. Similarly, the median percentage of intervals for positive social engagement was 60%. Percentages of positive social engagement during intervention ranged from 26% to 92%. The percentage of data points exceeding the median (PEM; Parker et al., 2009) of the baseline phase was 100%. The percentage of non-overlapping data (PND; Gast, 2010) in baseline and intervention phases was 94%. Intervention phases yielded a medium effect size, or improvement rate difference (IRD; Parker et al., 2009) of .54.

In these intervention phases, the mean percentage of intervals of negative social engagement was 2%, indicating a difference of 4% and a 67% decrease from baseline. The median percentage of intervals of negative social engagement was 0%. The percentage of intervals of negative social engagement in the intervention phase ranged from 0% to 10%. The PEM was 12% with respect to negative social engagement, indicating a decrease of negative social behaviors with 88% of data points falling below the median.

Follow-up. Billy did not appear to use prosocial skills the same extent when the intervention was removed. Specifically, Billy's data demonstrated a noticeable decline in positive social engagement. However, the decrease in Billy's negative social engagement during the intervention phases appeared to maintain.

In the follow-up phase, the mean percentage of intervals of positive social engagement was 26%, while the median percentage of intervals for positive social engagement was 31%. The percentages of positive social engagement ranged from 47% to 0%. The mean percentage of intervals for negative social engagement was 1%, and the median percentage of intervals of negative social engagement was 0%. The percentages in the follow-up phase of negative social engagement ranged from 0% to 4%.

Rachel. Rachel often observed other peers playing on the playground during the baseline phase. She did not seem to approach other students and rarely engaged in verbal interaction with both peers and adults. Some female classmates involved her in their play activities during this phase, but these same students also teased her for her social inhibition (e.g., "You are so awkward.").

Baseline. The percentage of intervals in which Rachel exhibited positive social engagement during baseline averaged 26%, with performance ranging from 8% to 57%. The

median percentage of intervals of positive social engagement during baseline was 25%. Rachel displayed a baseline mean of 1% for negative social engagement, with a range of 0% to 5%. The median percentage of intervals of negative social engagement during baseline was 0%.

Training. Similar to Billy's data, Rachel's initial data point in the training phase reflected minimal change. Following the first day, an increase in her positive social engagement was observed, with data demonstrating a gradual upward trend. Although positive social engagement decreased following a two-day absence, her percentage of positive behavior increased the following day, and data continued to improve, showing a stable upward trend.

The mean percentage of intervals of positive social engagement during the training phase was 64% and the median percentage was 70%, with the percentage of positive social engagement ranging from 36% to 80%. The mean and median percentages of negative social engagement were 0%. All percentage values for negative social engagement were 0% in the training phase.

Post-training. Rachel was absent the first day of the post-training phase. Following the first day, data were relatively stable with high levels of positive and low levels of negative social engagement. The fifth data point in the post-training phase was not recorded because an insufficient number of intervals were observed. Data in the post-training phase showed a slight downward trend; but it was difficult to determine whether this was an accurate measure of Rachel's performance since the data were recorded only four of six days.

The mean percentage of intervals of positive social engagement during the post-training phase was 63%, and the median percentage was 64%. The percentage of positive social engagement ranged from 49% to 77%. The mean and median percentages of negative social engagement were 0%. All percentages of negative social engagement were 0%.

Intervention levels. During the intervention levels (i.e., training and post-training phases), Rachel's mean percentage of positive social engagement was 64%, with a difference of 38% and an increase of 146% from baseline. The median percentage of intervals for positive social engagement was 70%, with a range of 36% to 80%. The PEM was 100%, and the PND in baseline and intervention phases was 67%. The IRD or effect size was .60.

During these two phases of the intervention, the mean and median percentages of intervals of negative social engagement were 0%, indicating no change or decrease from the baseline mean. Because all percentages of negative social engagement were 0%, the median of baseline was 0% and the PEM was 0%.

Follow-up. Rachel's positive social engagement appeared to maintain; specifically, follow-up data resembled data collected during the intervention phases. Moreover, Rachel's low levels of negative social engagement remained stable across all phases.

In the follow-up phase, the mean percentage of intervals of positive social engagement was 77%, while the median percentage of intervals for positive social engagement was 81%. The percentages of positive social engagement ranged from 64% to 84%. The mean percentage of intervals for negative social engagement was 0%, and the median percentage of intervals of negative social engagement was 0%. There was no range for percentages of negative social engagement as all remained at 0%.

Lauren. Lauren would typically begin recess by wandering around observing others before attempting to play with another peer. She often displayed bossy tendencies and would verbally direct other children (e.g., "You're not allowed," "You can't play with us," and "We're not friends anymore. Don't talk to me."). During one recess period, she stayed by the teacher for the entire observation and only interacted with a peer once.

Baseline. Lauren's mean percentage of positive social engagement during baseline was 34%, with a median percentage of 37%. The percentage of positive social engagement ranged from 1% to 54%. Lauren's baseline mean for negative social engagement was 9%, with a range of 0% to 26%. The median percentage of intervals of negative social engagement was 3%.

Training. At the beginning of the training phase, an immediate increase in level was shown. This increase in positive social engagement remained stable and continued with an upward trend. The mean percentage of intervals for positive social engagement was 67% and the median percentage was 71%. The range of percentages was 55% to 81%. The mean and median percentage of intervals for negative social engagement was 0%, with a range of 0% to 1%.

Post-training. Only three data points were recorded during this phase because Lauren was absent for the last observation. The data remained stable in the areas of positive and negative social engagement with a slight downward trend. The mean percentage of intervals for positive social engagement during the post-training phase was 68%, and the median percentage was 66%. Percentages of positive social engagement ranged from 63% to 74%. The mean and median percentages of negative social engagement were 0%. Similar to Rachel's data, all percentages of negative social engagement were 0%.

Intervention phases. Across the two intervention phases (i.e., training and post-training phases), the mean and median percentages of positive social engagement were 68% and 69%, respectively, with a difference from baseline of 34% and a 100% increase. Percentages ranged from 55% to 81%. The PEM was 100%, and the PND in baseline and intervention phases was 100%. The IRD or effect size was 1.00.

The mean and median percentages of negative social engagement in intervention phases were 0%, indicating a difference of 9% from the baseline mean and a 100% decrease.

Percentages ranged from 0% to 1%. With respect to negative social engagement, the PEM was 0%, indicating a significant decrease in negative social behaviors with 100% of data points falling below the median.

Follow-up. One additional data point was collected for Lauren in the follow-up phase due to excessive variability in the data. Specifically, Lauren's data suggested she was engaged in positive social behavior 99% of the time during the second follow-up observation, whereas the results of the other follow-up observations suggested that she was positively engaged in only about 35% of the time. Lauren's level of positive social engagement during the follow-up phase was deemed to be similar to that achieved in baseline. Yet, Lauren's negative social engagement appeared to be noticeably reduced in the follow-up phase, compared to baseline.

In the follow-up phase, the mean percentage of intervals of positive social engagement was 52%, while the median percentage of intervals for positive social engagement was 37%. Due to the likelihood that the second follow-up data point of 99% would skew the data and provide an overestimate of the mean, the median was believed to be the better estimate of Lauren's positive social engagement. The percentages of positive social engagement ranged from 34% to 99%. The mean percentage of intervals of negative social engagement was 0%, and the median percentage of intervals of negative social engagement was 0%. There was no range for percentages of negative social engagement as all remained at 0%.

Social Validity Findings

Overall, the intervention was perceived by teachers, parents, and target students as appropriate and effective in increasing social competency and positive interactions. The kindergarten teacher reported that she liked the intervention and its procedures and thought that they were beneficial to students learning and development. The only challenging aspect the

teacher noted was that the intervention might be time-consuming if a classroom teacher implemented the intervention for each student. The teacher reported observing increases in positive social interaction on the playground across all target students during intervention.

Parents reported enjoying the home note messages and thought that they were effective in informing them of their child's progress. However, parents also noted a need for more communication between them and the implementer of the intervention. Because of the short duration of the study, one parents suggested that the intervention would be more effective if it were implemented for a longer time period.

All target students rated the intervention favorably and reported feeling competent in performing the steps of each skill taught to them. Billy did not note a favorite thing about the intervention, but he reported his least favorite thing was playing with others to earn rewards because he would rather play alone. Both Rachel and Lauren stated that their favorite activity was learning the skills with the researcher. Rachel said her least favorite activity was role playing, while Lauren's was "working hard to earn smileys."

Discussion

The purpose of the current research was to examine the effectiveness of a social skills intervention designed to improve the social interaction of kindergarten students who exhibit socially withdrawn behavior on the playground. The components of the social skills intervention were (a) social skills training, (b) self-evaluation and reinforcement, (c) home notes and parent involvement, and (d) adult mediation. For Billy, an additional intervention was added to the original post-training phase in which he was shown his level of performance using the data representing the progress he had made in speaking and playing appropriately with other children on the playground.

The data demonstrated a functional relationship between the dependent and independent variables during the training and post-training phase since an increase in positive social engagement was evident during each implementation of the intervention. Thus, these findings suggest that the intervention contributed to the target students' increase in positive social engagement. It is difficult to determine which component(s) of the intervention contributed the most to this increase in positive social interaction due to simultaneous implementation of each component.

The results of this study extend the results of previous research conducted with kindergarten students exhibiting social withdrawal (Marchant et al., 2007). The inclusion of parent involvement through a home note intervention was an addition in the present study, as well as a brief follow-up phase. A noticeable difference between the present study and the study conducted by Marchant and colleagues was in the implementation of interventions. Because of the efficacy of adult mediation in the Marchant study, it was implemented simultaneously with social skills training. Compared to the earlier study, results of the present study demonstrated similar outcomes with all target students' data showing positive trends in social engagement behavior during intervention. The current study yielded strong results in a relatively short period of time, but the results of the follow-up phase indicated the maintenance of prosocial behaviors varied among participants. This likely was due to the limited amount of time researchers were permitted to work with target students at the university lab school.

Limitations

There were several limitations that should be taken into consideration in the interpretation of results. Due to the limited number of participants, replications of the study are needed to strengthen the generality of the findings. It is also possible that target students interacted with

one another due to the use of a single classroom for the study, thus impacting the data for each student. Each target student was absent at least twice during the course of the study, which may have disrupted the consistency of the intervention and weakened its overall effect. Lastly, the short duration of treatment (i.e., 4-5 weeks of intervention) may have been a limiting factor in relation to the results achieved. Implementing the study over a longer period of time might have strengthened skill acquisition and allowed the researcher to fade the intervention procedures more gradually. Indeed, meta-analyses have shown that the most effective treatment programs were those in which individuals were exposed to daily intervention (Joseph & Strain, 2003) and were of longer duration (January et al., 2011).

Future Research

Future replications of the present study are needed to address the limitations noted above. For example, lengthening the duration of the treatment to facilitate longer exposure to the interventions could increase the likelihood that behavioral changes would be maintained over time (Bennett, 1986). It is also necessary to further examine intervention effects for socially withdrawn youth during the significant developmental periods of preschool and kindergarten as this appears to be the most opportune time to apply social skills intervention for long-term positive outcomes (January et al., 2011).

A meta-analysis conducted by January and colleagues (2011) demonstrated that classroom-wide social skills interventions resulted in larger positive outcomes for preschoolers and kindergarteners than any other age group. As a result of this meta-analysis, it is recommended that future researchers determine whether differential effects are obtained when examining differences in a classroom-wide version of the social skills intervention versus an individual-based intervention. As in the case of Billy, it is also important for interventionists to

focus on supporting outliers who may need particular attention and individualized intervention. For instance, a peer mediator may have helped strengthen Billy's sense of self-worth and provided a buddy to model prosocial behaviors. While Billy responded to reinforcement, peers appeared to be punishing him through rejections of his social skill use. Although the number of his negative interactions was reduced, he needed to repair these relations with his peers prior to their accepting his invitations. A suggestion for further intervention might be to have a teacher supervise positive interactions with his peers to support this relationship development. It should be noted that further observations and non-experimental intervention was continued for Billy following the completion of the current study.

Despite the commonality among target students in regard to their tendency to withdraw from the peer group, each participant was dealing with different behavioral challenges (e.g., aggression, anxiety), which made it challenging to develop a strong intervention that would satisfy all individual needs. To address this limitation, future studies would do well to sample from a number of classrooms to identify an appropriate, well-defined group of students having similar characteristics. The dependent variables for the present study were positive and negative social engagement, both of which consisted of communication and play behavior. Therefore, future research is needed to further examine the two dependent variables in isolation in order to determine which social skill (i.e., communication or play behavior) yields greater improvement. An examination of methods to promote the generalization of social skills across a variety of settings is likewise needed. For example, although it is speculated that home-school collaboration and communication may be effectively used for this purpose, additional investigations are needed to examine this question.

Conclusion

During the intervention, target students demonstrated positive increases in their social interactions while also engaging in less negative social behaviors. However, these outcomes were maintained for only one of the target students in the follow-up phase, whereas the remaining two students seemed to exhibit behaviors similar to those in baseline. It is likely that the intervention needed to be in place longer to yield stronger outcomes in the maintenance phase. Although the retention of skills over time was not achieved by all students, the results of the intervention appear to be promising. Further investigation is warranted to determine whether addressing the limitations of this study would yield stronger results with this under-identified population of students.

References

- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333-341. doi:10.1037/0003-066X.46.4.333
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Barmish, A. J., & Kendall, P. C. (2005). Should parents be co-clients in cognitive-behavioral therapy for anxious youth? *Journal of Clinical Child and Adolescent Psychology, 34*(3), 569-581.
- Bennett, G. A. (1986). Behavior therapy for obesity: A quantitative review of the effects of selected treatment characteristics on outcome. *Behavior Therapy, 17*, 554-562.
- Boivin, M., Hymel, S., & Burkowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology, 7*(4), 765-785.
doi:10.1017/S0954579400006830
- Bowen, F., Vitaro, F., Kerr, M., & Pelletier, D. (1995). Childhood internalizing problems: Prediction from kindergarten, effect of maternal overprotectiveness, and sex differences. *Development and Psychopathology, 7*(3), 481-498. doi:10.1017/S0954579400006647
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London, England: Tavistock.
- Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development, 65*(4), 971-981. doi:10.2307/1131298
- Chen, X., DeSouza, A. T., Chen, H., & Wang, L. (2006). Reticent behavior and experiences in peer interactions in Chinese and Canadian children. *Developmental Psychology, 42*(4), 656-665. doi:10.1037/0012-1649.42.4.656

- Coie, J. D., & Dodge, K. A. (1983). Continuities and changes in children's social status: A five-year longitudinal study. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 29(3), 261-282.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill.
- Coplan, R. J., Prakash, K., O'Neil, K., & Armer, M. (2004). Do you "want" to play? Distinguishing between conflicted shyness and social disinterest in early childhood. *Developmental Psychology*, 40(2), 244-258. doi:10.1037/0012-1649.40.2.244
- Coplan, R. J., & Rubin, K. H. (2010). Social withdrawal and shyness in childhood: History, theories, definitions, and assessments. In K. H. Rubin & R. J. Coplan (Eds.), *The development of shyness and social withdrawal* (pp. 3-20). New York, NY: Guilford Press.
- Cox, D. D. (2005). Evidence-based interventions using home-school collaboration. *School Psychology Quarterly*, 20(4), 473-497.
- Day, R. D., & Padilla-Walker, L. M. (2009). Mother and father connectedness and involvement during early adolescence. *Journal of Family Psychology*, 23(6), 900-904.
doi:10.1037/a0016438
- Dowd, T., & Tierney, J. (2005). *Teaching social skills to youth*. Boys Town, NE: Boys Town Press.
- Dykas, M. J., Ziv, Y., & Cassidy, J. (2008). Attachment and peer relations in adolescence. *Attachment & Human Development*, 10(2), 123-141. doi:10.1080/14616730802113679

- Erath, S. A., Flanagan, K. S., & Bierman, K. L. (2007). Social anxiety and peer relations in early adolescence: Behavioral and cognitive factors. *Journal of Abnormal Child Psychology*, 35(3), 405-416. doi:10.1007/s10802-007-9099-2
- Feil, E. G., Walker, H., Severson, H., & Ball, A. (2000). Proactive screening for emotional/behavioral concerns in Head Start preschools: Promising practices and challenges in applied research. *Behavioral Disorders*, 26(1), 13-25.
- Finzi, R., Cohen, O., Sapir, Y., & Weizman, A. (2000). Attachment styles in maltreated children: A comparative study. *Child Psychiatry and Human Development*, 31(2), 113-128. doi:10.1023/A:1001944509409
- Gazelle, H., & Ladd, G. W. (2003). Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development*, 74(1), 257-278. doi:10.1111/1467-8624.00534
- Greco, L. A., & Morris, T. L. (2001). Treating childhood shyness and related behavior: Empirically evaluated approaches to promote positive social interactions. *Clinical Child and Family Psychology Review*, 4(4), 299-318. doi:10.1023/A:1013543320648
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System*. Circle Pines, MN: American Guidance Service.
- Grills, A. E., & Ollendick, T. H. (2002). Peer victimization, global self-worth, and anxiety in middle school children. *Journal of Clinical Child and Adolescent Psychology*, 31(1), 59-68. doi:10.1207/153744202753441675
- Guerra, V. S., Asher, S. R., & DeRosier, M. E. (2004). Effect of children's perceived rejection on physical aggression. *Journal of Abnormal Child Psychology*, 32(5), 551-563. doi:10.1023/B:JACP.0000037783.88097.69

- Hanish, L. D., & Guerra, N. G. (2004). Aggressive victims, passive victims, and bullies: Developmental continuity or developmental change? *Merrill Palmer Quarterly: Journal of Developmental Psychology*, 50(1), 17-38. doi:10.1353/mpq.2004.0003
- Hastings, P. D., & Rubin, K. H. (1999). Predicting mothers' beliefs about preschool-aged children's social behavior: Evidence for maternal attitudes moderating child effects. *Child Development*, 70(3), 722-741. doi:10.1111/1467-8624.00052
- Hayward, C., Killen, J., Kraemer, H., & Taylor, C. (1998). Linking self-reported childhood behavioral inhibition to adolescent social phobia. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(12), 1308-1316. doi:10.1097/00004583-199812000-00015
- January, A. M., Casey, R. J., & Paulson, D. (2011). A meta-analysis of classroom-wide interventions to build social skills: Do they work? *School Psychology Review*, 40(2), 242-256.
- Joseph, G. E., & Strain, P. S. (2003). Comprehensive evidence-based social-emotional curricula for young children: An analysis of efficacious adoption potential. *Topics in Early Childhood Special Education*, 23(2), 65-76.
- Kazdin, A. E. (1982). *Single-case research designs: Methods for clinical and applied settings*. New York, NY: Oxford University Press.
- Kerr, M. M., & Nelson, M. C., (2006). *Strategies for managing behavior problems in the classroom* (5th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Kupersmidt, J. B., & Patterson, C. J. (1991). Childhood peer rejection, aggression, withdrawal, and perceived competence as predictors of self-reported behavior problems in

- preadolescence. *Journal of Abnormal Child Psychology*, 19(4), 427-449.
doi:10.1007/BF00919087
- Ladd, G. W. (2006). Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An examination of four predictive models. *Child Development*, 77(4), 822-846. doi:10.1111/j.1467-8624.2006.00905.x
- Ladd, G. W., & Asher, S. R. (1985). Social skill training and children's peer relations. In L. L'Abate & M. A. Milan (Eds.), *Handbook of social skills training and research* (pp. 219-244). New York, NY: Wiley.
- Lane, K. L., & Beebe-Frankenberger, M. (2004). *School based interventions : The tools you need to succeed*. Boston, MA: Pearson Education Inc.
- Lieb, R., Wittchen, H., Höfler, M., Fuetsch, M., Stein, M. B., & Merikangas, K. R. (2000). Parental psychopathology, parenting styles, and the risk of social phobia in offspring: A prospective-longitudinal community study. *Archives of General Psychiatry*, 57(9), 859-866. doi:10.1001/archpsyc.57.9.859
- Marchant, M. R., Solano, B. R., Fisher, A. K., Caldarella, P., Young, K., & Renshaw, T. L. (2007). Modifying socially withdrawn behavior: A playground intervention for students with internalizing behaviors. *Psychology in the Schools*, 44(8), 779-794.
doi:10.1002/pits.20265
- Martens, B. K., Witt, J. C., Elliott, S. N., & Darveaux, D. (1985). Teacher judgments concerning the acceptability of school based interventions. *Professional Psychology, Research and Practice*, 16, 191-198. doi:10.1037/0735-7028.16.2.191.
- McFall, R. M. (1982). A review and reformulation of the concept of social skills. *Behavioral Assessment*, 4(1), 1-33. doi:10.1007/BF01321377

- McGinnis, E., & Goldstein, A. P. (1997). *Skillstreaming the elementary school child*. Champaign, IL: Research Press.
- McGoey, K. E., Prodan, T., & Condit, N. (2007). Examining the effects of teacher and self-evaluation of disruptive behavior via school-home notes for two young children in kindergarten. *Journal of Early and Intensive Behavior Intervention*, 3(4-41), 365-376.
- McShane, K. E., & Hastings, P. D. (2009). The new friends vignettes: Measuring parental psychological control that confers risk for anxious adjustment in preschoolers. *International Journal of Behavioral Development*, 33(6), 481-495.
doi:10.1177/0165025409103874
- Merrell, K. W. (1995). Relationships among early childhood behavior rating scales: Convergent and discriminant construct validity of the Preschool and Kindergarten Behavior Scales. *Early Education and Development*, 6(3), 253-264. doi:10.1207/s15566935eed0603_4
- Merrell, K.W. (2002). *Preschool and kindergarten behavior scales* (2nd ed.). Austin, TX: Pro-Ed.
- Mills, R. L., & Rubin, K. H. (1998). Are behavioural and psychological control both differentially associated with childhood aggression and social withdrawal? *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 30(2), 132-136. doi:10.1037/h0085803
- Nelson, L. J., Rubin, K. H., & Fox, N. A. (2005). Social withdrawal, observed peer acceptance, and the development of self-perceptions in children ages 4 to 7 years. *Early Childhood Research Quarterly*, 20(2), 185-200. doi:10.1016/j.ecresq.2005.04.007

- Oh, W., Rubin, K. H., Bowker, J., Booth-LaForce, C., Rose-Krasnor, L., & Laursen, B. (2008). Trajectories of social withdrawal from middle childhood to early adolescence. *Journal of Abnormal Child Psychology*, 36(4), 553-566. doi:10.1007/s10802-007-9199-z
- Parker, R. I., Vannest, K. J., & Brown, L. (2009). The improvement rate difference for single-case research. *Exceptional Children*, 75(2), 135-150.
- Peacock, G. G., & Collett, B. R. (2010). *Collaborative home/school interventions*. New York, NY: Guilford Press.
- Pedersen, S., Vitaro, F., Barker, E. D., & Borge, A. H. (2007). The timing of middle-childhood peer rejection and friendship: Linking early behavior to early-adolescent adjustment. *Child Development*, 78(4), 1037-1051. doi:10.1111/j.1467-8624.2007.01051.x
- Plake, B. S., & Impara, J. C. (Eds.) (2001). *The fourteenth mental measurements yearbook*. Lincoln, NE: Buros Institute of Mental Measurements.
- Rubin, K. H., & Asendorpf, J. B. (1993). Social withdrawal, inhibition, and shyness in childhood: Conceptual and definitional issues. *Social withdrawal, inhibition, and shyness in childhood* (pp. 3-17). Hillsdale, NJ: Erlbaum.
- Rubin, K. H., Bowker, J., Gazelle, H. (2010). Social withdrawal in childhood and adolescence: Peer relationships and social competence. In K. H. Rubin & R. J. Coplan (Eds.), *The development of shyness and social withdrawal* (pp. 131-156). New York, NY: Guilford Press.
- Rubin, K.H., Bukowski, W., & Parker, J. (2006). Peer interactions, relationships, and groups. In N. Eisenberg (Ed.), *Handbook of child psychology (Vol. 3): Social, emotional, and personality development* (pp. 571-645). New York, NY: Wiley.

- Rubin, K. H., & Krasnor, L. R. (1986). Social-cognitive and social behavioral perspectives on problem solving. In M. Perlmutter (Ed.), *Cognitive perspectives on children's social and behavioral development. The Minnesota symposia on child psychology, Vol. 18* (pp. 1-68). Hillsdale, NJ: Erlbaum.
- Rubin, K. H., Nelson, L. J., Hastings, P., & Asendorpf, J. (1999). The transaction between parents' perceptions of their children's shyness and their parenting styles. *International Journal of Behavioral Development, 23*(4), 937-958. doi:10.1080/016502599383612
- Rubin, K. H., Wojslawowicz, J. C., Rose-Krasnor, L., Booth-LaForce, C., & Burgess, K. B. (2006). The best friendships of shy/withdrawn children: Prevalence, stability, and relationship quality. *Journal of Abnormal Child Psychology, 34*(2), 143-157. doi:10.1007/s10802-005-9017-4
- Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(8), 1008-1015. doi:10.1097/00004583-199908000-00017
- Sheridan, S. M., Kratochwill, T. R., & Elliott, S. N. (1990). Behavioral consultation with parents and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review, 19*(1), 33-52.
- Siperstein, G. N., & Bak, J. J. (1988). Improving social skills in schools: The role of parents. *The Exceptional Parent, 18*(2), 18-22.
- Spence, S. H., Donovan, C., & Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training-based, cognitive-behavioural intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry, 41*(6), 713-726. doi:10.1111/1469-7610.00659

- Spies, R.A., & Plake, B. S. (Eds.) (2005). *The sixteenth mental measurements yearbook*. Lincoln, NE: Buros Institute of Mental Measurements.
- Gast, D. L. (2010). *Single subject research methodology in behavioral sciences*. New York, NY: Routledge.
- Trout, A., Epstein, M. H., Nelson, R., Synhorst, L., & Hurley, K. (2006). Profiles of children served in early intervention programs for behavioral disorders: Early literacy and behavioral characteristics. *Topics in Early Childhood Special Education, 26*(4), 206-218. doi:10.1177/02711214060260040201
- van Brakel, A. L., Muris, P., Bögels, S. M., & Thomassen, C. (2006). A multifactorial model for the etiology of anxiety in non-clinical adolescents: Main and interactive effects of behavioral inhibition, attachment and parental rearing. *Journal of Child and Family Studies, 15*(5), 569-579. doi:10.1007/s10826-006-9061-x
- Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). *Antisocial behavior at school: Strategies and best practices* (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Walker, H. M., Severson, H. H., & Feil, E. G. (1995). *Early screening project: A proven child-find process*. Longmont, CO: Sopris West.
- Weiss, B., Jackson, E. W., & Süsser, K. (1997). Effect of co-occurrence on the referability of internalizing and externalizing problem behavior in adolescents. *Journal of Clinical Child Psychology, 26*(2), 198-204. doi:10.1207/s15374424jccp2602_8

Table 1

Student Scores on Preschool and Kindergarten Behavior Scales, 2nd Edition (PKBS-2)

Billy (mean=100, standard deviation=15)			
	Standard Score	Percentile Rank	Risk Level
Social Skills Subscale			
Social Cooperation	65	3rd	High
Social Interaction	60	2nd	High
Social Independence	76	8th	Moderate
Problem Behavior Subscale			
Externalizing Problems	136	99th	High
Internalizing Problems	109	75th	--
Rachel (mean=100, standard deviation=15)			
	Standard Score	Percentile Rank	Risk Level
Social Skills Subscale			
Social Cooperation	109	67th	--
Social Interaction	67	4th	High
Social Independence	69	4th	High
Problem Behavior Subscale			
Externalizing Problems	81	12th	--
Internalizing Problems	137	99th	High
Lauren (mean=100, standard deviation=15)			
	Standard Score	Percentile Rank	Risk Level
Social Skills Subscale			
Social Cooperation	109	67th	--
Social Interaction	98	37th	--
Social Independence	85	17th	--
Problem Behavior Subscale			
Externalizing Problems	78	1st	--
Internalizing Problems	108	72nd	--

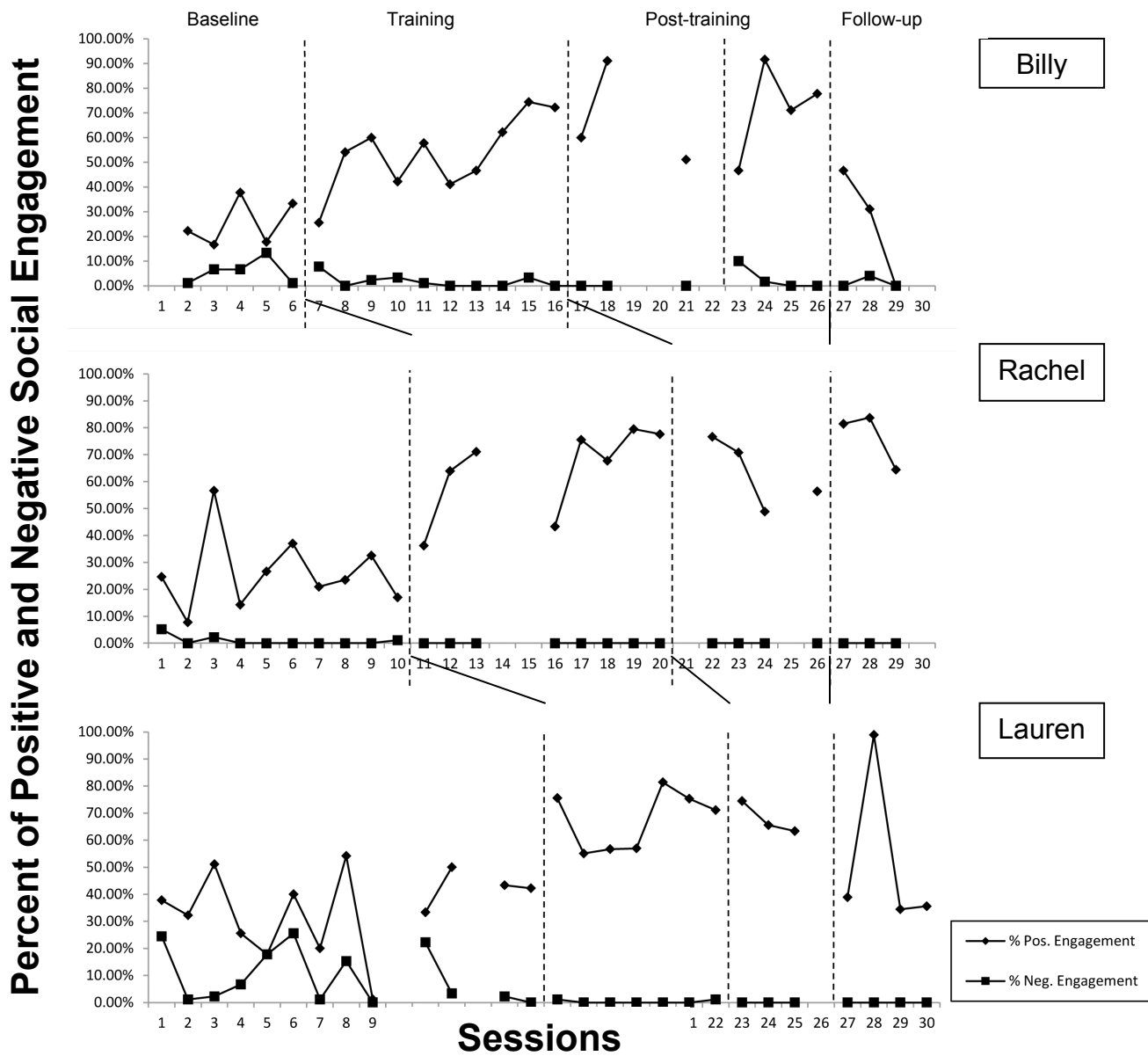


Figure 1. Percentage of positive and negative social engagement behavior for all participants.

Table 2

Summary of results during intervention phases.

Billy	
Positive Social Engagement Mean=60% Median=60% Difference score=34% 131% increase from baseline Ranged from 26% to 92%. PEM=100% PND=94% IRD=.54	Negative Social Engagement Mean=2% Median=0% Difference score=4% 67% decrease from baseline Ranged from 0% to 10% PEM=12%, indicating a decrease of negative social behaviors with 88% of data points falling below the median
Rachel	
Positive Social Engagement Mean=60% Median=60% Difference score=34% 131% increase from baseline Ranged from 26% to 92%. PEM=100% PND=94% IRD=.54	Negative Social Engagement Mean=2% Median=0% Difference score=4% 67% decrease from baseline Ranged from 0% to 10% PEM=12%, indicating a decrease of negative social behaviors with 88% of data points falling below the median
Lauren	
Positive Social Engagement: Mean=68% Median=69% Difference score=34% 100% increase from baseline Ranged from 55% to 81% PEM=100% PND=100% IRD=1.00	Negative Social Engagement Mean=0% Median=0% Difference score=9% 100% decrease from baseline Ranged from 0% to 1% PEM=0%, indicating a decrease of negative social behaviors with 100% of data points falling below the median

Appendix A: Review of Literature

The following review of literature defines the following concepts: social skills, social withdrawal, and social competency. Specifically, the relationships between these three social constructs will be discussed in the context of those facing interpersonal difficulties. In addition, the negative outcomes of maladaptive peer relations, the developmental significance of the parent-child relationship, and current approaches to identify and treat socially withdrawn children are addressed.

Definition of Terms and Background

Concise definitions of social withdrawal, social skills, and social competency will subsequently be provided. Distinctions between the three constructs will be explained as the connection between social withdrawal and social skill use is addressed. The discussion will also pinpoint the need for additional research to identify effective treatments for children with internalizing symptoms, specifically those manifesting social withdrawal.

Social withdrawal and social skill use. The ability to successfully maintain relationships and interact with peers and teachers is associated with a student's academic achievement, teacher and peer acceptance, and positive peer relationships (Kerr & Nelson, 2006; Walker, Ramsey, & Gresham, 2004). However, a small percentage of individuals go throughout their lives plagued by significant interpersonal, occupational, academic, and emotional-behavioral problems, demonstrating deficits in either the development or performance of critical social skills (Merrell & Gimpel, 1998). These social skills are defined as specific behaviors one must demonstrate to perform competently on a given task, such as inviting another student to join a group or raising one's hand and waiting to be called upon (McFall, 1982). Thus, it is apparent that certain social skills are necessary for success in the school environment. Unfortunately, students with

internalizing behaviors (e.g., anxiety, depression) often struggle with developing social skills necessary to achieve academically and socially.

Social withdrawal, a characteristic of those with internalizing behaviors, refers to the tendency to withdraw one's self from the peer group for whatever reason (Coplan & Rubin, 2010). Rubin and Asendorpf (1993) have suggested that these reasons originate from internal factors to the child, such as anxiety, self-perceived social difficulties, and negative self-esteem. While social withdrawal is not listed as a clinical disorder in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR; American Psychiatric Association [APA], 2000), it can be found as a symptom in a number of mental disturbances. Most notably, withdrawal and shy behavior are closely related to social anxiety disorder (SAD), which is characterized by “a marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others” (APA, 2000, p. 456). In fact, investigators have noted an increased risk for the extremely withdrawn population to develop this particular anxiety disorder in later adolescence (Hayward, Killen, Kraemer, & Taylor, 1998; Schwartz, Snidman, & Kagan, 1999). Researchers have also shown that this population experiences more peer rejection and exclusion (Chen, DeSouza, Chen, & Wang, 2006; Nelson, Rubin, & Fox, 2005), are actively disliked by their peers (Gazelle & Ladd, 2003; Ladd, 2006; Oh et al., 2008), and are at-risk for victimization (Erath, Flanagan, & Bierman, 2007; Hanish & Guerra, 2004). Indeed, there is a significant amount of research on the association between socially withdrawn behavior and socioemotional maladjustment and relationship difficulties (see Rubin, Coplan, & Bowker, 2009 for a review).

Social competence. While social skills have been defined as behaviors needed to competently complete a given task, social competency is defined as a “judgment call” as to

whether an individual has performed the task adequately (McFall, 1982). That is to say that being socially competent is based on an observer's evaluation of how well one has demonstrated prosocial behavior. Rubin, Bowker, and Gazelle (2010) extended this definition by adding that there must be a consistent demonstration of positive social skills across settings and over time. Due to social skill deficits, shy children are often perceived as being easy targets for victimization due to their timid and reserved nature. Indeed, many researchers have noted these displays of perceived vulnerabilities in socially withdrawn children (e.g., Gazelle & Ladd, 2003; Hodges, Malone, & Perry, 1997; Rubin, Wojslawowicz, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). Yet, a judgment of one's social competency is not only left to observers, but may also be self-evaluated. Consistent with this idea is a finding by Rubin and Krasnor (1986) in which socially withdrawn children attributed their social failures to personal characteristics rather than external causes or events. In other words, they have assessed themselves as unsociable.

The Influence of Peers and Gender on Social Growth

Difficulty in forming positive peer relationships can significantly inhibit a child's social adjustment. The negative outcomes associated with maladaptive peer relations and related constructs will be described in the following paragraphs.

Maladaptive peer relations. Positive social interactions and peer relationships have been shown to play a critical role in normal social and emotional childhood development and later successful life adjustment (Rubin, Bukowski, & Parker, 2006; Rubin, Roots, & Bowker, 2010). Peers serve as an important developmental context for children because it is in these experiences that they acquire a number of skills, behaviors, and attitudes that influence their adaptation throughout the lifespan. Therefore, poor peer relationships in childhood can be

detrimental to both concurrent and long-term adjustment. For example, peer rejection and social isolation may lead to feelings of loneliness, insecurity, anger, and trigger depression, anxiety, and alienation (Boivin, Hymel, & Bukowski, 1995). Unfortunately, socially withdrawn children have great difficulty in forming friendships with many people (Pedersen, Vitaro, Barker, & Borge, 2007). These difficulties are the result of peer rejection, which is believed to be a product of reticent behavior as conflicting with peers' expectation of how one should perform in adequate prosocial interactions (Rubin, Wojslawowicz, et al., 2006). In fact, one of the strongest correlates of peer rejection in childhood is indeed social withdrawal (e.g., Deater-Deckard, 2001; Newcomb, Bukowski, & Pattee, 1993). As a result, children who face peer rejection typically undergo continued social difficulties, stable loneliness, greater academic struggles, poor school adjustment, and later mental health problems as an adult (Ladd & Asher, 1985) and tend to remain stable in their social status over time (Coie & Dodge, 1983).

While peer rejection has been defined as being widely disliked by peers, another relational construct referred to as peer exclusion is defined as being left out of group activities by being passively ignored or actively refused access (Rubin, Bowker, et al., 2010). Gazelle and Ladd (2003) found greater stability in expressions of anxious solitude behavior and elevated levels of depression in socially withdrawn children from kindergarten age through middle childhood. Similarly, elevated levels of peer exclusion for anxious solitary students over the course of fifth and sixth grade led to sustaining or exacerbating the degree of social avoidance behavior and depression, whereas low exclusion predicted more social approach and less depression (Gazelle & Rudolph, 2004).

Another important relational construct is peer victimization, which refers to mistreatment by peers in the form of teasing, physical harm, and verbal put-downs (Rubin, Bowker, et al.,

2010). A number of studies have demonstrated that anxious and withdrawn children are at high risk for peer victimization (Erath et al., 2007; Hanish & Guerra, 2004; Kochenderfer-Ladd, 2003). Indeed, male children who are targets of chronic victimization have been found to be submissive and socially incompetent (Schwartz, Dodge, & Coie, 1993). Grills and Ollendick (2002) have suggested that repeated peer victimization endorsed more symptoms of social anxiety, feelings of negative self-worth, and a view that the world is an unsafe place. Consistent with this is a study that reports frequent exposure to peer victimization leading to increased fear of classmates and further withdrawal from group activities and peer interactions (Hoglund, 2007).

Gender differences. According to a review by Rubin and colleagues (2009), no significant evidence has suggested any gender differences in the frequency or prevalence of childhood inhibition, social withdrawal, and shyness. Nevertheless, a growing body of research suggests that social withdrawal is a greater risk factor for boys than for girls. For instance, Coplan, Prakash, O'Neil, and Armer (2004) found that shy boys experienced more peer exclusion than their shy female classmates. Consistent with these results are findings that socially withdrawn boys describe themselves as being lonelier, having lower self-esteem and weaker social skills than their average peers (Morison & Masten, 1991; Nelson et al., 2005; Rubin, Chen, & Hymel, 1993). Studies also suggest that teachers rate socially withdrawn boys lower on social competence than girls who displayed the same shy tendencies (Coplan, Gavinsky-Molina, Lagace-Seguin, & Wichmann, 2001). Indeed, the maladjustments associated with shy boys are significantly greater than for shy girls. Such negative outcomes could be attributed to the cultural expectations Western society has for males. That is, social withdrawal appears to be less acceptable for boys than for girls (Sadker & Sadker, 1994). These gender biased expectations for

shyness are not limited to only educators, but may also have an effect on how parents respond to social withdrawal in sons as compared to daughters.

Studies have shown that socially withdrawn behavior in sons is more likely to be discouraged, whereas the same behavior in daughters is more likely to be rewarded and accepted (Engfer, 1993; Stevenson-Hinde, 1989). In addition, findings also demonstrate that mothers treat their shy girls and shy boys differently; socially withdrawn daughters were treated with tenderness, sensitivity, and responsiveness, whereas socially withdrawn sons received less affection, less responsiveness, and were disciplined in a power assertive style (Radke-Yarrow, Richters, & Wilson, 1988; Stevenson-Hinde, 1989). Similar results from a study by Simpson and Stevenson-Hinde (1985) report more negative interactions between socially withdrawn boys and their parents, while girls had more positive ones. Indeed, society has engendered biases not only in the education system, but in the home as well. It is imperative for both educators and parents to understand the repercussions social inhibition has on the developmental trajectories of shy children, particularly boys, so that corrections can be made to promote positive outcomes.

Developmental Significance of Parent-Child Relationship

Researchers in the area of attachment theory have long maintained that in order for normal social and emotional development to occur, an infant must develop a secure relationship with at least one primary caregiver (Ainsworth & Bowlby, 1991; Bowlby, 1979). Relationships with parents are the first and most enduring for children, and so it makes sense that the greatest responsibility for positive development originate with them. Thus, an insecure attachment with the primary caregiver was expected to set a child toward a course for social difficulties. Indeed, researchers have found that an insecure anxious-ambivalent attachment predicted internalizing behavior (Finzi, Cohen, Sapir, & Weizman, 2000; van Brakel, Muris, Bögels, & Thomassen,

2006), and is the result of experiences of parental neglect in the form of inconsistent availability and minimal responsiveness (Cassidy & Berlin, 1994). Children with these experiences may develop the expectation that social encounters are not rewarding and a belief that they are not worthy of care (Renken, Egeland, Marvinney, & Mangelsdorf, 1989). These findings are consistent with what Bowlby (1979) refers to as an internal working model, which is a mental representation of the self in relation to others. In other words, it is a mechanism through which the quality of the parent-child relationship carries forward into a child's future social interactions and has an influence on their competence in those situations. Dykas, Ziv, and Cassidy (2008) found that children with insecure attachments were less likely to be socially accepted, whereas children with secure attachments were perceived to be socially competent. In a related study, children who developed a positive representation of self reported feeling socially accepted and had stronger ratings of global self-worth (Verschueren, Buyck, & Marcoen, 2001). Indeed, these mental representations of self have a significant effect on how socially competent children are perceived in peer interactions.

Attachment theory is typically associated with the relationship between mother and child with little attention paid to paternal attachment. This is most likely due to mothers' traditional role as the primary caregiver in the home. While some researchers have found no significant associations between shyness and paternal attachment (LaFrenière, Provost, & Dubeau, 1992), others have reported that positive father involvement with children is related to better social adjustment (Amato & Gilbreth, 1999). Similarly, the degree of anxious and withdrawn behavior a child displays is better predicted by the father-child attachment quality, while the mother-child attachment quality acted as a better predictor for positive representation of self (Verschueren & Marcoen, 1999). Similarly, a father's presence and support has also been found to predict social

competence in children entering the first grade (Dubowitz et al., 2001). Another study also found that critical fathers had preschool children with more anxious adjustment and internalizing difficulties (McShane & Hastings, 2009). It is important to note that these findings do not suggest a dominance of one attachment figure over the other, but rather both attachment figures have more relative predictive power in certain functioning domains. In fact, researchers have found that the greatest predictive power for a male child's inhibition was found when examining both parents' behaviors rather than one parent over the other (Park, Belsky, Putnam, & Crnic, 1997).

Although paternal attachment and socialization is believed to be an important variable in the development of social competency, mothers also play a significant role in the socioemotional progress of their offspring as well. For instance, a number of studies have reported predictive links between both mothers' and fathers' overprotection, overcontrolling, and intrusive behavior and child shyness and other internalizing symptoms (Coplan et al., 2004; Lieb et al., 2000; McShane & Hastings, 2009; Mills & Rubin, 1998). Rubin and colleagues (2009) have explained that this association may be due to parents' controlling behavior acting as a restriction to their children's independence. As a result, these children do not acquire the necessary problem-solving and coping strategies for developing adequate social competency. Of course, the reverse effect may also be true. That is, the reason parents act so overly restrictive, protective, and controlling is because of their child's reticent behavior. In fact, it has been reported that such withdrawn behavior is predictive of later parental control (Hastings & Rubin, 1999; Rubin, Nelson, Hastings, & Asendorpf, 1999). When observing the vulnerabilities of their withdrawn child in peer interactions, feelings of concern may be induced and the parent may simply take over in order to free them from social discomfort (Rubin et al., 1999). Unfortunately, the parent's

directing behavior only reinforces the child's feelings of social incompetence and results in maintaining the continued cycle of controlling behavior and child helplessness (Rapee, 1997).

Earlier it was noted that anxious-ambivalent attachments result in shy children and that these children experience low responsiveness and minimal maternal availability. Thus, a reasonable question would be why mothers would be so overprotective and overly involved in their ambivalent children's interactions in later years, when it was likely that during their child's infancy they were treated with neglect and low responsiveness. Cassidy and Berlin (1994) posited that mothers may develop a parental strategy during the early years of the child in which the mother's own attachment needs must be satisfied. To be exact, the mother may want to feel assured of her importance to her child and may act unresponsive in an effort to increase the child's bid for attention. This reasoning would be consistent with why mothers may act so overprotective and controlling in their child's later years. If the mother has a desire to feel "needed," then a reasonable course of action would be to act in ways in which she satisfies that need, such as directing their helpless child in social interactions.

Identifying Childhood Social Withdrawal

The reasons for childhood social withdrawal comes in many forms, and therefore social withdrawal has been deemed an "umbrella term" for numerous constructs (e.g., reticence, inhibition, shyness) that are associated with the internalizing symptom (Rubin & Coplan, 2004). As a result, assessing social withdrawal has been accompanied by identifying those who fit certain behavioral descriptors through the use of peer-rating procedures, behavioral observations, parent and teacher ratings, and self-reports.

One widely used peer-rating procedure known as the Revised Class Play (RCP; Masten, Morison, & Pellegrini, 1985) is used to identify a broader construct of social withdrawal through

classmates who nominate peers that have particular behavioral descriptors or attributes. This method of nomination is conducted through role playing in which each student pretends to cast their peers into various positive and negative imaginary roles. The RCP examines three dimensions of peer reputation: sociability-leadership, aggressive-disruptive, and sensitive-isolated. The factor of interest in the RCP is the sensitive-isolated dimension, which identifies students who do not frequently interact with other peers and include items associated with shyness/withdrawal (e.g., “someone whose feelings get hurt easily”) and social isolation/exclusion (e.g., “a person who is often left out”). Researchers have suggested separating these items in order to reflect a clearer identification of social withdrawal (Rubin & Mills, 1988).

In a more recent study by Rubin and colleagues (2006), ten additional items were created for the RCP in order to further differentiate between peer victimization (e.g., “someone who is hit or kicked by others”), aggression (e.g., “someone who hits other kids”), and active isolation (e.g., “someone who prefers to be alone”). Specifically, five factors were examined in elementary aged students: aggression, shyness/withdrawal, rejection/victimization, leadership/prosocial, popularity/sociability. This extension of the RCP, herein referred to as the Extended Class Play (ECP), has been validated in a number of studies (Burgess, Wojslawowicz, Rubin, Rose-Krasnor, & Booth-LaForce, 2006; Menzer, Oh, McDonald, Rubin, & Dashiell-Aje, 2010; Wojslawowicz Bowker, Rubin, Burgess, Booth-Laforce, & Rose-Krasnor, 2006).

Another way to identify different forms of solitude is through the use of behavioral observations. For instance, Rubin (2001) developed the Play Observation Scale (POS) to allow for direct observation of children’s play behavior in both laboratory playrooms (Coplan, Rubin, Fox, & Calkins, 1994) and in traditional classrooms in school (Coplan, Arbeau, & Armer, 2008). Using the POS, investigators record a child’s free-play behavior in a series of 10 second

intervals. It is suggested that only 5 minutes of POS data be recorded for the child on any given day and that a minimum of 15 minutes be gathered in order to achieve a valid measure of play behavior. Thus, a minimum of three days is typical when using this measurement. The POS is only one example of a behavioral observation scale, and is typically used to identify social and nonsocial play behavior. Coplan and Rubin (2010) have stated that this form of measurement has the advantage of high face validity when applying it to a broad-based assessment of solitary behavior. Additionally, it is suggested that nonsocial play behaviors may be indicative of different forms of solitude. For instance, a child who watches the activity of other children but does not become involved and/or remains unoccupied during these group activities may be behavioral markers for social anxiety (Coplan et al., 2008). Indeed, behavioral observations can be a useful tool in the assessment of childhood social withdrawal and other observable behaviors, although it may be a more time-consuming alternative to other pencil-based measures.

Assessments in which participants mark responses to items can be found in the form of parent and teacher ratings, and self-reports. Investigators have long utilized educators and parents to obtain their perceptions of social behaviors in both research and schools. In the case of shyness, a few parent rating instruments are available. One of these is the Colorado Child Temperament Inventory developed by Rowe and Plomin (1977), in which six factors of child personality are rated by the parent: sociability, emotionality, activity, attention span persistence, reaction to food, and soothability. The sociability dimension includes items for parents to rate about their child, such as “child is very sociable” and “child tends to be shy.” Another parent rating instrument is the Child Social Preference Scale (CSPS; Coplan et al., 2004) which is specifically focused on assessing the two dimensions of conflicted shyness and social disinterest. When assessing conflicted shyness, parents rate items such as “my child seems to want to play

with others but is sometimes nervous to” and “my child will turn down social initiations from other children because he/she is shy,” while items for social disinterests include “my child often seems content to play alone” and “my child is just as happy to play quietly by him/herself than to play with a group of children.”

Although parents may be considered experts on their child’s social behaviors, educators often observe how individual students interact with one another in the classroom setting and therefore frequently complete rating instruments. One such assessment is the Child Behavior Scale (CBS; Ladd & Profilet, 1996), which asks teachers to rate behaviors that may be characteristic of a target child. Six subscales are examined using this 59-item assessment tool: aggressiveness, prosocial behavior, exclusion by peers, asocial behavior, hyperactive-distractible behavior, and anxious-fearful behavior. Evidence for reliability and validity has been shown to be sufficient for the CBS and would be a useful teacher rating instrument for targeting highly specific peer behaviors within the school setting (Ladd & Profilet, 1996).

Utilizing older children and adolescents in research has the advantage of gathering data through the use of self-report measures. Due to the internalizing characteristics of social withdrawal and shyness, self-reports have the benefit of allowing children to describe to investigators what it is they exactly feel. Ultimately, internalizing characteristics are best expressed and understood by the population themselves. Perhaps one of the earliest and most widely used self-report tools that specifically address shyness as a distinct construct from other social distresses would be the Revised Cheek and Buss Shyness Scale (RCBS; Cheek & Buss, 1981). The original version of this measure included 9-items, but has since gone through four different revisions. Respondents answer items such as “I have no doubts about my social competence” and “I feel inhibited in social situations.” A recent analysis of the revised version of

this assessment has shown consistent reliability and validity, and therefore has demonstrated sound psychometric properties (Crozier, 2005).

Current Approaches to Enhance Social Skills

Educators commonly implement interventions to promote positive outcomes following identification of any maladaptive behaviors or difficulties within the schools, such as aggression or academic problems. However, little research has been devoted to the treatment of childhood social withdrawal despite the significant evidence for the predictive risks associated with the internalizing symptom. This is disconcerting when considering that social difficulties often occur simultaneously with other internalizing problems, including depression (Kupersmidt & Patterson, 1991) and anxiety (Bowen, Vitaro, Kerr, & Pelletier, 1995). While limited intervention and prevention strategies exist to treat the social withdrawn population, a few evidence-based treatment approaches are available to promote positive social interactions and competencies.

Perhaps the most widely used intervention strategies in schools are social skills training (SST) programs, which involves teaching children with social deficits numerous verbal and nonverbal communication skills. Given the multimodal nature of this treatment approach, different techniques and strategies exist in a number of SST programs. Furthermore, treatment can be administered to groups or individuals and in school or clinical settings (Greco & Morris, 2001). Despite the wide variety in methodology, most SST programs involve coaching, modeling, and cognitive problem-solving training (Erwin, 1994). A few researchers have utilized SST programs to treat socially withdrawn youth, and have achieved moderate improvements with this population (e.g., Bienert & Schneider, 1995; Jupp & Griffiths, 1990). However, it is important to note that long-term follow-up data on these results were not reported. In a review of

treatment approaches for shy children by Greco and Morris (2001), it was noted that sufficient evidence was lacking in the durability and generalization of acquired interpersonal skills and problem-solving abilities to real-life settings. In an effort to overcome these deficits, it was recommended that significant models of socialization become involved in treatment, such as parents, peers, siblings, and teachers.

The generalization and maintenance of newly developed social skills is possible through peer-mediated and peer-pairing treatment models, which utilize peers as behavior change agents for children with social skills deficits. Specifically, individuals using the peer-mediated approach train peers of a targeted group to initiate, model, and reinforce prosocial behaviors (Odom & Strain, 1984), whereas the peer-pairing approach typically involves pairing the identified child with a socially skilled peer (Greco & Morris, 2001). The latter procedure can be structured differently depending on the needs of the child, but the focus for both treatments involves developing a friendship with a peer who can act as a model for appropriate behavior. Given that classmates act as significant socialization models in schools, it is reasonable to believe that peer involvement would help foster and maintain acquired skills outside of treatment sessions.

Numerous strategies that enable participants to strengthen their emotional resilience and social competence derive from a cognitive-behavioral therapy (CBT) framework. That is, CBT methods focus on promoting adaptive cognitions and shaping positive behavior. This problem-specific approach to dysfunctional cognitive processes and behavior is traditionally used to treat a wide range of disorders categorized in the DSM-IV-TR, such as clinical depression, obsessive-compulsive disorder, and specific phobias. For instance, social anxiety disorder, also referred to as social phobia, has often been treated with cognitive restructuring and exposure to fear-provoking situations despite distress (Rodebaugh, Holaway, & Heimberg, 2004). Cognitive

restructuring involves modifying faulty cognition and is based on the premise that it is the individual's thoughts about the situation that produces anxiety rather than the situation itself (Beck & Emery, 1985), while full exposure to the feared situation is believed to be a prerequisite for corrective change (Foa & Kozak, 1986).

The central theory behind a CBT approach is to help the individual recognize the relationship between their thoughts, feelings, and behavior. Common CBT techniques used to elicit this understanding between these internal constructs include relaxation training and self-management. A component of self-management, referred to as self-evaluation, a student compares his or her performance of a target behavior against a predetermined goal (Cooper, Heron, & Heward, 1987). Self-monitoring, another self-management approach, involves an individual observing and recording their own behavior and has been used to increase students' prosocial behavior in the literature (Peterson, Young, Salzberg, West, & Hill, 2006). While participants are often inaccurate in the recordings of their behavior, the self-monitoring process itself serves as a sufficient catalyst for behavioral change (Nelson & Hayes, 1981). Indeed, studies have resulted in positive treatment outcomes from the use of either self-monitoring (Gumpel & Golan, 2000; Peterson et al., 2006) or self-evaluation (McGoey, Prodan, & Condit, 2007).

While techniques used in CBT include educating youth with social skill deficits, it is important that education be provided for the parents as well. The potential influence of the parent-child relationship and parenting characteristics in maintaining shy behavior and inadequate demonstrations of social competency have been described earlier in this review. Recent research suggests that educating parents about anxiety and child management may be

helpful in reducing the anxiety that is felt by both child and parent (Creswell, Schniering, & Rapee, 2005).

It should be noted that this review of literature does not encompass all of the available treatments to improve social competency. However, the approaches that have been discussed are among the most commonly used techniques and strategies in clinical and school settings. Despite the number of treatment approaches documented in the literature, there is a considerable lack of treatments available utilizing the parental influence that is significant to a child's development. In addition, ways to specifically develop treatments that align with the needs of the socially withdrawn child are largely unaddressed in the research.

Statement of the Problem

Internalizers are debilitated by numerous symptoms that stem from within, such as depression and psychosomatic difficulties. Nevertheless, one such characteristic is paid little attention to in the literature: social withdrawal. Shy and withdrawn youth are on a trajectory that is likely to impede their socioemotional development. From the offset of infancy, parental treatment of neglect and low responsiveness has been shown to predict the development of insecure anxious-ambivalent attachments (Cassidy & Berlin, 1994) and to place the child on a course for social difficulties and at-risk for internalizing problems (Dykas et al., 2008; Finzi et al., 2000). Socially withdrawn children also face deficits in their social skills repertoire that make it difficult to form sustaining friendships. In fact, solitary behavior actually increases the likelihood that children will be targeted for victimization (Erath et al., 2007) and become more actively rejected and excluded from peer groups (Chen et al., 2006). Such treatment by peers can result in a number of negative feelings, including loneliness, anger, and depression (Boivin et al., 1995).

The need for school-based intervention. Social and emotional difficulties are among the greatest struggles for the socially withdrawn population. However, for those currently fraught with these problems in their childhood, the burden of academic difficulties and poor school adjustment are also problems that must be dealt with (Ladd & Asher, 1985). If the needs of the socially withdrawn child are not addressed at an early age, the possibility of continued dysfunction (Coie & Dodge, 1983) and developing social anxiety disorder remain high (Hayward et al., 1998; Schwartz, et al., 1999). Unfortunately, internalizing behaviors are not typically addressed within the schools or in the intervention literature as often as externalizing problems, such as coercive behavior and verbal aggression (Merrell & Gimpel, 1998; Peacock & Collett, 2010). Some researchers have suggested that socially withdrawn students often go unnoticed by teachers who view them as merely shy, unaware of the negative outcomes of such behavior (Keogh, 2003; Reynolds, 1992). Additionally, Rimm-Kaufman and colleagues (2002) have posited that teachers spend most of their time extinguishing externalizing behaviors, rather than improving the interpersonal skills of shy children. As a result, this reserved and compliant behavior may be reinforced by teachers. Educators and intervention researchers must therefore pay special attention to the socially withdrawn subgroup of internalizers by continuing to develop empirically validated treatments to improve their social competencies.

Eliciting parent involvement in intervention. Given the essential role of caregivers, Greco and Morris (2001) have suggested a few strategies in which to utilize parents in interventions for socially withdrawn children. First, it might be necessary to educate caregivers about the potential effects of their childrearing behavior. Second, parents can be coached in the effective uses of disciplining skills, such as dissolving anxious or feared behavior in social situations and reinforcing adequate positive social skills. Third, overcontrolling parents can be

instructed to decrease the use of commands and allow their child to practice acts of age-appropriate level independence.

A less obtrusive way to elicit parent involvement in school-based interventions is a school-home note, or simply home note. A home note serves as a form of communication between the teacher and parent, with the intent that parents encourage and reward their child on the successful performance of target behaviors (McGinnis & Goldstein, 1997). Schools can notify parents about social skill training efforts through a home note component, with the likelihood that parents will practice and reinforce the skills in the home setting (Siperstein & Bak, 1988). This inexpensive and simple home-based intervention strategy encourages greater parent involvement, making it a valuable tool in schools. Nevertheless, the use of home notes is an underutilized intervention approach despite research demonstrating the advantages of interventions based on home-school collaboration (Cox, 2005).

Conclusion

As evidenced by the existing and long-term struggles, the need for treatment for the socially withdrawn population is great. However, the literature is lacking in approaches designed to treat this specific group of internalizers. Thus, the purpose of this study is to design an intervention that addresses the needs of the socially withdrawn population by utilizing both educators and parents as implementers. Due to the significant influence that caregivers have on their child's developmental trajectory, as well as the parental characteristics that may influence the maintenance of child psychopathology, it would be reasonable to include parents as part of the intervention to create sustainable and positive treatment outcomes. Indeed, it has been shown that parent-involved approaches for shy youth have positive treatment outcomes that have demonstrated a higher degree of permanence and durability (Spence, Donovan, & Brechman-

Toussaint, 2000) as well as greater generalization between the home and school setting (Sheridan, Kratochwill, & Elliott, 1990), whereas teacher-only approaches have not been shown to produce the same results. Nevertheless, the literature is lacking when it comes to demonstrating the benefits of treatments utilizing parental involvement (Barmish & Kendall, 2005; Peacock & Collett, 2010).

Thesis References

- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333-341. doi:10.1037/0003-066X.46.4.333
- Amato, P. R., & Gilbreth, J. G. (1999). Nonresident fathers and children's well-being: A meta-analysis. *Journal of Marriage & the Family, 61*(3), 557-573. doi:10.2307/353560
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed, Rev. ed.). Washington, DC: Author.
- Barmish, A. J., & Kendall, P. C. (2005). Should parents be co-clients in cognitive-behavioral therapy for anxious youth? *Journal of Clinical Child and Adolescent Psychology, 34*(3), 569-581.
- Barrett, P. M., Rapee, R. M., Dadds, M. M., & Ryan, S. M. (1996). Family enhancement of cognitive style in anxious and aggressive children. *Journal of Abnormal Child Psychology, 24*(2), 187-203. doi:10.1007/BF01441484
- Beck, A. T., & Emery, G. (1985). *Anxiety disorders and phobias: A cognitive perspective*. New York, NY: Basic Books.
- Bienert, H., & Schneider, B. H. (1995). Deficit-specific social skills training with peer-nominated aggressive-disruptive and sensitive-isolated preadolescents. *Journal of Clinical Child Psychology, 24*(3), 287-299. doi:10.1207/s15374424jccp2403_6
- Boivin, M., Hymel, S., & Burkowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology, 7*(4), 765-785.
doi:10.1017/S0954579400006830

- Bowen, F., Vitaro, F., Kerr, M., & Pelletier, D. (1995). Childhood internalizing problems: Prediction from kindergarten, effect of maternal overprotectiveness, and sex differences. *Development and Psychopathology*, 7(3), 481-498. doi:10.1017/S0954579400006647
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Burgess, K. B., Wojslawowicz, J. C., Rubin, K. H., Rose-Krasnor, L., & Booth-LaForce, C. (2006). Social information processing and coping strategies of shy/withdrawn and aggressive children: Does friendship matter? *Child Development*, 77(2), 371-383. doi:10.1111/j.1467-8624.2006.00876.x
- Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development*, 65(4), 971-981. doi:10.2307/1131298
- Cheek, J. M., & Buss, A. H. (1981). Shyness and sociability. *Journal of Personality and Social Psychology*, 41(2), 330-339. doi:10.1037/0022-3514.41.2.330
- Chen, X., DeSouza, A. T., Chen, H., & Wang, L. (2006). Reticent behavior and experiences in peer interactions in Chinese and Canadian children. *Developmental Psychology*, 42(4), 656-665. doi:10.1037/0012-1649.42.4.656
- Coie, J. D., & Dodge, K. A. (1983). Continuities and changes in children's social status: A five-year longitudinal study. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 29(3), 261-282.
- Cooper, J.O., Heron, T.E., & Heward, W.L. (1987). *Applied behavior analysis*. Columbus, OH: Merrill.
- Coplan, R. J., Arbeau, K. A., & Armer, M. (2008). Don't fret, be supportive: Maternal characteristics linking child shyness to psychosocial and school adjustment in

kindergarten. *Journal of Abnormal Child Psychology*, 36(3), 359-371.

doi:10.1007/s10802-007-9183-7

Coplan, R. J., Gavinsky-Molina, M. H., Lagace-Seguin, D., & Wichmann, C. (2001). When girls versus boys play alone: Gender differences in the associates of nonsocial play in kindergarten. *Developmental Psychology*, 37(4), 464-474.

Coplan, R. J., Prakash, K., O'Neil, K., & Armer, M. (2004). Do you "want" to play? Distinguishing between conflicted shyness and social disinterest in early childhood. *Developmental Psychology*, 40(2), 244-258. doi:10.1037/0012-1649.40.2.244

Coplan, R. J., & Rubin, K. H. (2010). Social withdrawal and shyness in childhood: History, theories, definitions, and assessments. In K. H. Rubin & R. J. Coplan (Eds.), *The development of shyness and social withdrawal* (pp. 3-20). New York, NY: Guilford Press.

Coplan, R. J., Rubin, K. H., Fox, N. A., & Calkins, S. D. (1994). Being alone, playing alone, and acting alone: Distinguishing among reticence and passive and active solitude in young children. *Child Development*, 65(1), 129-137. doi:10.2307/1131370

Creswell, C., Schniering, C. A., & Rapee, R. M. (2005). Threat interpretation in anxious children and their mothers: Comparison with nonclinical children and the effects of treatment. *Behaviour Research and Therapy*, 43(10), 1375-1381. doi:10.1016/j.brat.2004.10.009

Crozier, W. (2005). Measuring shyness: Analysis of the Revised Cheek and Buss Shyness scale. *Personality and Individual Differences*, 38(8), 1947-1956.

doi:10.1016/j.paid.2004.12.002

- Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry*, 42(5), 565-579. doi:10.1111/1469-7610.00753
- Dubowitz, H., Black, M. M., Cox, C. E., Kerr, M. A., Litrownik, A. J., Radhakrishna, A., ... Runyan, D. K. (2001). Father involvement and children's functioning at age 6 years: A multisite study. *Child Maltreatment*, 6(4), 300-309. doi:10.1177/1077559501006004003
- Dykas, M. J., Ziv, Y., & Cassidy, J. (2008). Attachment and peer relations in adolescence. *Attachment & Human Development*, 10(2), 123-141. doi:10.1080/14616730802113679
- Engfer, A. (1993). Antecedents and consequences of shyness in boys and girls: A 6-year longitudinal study. In K. H. Rubin & J. B. Asendorpf (Eds.), *Social withdrawal, inhibition, and shyness in childhood* (pp. 49-79). Hillsdale, NJ: Erlbaum.
- Erath, S. A., Flanagan, K. S., & Bierman, K. L. (2007). Social anxiety and peer relations in early adolescence: Behavioral and cognitive factors. *Journal of Abnormal Child Psychology*, 35(3), 405-416. doi:10.1007/s10802-007-9099-2
- Erwin, P. G. (1994). Effectiveness of social skills training with children: A meta-analytic study. *Counselling Psychology Quarterly*, 7(3), 305-310. doi:10.1080/09515079408254154
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99(1), 20-35. doi:10.1037/0033-2909.99.1.20
- Finzi, R., Cohen, O., Sapir, Y., & Weizman, A. (2000). Attachment styles in maltreated children: A comparative study. *Child Psychiatry and Human Development*, 31(2), 113-128. doi:10.1023/A:1001944509409

- Gazelle, H., & Ladd, G. W. (2003). Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development, 74*(1), 257-278. doi:10.1111/1467-8624.00534
- Gazelle, H., & Rudolph, K. D. (2004). Moving toward and away from the world: Social approach and avoidance trajectories in anxious solitary youth. *Child Development, 75*(3), 829-849.
- Greco, L. A., & Morris, T. L. (2001). Treating childhood shyness and related behavior: Empirically evaluated approaches to promote positive social interactions. *Clinical Child and Family Psychology Review, 4*(4), 299-318. doi:10.1023/A:1013543320648
- Grills, A. E., & Ollendick, T. H. (2002). Peer victimization, global self-worth, and anxiety in middle school children. *Journal of Clinical Child and Adolescent Psychology, 31*(1), 59-68. doi:10.1207/153744202753441675
- Gumpel, T. P., & Golan, H. (2000). Teaching game-playing social skills using a self-monitoring treatment package. *Psychology in the Schools, 37*(3), 253-261. doi:10.1002/(SICI)1520-6807(200005)37:3<253::AID-PITS5>3.0.CO;2-I
- Hanish, L. D., & Guerra, N. G. (2004). Aggressive victims, passive victims, and bullies: Developmental continuity or developmental change? *Merrill Palmer Quarterly: Journal of Developmental Psychology, 50*(1), 17-38. doi:10.1353/mpq.2004.0003
- Hastings, P. D., & Rubin, K. H. (1999). Predicting mothers' beliefs about preschool-aged children's social behavior: Evidence for maternal attitudes moderating child effects. *Child Development, 70*(3), 722-741. doi:10.1111/1467-8624.00052
- Hayward, C., Killen, J., Kraemer, H., & Taylor, C. (1998). Linking self-reported childhood behavioral inhibition to adolescent social phobia. *Journal of the American Academy of*

Child & Adolescent Psychiatry, 37(12), 1308-1316. doi:10.1097/00004583-199812000-00015

Hodges, E., Malone, M., & Perry, D. (1997). Individual risk and social risk as interacting determinants of victimization in the peer group. *Developmental Psychology*, 33(6), 1032-1039. doi:10.1037/0012-1649.33.6.1032

Hoglund, W. G. (2007). School functioning in early adolescence: Gender-linked responses to peer victimization. *Journal of Educational Psychology*, 99(4), 683-699.

Jupp, J. J., & Griffiths, M. D. (1990). Self-concept changes in shy, socially isolated adolescents following social skills training emphasizing role plays. *Australian Psychologist*, 25(2), 165-177. doi:10.1080/00050069008260009

Keogh, B. K. (2003). *Temperament in the classroom: Understanding individual differences*. Baltimore, MD: Paul H. Brookes.

Kerr, M. M., & Nelson, M. C. (2006). *Strategies for managing behavior problems in the classroom* (5th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Kochenderfer-Ladd, B. (2003). Identification of aggressive and asocial victims and the stability of their peer victimization. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 49(4), 401-425. doi:10.1353/mpq.2003.0022

Kupersmidt, J. B., & Patterson, C. J. (1991). Childhood peer rejection, aggression, withdrawal, and perceived competence as predictors of self-reported behavior problems in preadolescence. *Journal of Abnormal Child Psychology*, 19(4), 427-449. doi:10.1007/BF00919087

- Ladd, G. W. (2006). Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An examination of four predictive models. *Child Development, 77*(4), 822-846. doi:10.1111/j.1467-8624.2006.00905.x
- Ladd, G. W., & Asher, S. R. (1985). Social skill training and children's peer relations. In L. L'Abate & M. A. Milan (Eds.), *Handbook of social skills training and research* (pp. 219-244). New York, NY: Wiley.
- Ladd, G. W., & Profilet, S. (1996). The Child Behavior Scale: A teacher-report measure of young children's aggressive, withdrawn, and prosocial behaviors. *Developmental Psychology, 32*(6), 1008-1024. doi:10.1037/0012-1649.32.6.1008
- LaFrenière, P. J., Provost, M. A., & Dubeau, D. (1992). From an insecure base: Parent-child relations and internalizing behaviour in the pre-school. *Early Development & Parenting, 1*(3), 137-148. doi:10.1002/edp.2430010303
- Lieb, R., Wittchen, H., Höfler, M., Fuetsch, M., Stein, M. B., & Merikangas, K. R. (2000). Parental psychopathology, parenting styles, and the risk of social phobia in offspring: A prospective-longitudinal community study. *Archives of General Psychiatry, 57*(9), 859-866. doi:10.1001/archpsyc.57.9.859
- Masten, A. S., Morison, P., & Pellegrini, D. S. (1985). A revised class play method of peer assessment. *Developmental Psychology, 21*(3), 523-33.
- McFall, R. M. (1982). A review and reformulation of the concept of social skills. *Behavioral Assessment, 4*(1), 1-33. doi:10.1007/BF01321377
- McGinnis, E., & Goldstein, A. P. (1997). *Skillstreaming the elementary school child*. Champaign, IL: Research Press.

- McGoey, K. E., Prodan, T., & Condit, N. (2007). Examining the effects of teacher and self-evaluation of disruptive behavior via school-home notes for two young children in kindergarten. *Journal of Early and Intensive Behavior Intervention*, 3(4-41), 365-376.
- McShane, K. E., & Hastings, P. D. (2009). The new friends vignettes: Measuring parental psychological control that confers risk for anxious adjustment in preschoolers. *International Journal of Behavioral Development*, 33(6), 481-495.
doi:10.1177/0165025409103874
- Menzer, M. M., Oh, W., McDonald, K. L., Rubin, K. H., & Dashiell-Aje, E. (2010). Behavioral correlates of peer exclusion and victimization of East Asian American and European American young adolescents. *Asian American Journal of Psychology*, 1(4), 290-302.
doi:10.1037/a0022085
- Merrell, K. W., & Gimpel, G. A. (1998). *Social skills of children and adolescents: Conceptualization, assessment, treatment*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Mills, R. L., & Rubin, K. H. (1998). Are behavioural and psychological control both differentially associated with childhood aggression and social withdrawal? *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 30(2), 132-136. doi:10.1037/h0085803
- Morison, P., & Masten, A. (1991). Peer reputation in middle childhood as a predictor of adaptation in adolescence: A seven-year follow-up. *Child Development*, 62, 991-1007.
- Nelson, R. O., & Hayes, S. C. (1981). Theoretical explanations for reactivity in self-monitoring. *Behavior Modification*, 5(1), 3-14. doi:10.1177/014544558151001

- Nelson, L. J., Rubin, K. H., & Fox, N. A. (2005). Social withdrawal, observed peer acceptance, and the development of self-perceptions in children ages 4 to 7 years. *Early Childhood Research Quarterly, 20*(2), 185-200. doi:10.1016/j.ecresq.2005.04.007
- Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin, 113*(1), 99-128. doi:10.1037/0033-2909.113.1.99
- Odom, S. L., & Strain, P. S. (1984). Peer-mediated approaches to promoting children's social interaction: A review. *American Journal of Orthopsychiatry, 54*(4), 544-557.
- Oh, W., Rubin, K. H., Bowker, J., Booth-LaForce, C., Rose-Krasnor, L., & Laursen, B. (2008). Trajectories of social withdrawal from middle childhood to early adolescence. *Journal of Abnormal Child Psychology, 36*(4), 553-566. doi:10.1007/s10802-007-9199-z
- Park, S., Belsky, J., Putnam, S., & Crnic, K. (1997). Infant emotionality, parenting, and 3-year inhibition: Exploring stability and lawful discontinuity in a male sample. *Developmental Psychology, 33*(2), 218-227. doi:10.1037/0012-1649.33.2.218
- Peacock, G. G., & Collett, B. R. (2010). *Collaborative home/school interventions*. New York, NY: Guilford Press.
- Pedersen, S., Vitaro, F., Barker, E. D., & Borge, A. H. (2007). The timing of middle-childhood peer rejection and friendship: Linking early behavior to early-adolescent adjustment. *Child Development, 78*(4), 1037-1051. doi:10.1111/j.1467-8624.2007.01051.x
- Peterson, L., Young, K., Salzberg, C. L., West, R. P., & Hill, M. (2006). Using self-management procedures to improve classroom social skills in multiple general education settings. *Education and Treatment of Children, 29*(1), 1-21.

- Radke-Yarrow, M., Richters, J., & Wilson, W. E. (1988). Child development in a network of relationships. In R. A. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 48-67). Oxford, England: Clarendon Press.
- Rapee, R. M. (1997). Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review, 17*(1), 47-67. doi:10.1016/S0272-7358(96)00040-2
- Renken, B., Egeland, B., Marvinney, D., & Mangelsdorf, S. (1989). Early childhood antecedents of aggression and passive-withdrawal in early elementary school. *Journal of Personality, 57*(2), 257-281. doi:10.1111/j.1467-6494.1989.tb00483.x
- Reynolds, W. M. (1992). The study of internalizing disorders in children and adolescents. In W. M. Reynolds (Ed.), *Internalizing disorders in children and adolescents* (pp. 1-18). New York, NY: Wiley.
- Rimm-Kaufman, S. E., Early, D. M., Cox, M. J., Saluja, G., Pianta, R., Bradley, R., et al. (2002). Early behavioral attributes and teachers' sensitivity as predictors of competent behavior in the kindergarten classroom. *Journal of Applied Developmental Psychology, 23*(4), 451-470. doi:10.1016/S0193-3973(02)00128-4
- Rodebaugh, T. L., Holaway, R. M., & Heimberg, R. G. (2004). The treatment of social anxiety disorder. *Clinical Psychology Review, 24*(7), 883-908. doi:10.1016/j.cpr.2004.07.007
- Rowe, D. C., & Plomin, R. (1977). Temperament in early childhood. *Journal of Personality Assessment, 41*(2), 150-156. doi:10.1207/s15327752jpa4102_5
- Rubin, K. H. (2001). *The Play Observation Scale (POS)*. College Park, MD: University of Maryland.

- Rubin, K. H., & Asendorpf, J. B. (1993). Social withdrawal, inhibition, and shyness in childhood: Conceptual and definitional issues. *Social withdrawal, inhibition, and shyness in childhood* (pp. 3-17). Hillsdale, NJ: Erlbaum.
- Rubin, K. H., Bowker, J., Gazelle, H. (2010). Social withdrawal in childhood and adolescence: Peer relationships and social competence. In K. H. Rubin & R. J. Coplan (Eds.), *The development of shyness and social withdrawal* (pp. 131-156). New York, NY: Guilford Press.
- Rubin, K.H., Bukowski, W., & Parker, J. (2006). Peer interactions, relationships, and groups. In N. Eisenberg (Ed.), *Handbook of child psychology (Vol. 3): Social, emotional, and personality development* (pp. 571-645). New York, NY: Wiley.
- Rubin, K. H., Chen, X., & Hymel, S. (1993). Socioemotional characteristics of withdrawn and aggressive children. *Merrill-Palmer Quarterly*, 39(4), 518-534.
- Rubin, K. H., & Coplan, R. J. (2004). Paying attention to and not neglecting social withdrawal and social isolation. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 50(4), 506-534. doi:10.1353/mpq.2004.0036
- Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual Review of Psychology*, 60, 141-171. doi:10.1146/annurev.psych.60.110707.163642
- Rubin, K. H., & Krasnor, L. R. (1986). Social-cognitive and social behavioral perspectives on problem solving. In M. Perlmutter (Ed.), *Cognitive perspectives on children's social and behavioral development. The Minnesota symposia on child psychology, Vol. 18* (pp. 1-68). Hillsdale, NJ: Erlbaum.
- Rubin, K. H., & Mills, R. L. (1988). The many faces of social isolation in childhood. *Journal of Consulting and Clinical Psychology*, 56(6), 916-24.

- Rubin, K. H., Nelson, L. J., Hastings, P., & Asendorpf, J. (1999). The transaction between parents' perceptions of their children's shyness and their parenting styles. *International Journal of Behavioral Development, 23*(4), 937-958. doi:10.1080/016502599383612
- Rubin, K. H., Root, A. K., & Bowker, J. (2010). Parents, peers, and social withdrawal in childhood: A relationship perspective. In H. Gazelle & K. H. Rubin (Eds.), *Social anxiety in childhood: Bridging developmental and clinical perspectives. New Directions for Child and Adolescent Development, 127*, 79-94. San Francisco, CA: Jossey-Bass.
- Rubin, K. H., Wojslawowicz, J. C., Rose-Krasnor, L., Booth-LaForce, C., & Burgess, K. B. (2006). The best friendships of shy/withdrawn children: Prevalence, stability, and relationship quality. *Journal of Abnormal Child Psychology, 34*(2), 143-157. doi:10.1007/s10802-005-9017-4
- Sadker, M., & Sadker, D. (1994). *Failing at fairness: How America's schools cheat girls*. New York, NY: Scribner.
- Schwartz, D., Dodge, K. A., & Coie, J. D. (1993). The emergence of chronic peer victimization in boys' play groups. *Child Development, 64*(6), 1755-1772. doi:10.2307/1131467
- Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*(8), 1008-1015. doi:10.1097/00004583-199908000-00017
- Sheridan, S. M., Kratochwill, T. R., & Elliott, S. N. (1990). Behavioral consultation with parents and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review, 19*(1), 33-52.

- Simpson, A. E., & Stevenson-Hinde, J. (1985). Temperamental characteristics of three- to four-year-old boys and girls and child-family interactions. *Journal of Child Psychology and Psychiatry*, *26*(1), 43-53.
- Siperstein, G. N., & Bak, J. J. (1988). Improving social skills in schools: The role of parents. *The Exceptional Parent*, *18*(2), 18-22.
- Spence, S. H., Donovan, C., & Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training-based, cognitive-behavioural intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry*, *41*(6), 713-726. doi:10.1111/1469-7610.00659
- Stevenson-Hinde, J. (1989). Behavioral inhibition: Issues of context. In J. S. Reznick (Ed.), *Perspectives on behavioral inhibition* (pp. 125-138). Chicago: University of Chicago Press.
- van Brakel, A. L., Muris, P., Bögels, S. M., & Thomassen, C. (2006). A multifactorial model for the etiology of anxiety in non-clinical adolescents: Main and interactive effects of behavioral inhibition, attachment and parental rearing. *Journal of Child and Family Studies*, *15*(5), 569-579. doi:10.1007/s10826-006-9061-x
- Verschueren, K., Buyck, P., & Marcoen, A. (2001). Self-representations and socioemotional competence in young children: A 3-year longitudinal study. *Developmental Psychology*, *37*(1), 126-134. doi:10.1037/0012-1649.37.1.126
- Verschueren, K., & Marcoen, A. (1999). Representation of self and socioemotional competence in kindergartners: Differential and combined effects of attachment to mother and father. *Child Development*, *70*(1), 183-201. doi:10.1111/1467-8624.00014

Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). *Antisocial behavior at school: Strategies and best practices* (2nd ed.). Pacific Grove, CA: Brooks/Cole.

Wojslawowicz Bowker, J. C., Rubin, K. H., Burgess, K. B., Booth-Laforce, C., & Rose-Krasnor, L. (2006). Behavioral characteristics associated with stable and fluid best friendship patterns in middle childhood. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 52(4), 671-693. doi:10.1353/mpq.2006.0000

Appendix B: Consent Form

PARENT PERMISSION FOR A MINOR TO PARTICIPATE IN RESEARCH

INTRODUCTION

This research study is being conducted by Scott Trinh, B.S., a graduate student at Brigham Young University, and Darlene H. Anderson, Ph.D., a professor at Brigham Young University. The purpose of the study is to respond to the need for additional research by evaluating the effects of social skills instruction for kindergarten students, while a secondary purpose is to involve parents through home notes.

PROCEDURES

If you agree to let your child participate in this research study, the following will occur:

Involvement of your child at school:

- Your child's social behavior will be observed and recorded on the playground for 15 minutes each school day for 8-12 weeks.
- Your child will be taught four 15-minute social skill lessons during class time, 3 days a week for 2-3 weeks. The instruction includes teaching, modeling, role-playing, and practicing. The following topics would be discussed during these lessons: how to engage in conversation, how to enter peer group situations, turn-taking, playing with friends, etc.
- A researcher will meet with each child to establish one social goal based on the social skill lesson—such as talking to a new friend at recess. Your child will then be asked to report if his/her goal was met at the end of each recess period. This will occur for the entire 3 week period of social skill lessons being taught in class.

Involvement from you at home:

- You will be given a note home for each lesson taught in class (4 total lessons over 2-3 weeks). Notes home will include a request to briefly practice these 4 lesson skills at home and then communicate back to the researcher whether the skills were practiced that week.

COMPENSATION

A \$25 gift card will be given as compensation at the conclusion of this study.

RISKS/BENEFITS

There are minimal risks associated with this study. Potential risks include discomforts that may occur during social skills instruction as a result of being pulled away from daily routines to which they are accustomed. If the child indicates in any way that he/she does not want to participate, by crying or other behavior, we will stop lessons immediately and return him/her to the classroom.

There are no direct benefits to participants; however, results of the study could be used to devise future instructional programs, potentially benefiting kindergarten students by promoting desired developmental outcomes.

PARTICIPATION AND CONFIDENTIALITY

Participation in this research is completely voluntary. You are free to decline to have your child participate in this research study. You may refuse or withdraw your child's participation at any time without penalty. Your decision whether or not to participate in this research study will have no influence on you or your child's present or future status at Brigham Young University or the Child and Family Studies Laboratory.

Strict confidentiality will be maintained by keeping all identifiable information in a locked file cabinet and/or on a password protected computer. Participants will remain anonymous; names will not be used or recorded. The raw data will be destroyed at the completion of the study. No identifiable information will be disclosed if this research is published.

QUESTIONS ABOUT THE RESEARCH

If you have any further questions about the study, you may contact Scott Trinh, a graduate student in the Educational Specialist school psychology program, by calling 757-609-1415 or <scott.trinh@byu.net>, or Darlene H. Anderson, Ph.D. by calling 801-422-7603 or <darlene_anderson@byu.edu>.

Questions about your child's right as a study participant, or comments or complaints about the study also may be addressed to the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602; 801-422-1461 or <irb@byu.edu>.

Sincerely,
Darlene H. Anderson, Ph.D., Faculty Sponsor

I have read, understood, and received a copy of the above consent and of my own free will and volition give consent for my child to participate in this study.

Child's Name: _____

Signature of Parent/Legal Guardian: _____

Date: _____

Signature of Researcher: _____

Date: _____

Appendix C: Structured Playground Observation Form

Target Student: _____ **Observer:** _____

Date: ___/___/___ **Day:** M T W Th F **Time:** _____ to _____

Instructions: Allow 1 minute prior to recording to familiarize yourself with the target student's behavioral cues. This will also allow children in the area to become acclimated to your presence on the playground. After 1 minute has passed, record target student's positive or negative social engagement (SE) for each 10 second interval.

	:10	:20	:30	:40	:50	:60		
1:00								
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COMMENTS:

Developed by Scott Trinh, B.S., Unpublished Document 2011

Social Engagement (SE) – partial interval data	
Definition	<p>The target student engages a peer by initiating positive or negative interaction.</p> <p>Example of positive social engagement (+):</p> <ul style="list-style-type: none"> asks a question or makes a statement to a peer or group of peers which clearly requests a response from the peer (e.g., “Hello,” “How are you?,” “You want to play with me?”) <p>OR</p> <ul style="list-style-type: none"> makes a praise statement or gives a compliment to a peer or group of peers (e.g., “Wow, you’re good at that!,” “I like your shirt,” “Good job!”) <p>OR</p> <ul style="list-style-type: none"> mutual engagement in an activity with a peer or group of peers (e.g., playing on the teeter-totter, chasing after one another, riding on tricycles together or side-by-side.) <p>Examples of negative social engagement (-):</p> <ul style="list-style-type: none"> makes a negative statement or comment to a peer or group of peers (e.g., “Shut up!,” “Leave me alone,” any name-calling comments, teasing, rude/aggressive tone of voice) <p>OR</p> <ul style="list-style-type: none"> engagement in an activity with a peer or group of peers that includes physical aggression (e.g., hitting, shoving, pinching, kicking)
Instructions	<p>Record a positive sign (+) for positive social engagement if it occurs at least once at anytime in a 10-second interval.</p> <p>Record a negative sign (-) for negative social engagement if it occurs at least once at anytime in a 10-second interval.</p> <p>Record a 0 if there is an absence of social engagement during the 10-second interval.</p>

Appendix D: Social Skill Lessons

Parent Signature: _____ Date: _____

Social Skill 1: How to Introduce Yourself

Steps of the social skill	Rationale & Notes
1. Look at the person and smile.	<p>Rationale: Looking and smiling at the person is one way of showing you want to meet him or her.</p> <p>Notes: Don't stare or make faces, just look at the person as would a friend.</p>
2. Decide if it is a good time.	<p>Notes: Discuss how to choose a good time: The person is not busy with something or someone else.</p>
3. Walk up to the person.	<p>Notes: Watch for appropriate distance.</p>
4. Use a pleasant voice to introduce yourself.	<p>Rationale: Saying "Hi" in a pleasant voice shows that you are friendly.</p> <p>Notes: Discuss ways to introduce yourself (say, "Hi, my name is _____"). You can also ask what their name is. Speak clearly and loud enough to be heard, but not too loud. Don't interrupt when they are speaking.</p>

Teaching steps:

1. Name the skill and describe the steps for performing the skill.

- a. Today, I am going to teach you how to introduce yourself. The steps in introducing yourself are (1) look at the person and smile; (2) decide if it is a good time; (3) walk up to the person; and (4) use a pleasant voice to introduce yourself, such as "Hi, my name is _____."
- b. "Can you tell me what the steps are to introduce yourself?" If student is having difficulty remembering, you can use verbal or nonverbal cues (e.g., point to eyes and smile for, "look at the person and smile.")
- c. After the student has repeated the steps in order, praise him/her (e.g., "_____, you did a great job of remembering those four steps!")

2. Give a reason (rationale) why the skill is important.

- a. "It is important to introduce yourself this way because it lets the person know that you are someone who wants to be friendly."
- b. "If we don't introduce ourselves, the other person could feel like they are not wanted."

3. Model steps of skill.

- a. “Now I’m going to pretend that we are on the playground and you are someone I don’t know. I will introduce myself using the three steps.”
 - b. “Watch me: I **look at you and smile**.”
 - c. “Next, I **decide if it is a good time** to introduce myself. You don’t look like you are doing anything so I will do the next step and walk up to you.”
 - d. “Now, I will **use a pleasant voice and introduce myself** by saying, “Hi, my name is _____. What’s your name?”
- 4. Student practices the skill.**
- a. Have the student say all the steps back to you. Ask, “What are the steps in introducing yourself to a person?”
 - b. Ask the student to role-play with you. “Pretend we are outside on the playground and I am a new student in your kindergarten class. You see me playing with a ball by myself. Show me how you would introduce yourself to me.” If the student is having difficulty, cue him as you did earlier, while also giving appropriate praise.
 - c. It is important to praise and give feedback. Make sure to review the steps many times. Complete more role-plays with the student in different scenarios:
 - i. **Home:** A friend of your parents is visiting your home.
 - ii. **Community:** A new boy or girl your age moves into your neighborhood.
- 5.** “Now you know how to introduce yourself. Great job! I hope that you will use these steps to introduce yourself to other kids and make new friends. The more you practice, the easier it will become!”

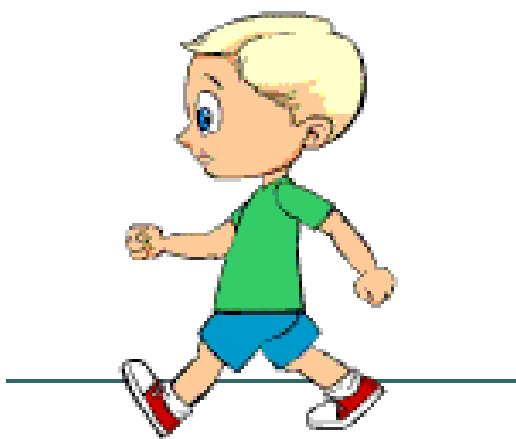
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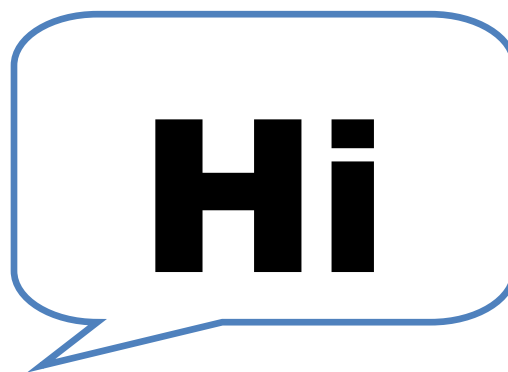
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Social Skill 2: How to Start a Conversation

Steps of the social skill	Rationale & Notes
1. Look at the person you want to talk to.	Notes: Remember to not bother the person if they are busy doing something or working.
2. Decide what you want to say or ask.	Notes: Suggest topics like what they did over the weekend, a hobby, or a favorite game.
3. Start talking to the person in a friendly way.	Rationale: A friendly and pleasant voice shows that you are nice. Notes: Show a friendly attitude when talking to the other person and make sure to listen. Make eye contact and don't talk too long. Make sure to give the other person a chance to talk.

Teaching steps:

1. Name the skill and describe the steps for performing the skill.

- a. Today, I am going to teach you what to do *after* you introduce yourself, which is how to start a conversation. The steps in starting a conversation are (1) look at the person you want to talk to; (2) decide what you want to say or ask; and (3) start talking to the person in a friendly way.
- b. "Can you tell me what the steps are to starting a conversation?" If student is having difficulty remembering, you can use verbal or nonverbal cues (e.g., pretend to ponder for, "decide what you want to say or ask.")
- c. After the student has repeated the steps in order, praise him/her (e.g., "_____, you did a great job of remembering those three steps!")

2. Give a reason (rationale) why the skill is important.

- a. "It is important to know how to start a conversation because that is how you get to know someone."
- b. "If we don't start conversations with people, then the other person might think you don't want to get to know them."

3. Model steps of skill.

- a. "Now I'm going to pretend that we are on the playground and you are someone I don't know. I will introduce myself using the three steps we learned last time."
- b. "Watch me: I **look at you and smile.**"
- d. "Next, I **decide if it is a good time** to introduce myself. You don't look like you are doing anything so I will do the next step and **walk up to you.**"

- e. “Now, I will **use a pleasant voice and introduce myself** by saying, ‘Hi, my name is _____. What’s your name?’ What would you say back to me?”
(Student should reply, “Hi. My name is _____.”)
 - f. “Now that I have introduced myself, I can start having a conversation.”
 - g. “Watch me do the first step in how to start a conversation: I **look at the person I want to talk to**, you!”
 - h. “Next, I **decide what I want to say or ask**. Since we’re pretending this is the first time I have met you, maybe I would like to know what you like to do.
 - i. “So I would **start talking in a friendly voice** and ask, ‘What do you like to do for fun, _____?’”
- 4. Student practices the skill.**
- a. Have the student review how to introduce yourself by saying the three steps back to you. Ask, “Do you remember what the four steps are in introducing yourself to a person?” (look at the person and smile, decide if it is a good time, walk up to the person, use a pleasant voice to introduce yourself)
 - b. Have student say the steps in starting a conversation. “Do you remember the three steps in starting a conversation?”
 - c. Ask the student to role-play with you. “Let’s pretend like we did last time. We are outside on the playground and you want to start a conversation about what we did over the weekend. You see me playing by myself. Show me how you would start a conversation with me.” If the student is having difficulty, cue him as you did earlier, while also giving appropriate praise.
 - d. It is important to praise and give feedback. Make sure to review the steps many times. Complete more role-plays with the student in different scenarios:
 - i. **School:** Talk to a classmate about a drawing you drew.
 - ii. **Home:** Tell your parents about what happened at school.

5. “Now you know how to introduce yourself *and* start a conversation. Great job! I hope that you will use these steps to get to know people and make new friends. The more you practice, the easier it will become!”

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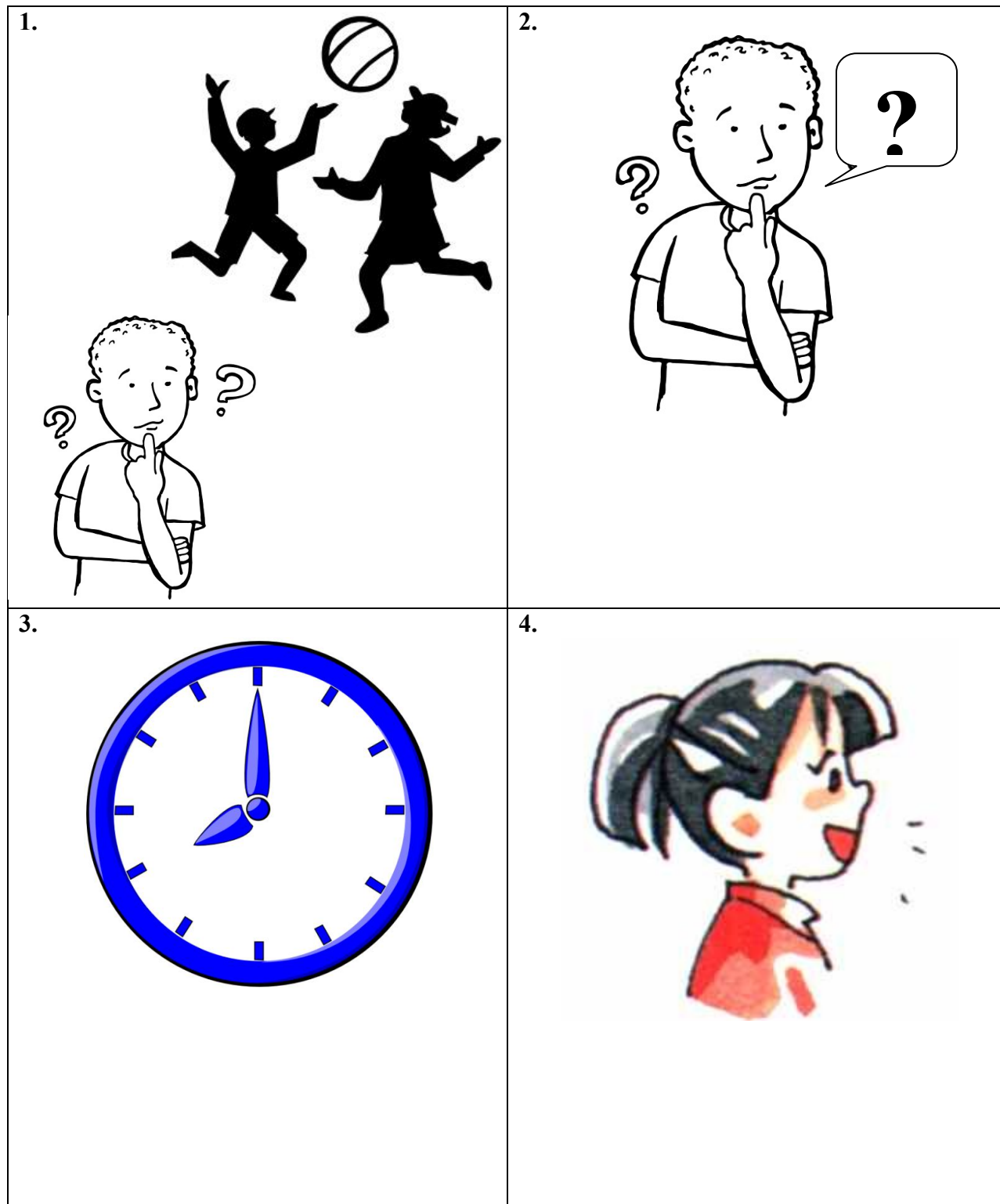
Social Skill 3: How to Talk to Others

Steps of the social skill	Rationale & Notes
1. Decide if you want to join in.	Notes: Students should decide whether they really want to participate.
2. Decide what to say.	Notes: Suggest possible things to say: “Can one more person play?” “Can I play too?”
3. Choose a good time.	Notes: Discuss how to choose a good time: during a break in the activity or before the activity has begun.
4. Say it in a friendly way.	Notes: Discuss the body language and nonverbal communicators that show a friendly attitude.

Teaching steps:

1. **Name the skill and describe the steps for performing the skill.**
 - a. “Today, I am going to teach you how to ask to play with others. The steps in asking to play with others are (1) decide if you want to join in; (2) decide what to say; (3) choose a good time; and (4) say it in a friendly way.”
 - b. “Can you tell me what the steps are in asking to play with others?” If student is having difficulty remembering, you can use verbal or nonverbal cues (e.g., point to wrist as if there was a watch for, “choose a good time.”)
 - c. After the student has repeated the steps in order, praise him/her (e.g., “_____, you did a great job of remembering those four steps!”)
2. **Give a reason (rationale) why the skill is important.**
 - a. “It is important to know how to ask to play with others because it is a way to make new friends.”
3. **Model steps of skill.**
 - a. “Now I’m going to pretend that we are on the playground and I see you playing with a ball. I will use the four steps in how to ask to play with others.”
 - b. “Watch me: I **decide if I want to join in** to play ball with you. You look like a friendly person and I would like to play with the ball too, so I decide that I do want to join in.”
 - c. “Next, I **decide what to say** and I think a simple, ‘Can I play too?’ works well.”
 - d. “Now, I will **choose a good time**. I see that you are just standing there holding the ball so I will ask now.”
 - e. “So I would make sure that I am smiling and making eye contact and then I **ask in a friendly way**, ‘Can I play too?’”

4. **Student practices the skill.**
 - a. Have the student tell you the four steps in how to ask to play with others. Ask, “What are the steps are in asking to play with others?”
 - b. Ask the student to role-play with you. “Let’s pretend I am your age and we are both on the playground. You see me playing hide and seek with two other kids, and we just got done with one game. Show me how you would ask to play with us.” If the student is having difficulty, cue him as you did earlier, while also giving appropriate praise.
 - c. It is important to praise and give feedback. Make sure to review the steps many times. Complete more role-plays with the student in different scenarios:
 - i. **School:** Ask to join in a game of tag at recess.
 - ii. **Home:** Ask to join a game with your brothers or sisters.
5. “Now you know how to ask to play with others. Great job! I hope that you will use these steps to play with other kids and make new friends. The more you practice, the easier it will become!”



Social Skill 4: How to Appropriately with Others

Steps of the social skill	Rationale & Notes
1. Be sure you know the rules.	Notes: Discuss what to do if student does not know the rules (ask someone to explain it to them).
2. Decide who starts the game.	Notes: Discuss methods of deciding who begins the game (e.g., roll dice, rock-paper-scissors, or let the other person go first).
3. Cooperate with others.	Notes: An example would be waiting your turn. Suggest that students repeat silently to themselves, “I can wait until it’s my turn.”
4. When the game is over, say something nice to the other person.	Notes: Discuss and practice appropriate ways of handling: Winning: “You played a good game” Losing: “Good job,” “Congratulations”

Teaching steps:

1. **Name the skill and describe the steps for performing the skill.**
 - a. Today is our last session, and I am going to teach you how to play appropriately with others. The steps in playing appropriately with others are (1) be sure to know the rules; (2) decide who starts the game; (3) cooperate with others; and (4) when the game is over, say something nice to the other person.
 - b. “Can you tell me what the steps are in playing appropriately with others?” If student is having difficulty remembering, you can use verbal or nonverbal cues (e.g., point to head for, “be sure you know the rules.”)
 - c. After the student has repeated the steps in order, praise him/her (e.g., “_____, you did a great job of remembering those four steps!”)
2. **Give a reason (rationale) why the skill is important.**
 - a. “It is important to know how to play appropriately because others will think you are friendly.”
 - b. “You can make new friends because others will like playing with you if you play appropriately.”
3. **Model steps of skill.**
 - a. “Now I’m going to pretend that we are on the playground and I see you and your friends playing tag. I will use the four steps in how to ask to play with others first, before I use the steps to play appropriately.”

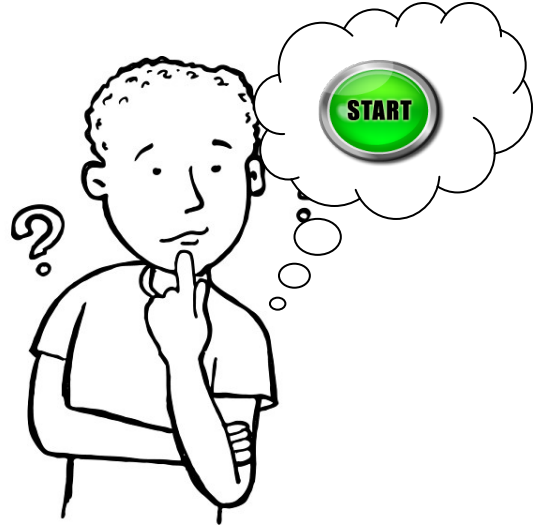
- b. “Watch me: I **decide if I want to join in** to play hide-and-peek with you and your friends. You look like a friendly person and I would like to play too, so I decide that I do want to join in.”
 - c. “Next, I **decide what to say** and I think a simple, ‘Can I play with you and your friends?’ works well.”
 - d. “Now, I will **choose a good time**. I wait for you and your friends to finish one game of hide-and-peek, and then I ask.”
 - e. “So I would make sure that I am smiling and making eye contact and then I **ask in a friendly way**, ‘Can I play with you and your friends?’”
 - f. “Let’s pretend you said, ‘Yes.’ Now, I can do the steps in playing appropriately.”
 - g. “First, I would make sure that I **know the rules** of the game. If I don’t, I could ask someone nicely what the rules are. I already know the rules of hide-and-peek, so I can move onto the next step.”
 - h. “We’ll have to **decide who has to start the game**, or be the person that has to find everyone. Maybe we could do rock-paper-scissors (Do rock-paper-scissors with the student).”
 - i. “Now that we have decided who has to start the game, I should make sure I **cooperate with others** by not pushing others or getting upset that I was found.”
 - j. “When we finish the game, I should **say something nice** to you. For example, I could say, ‘It was fun playing with you.’”
- 4. Student practices the skill.**
- a. Have the student review the four steps in how to ask to play with others. Ask, “Do you remember the four steps in asking to play with others?” (decide if you want to join in, decide what to say, choose a good time, ask in a friendly way).
 - b. Have the student say the steps in playing appropriately with others. “Do you remember the four steps in playing appropriately with others?”

- c. Ask the student to role-play with you. “Let’s pretend like we did last time. You are playing tag with other kids. Tell me how you would play appropriately with them by using the four steps. If the student is having difficulty, cue him as you did earlier, while also giving appropriate praise.
 - d. Ask the student what is something nice to say to the other person if the student had lost the game, and if the student had won the game.
 - e. It is important to praise and give feedback. Make sure to review the steps many times. Complete more role-plays with the student in different scenarios:
 - i. **School:** Playing a board game with a classmate at recess.
 - ii. **Home:** Playing a game with your brother or sister.
5. “Now you know how to ask to play with others and to play appropriately. Great job! And don’t forget, you also learned how to introduce yourself and to start a conversation. You have learned so much and I hope that you will use these steps to play with other kids and make new friends. The more you practice, the easier it will become!”

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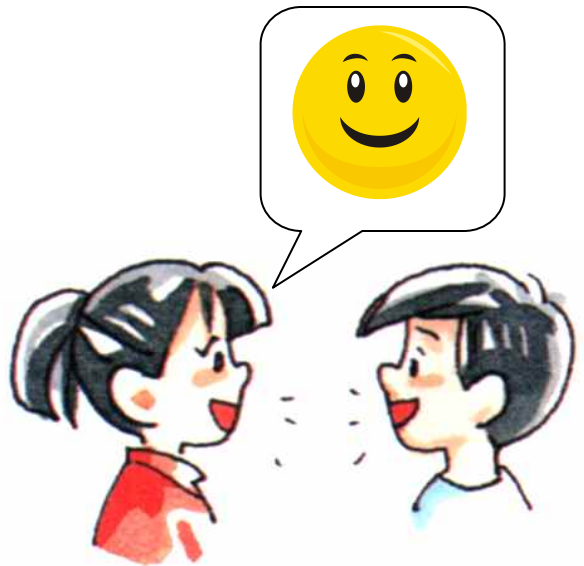
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Appendix E: Script Guideline for Adult Mediator

Instructions: Below is a script for the adult mediator to follow when speaking with the target student about goals on the playground. **This is only a guideline, so use your best judgment when conversing with the student.** Remember to provide lots of praise and encouragement.

Very Beginning of Recess – Reminding of Goal:

Mediator: “Hi, (student’s name). I really hope to see you having fun and playing with friends on the playground today! Do you remember the goal you set before?”

Allow student time to respond.

If student’s response is:

- Yes: “Can you say it back to me?”
- No/Not sure: “Your goal was to (pre-determined goal). Can you say that back to me?”

Have student repeat the goal back to you.

If student appears unsure that he/she can do it, be sure to encourage them.

It is important to show them that you have faith in their ability to meet the goal.

Mediator: “Great! You know the goal. Remember the steps you learned before because they will help you do the goal. I know that you can do it! You’re a very friendly person and others will see that too when you play with them nicely. Remember, if you try really hard to complete your goal, you get to ... (state reward, e.g., color, have extra recess time).”

After Recess – Discussing Outcome:

Mediator: “You did great playing with your friends! I am so proud of you, (student’s name). Now let’s talk about your goal. Can you tell me your goal again?”

Allow student time to respond.

If student’s response is:

- Yes: “Great! It makes me happy to know that you remembered your goal. So let’s talk about how you think you did in completing your goal.”
- No/Not sure: “The goal was to (pre-determined goal). So let’s talk about how you think you did in completing your goal.”

Present student with blank paper and draw a smiley face, a neutral (middle) face, and a frowny face.

Point to each face as you define it for the child.

This will not be necessary in future sessions once the child understands the rating system.

Mediator: “I just drew three faces. This smiley face means you tried really hard and you did it, You completed your goal of (pre-determined goal). This middle face means you tried really hard and you almost did it. This frowny face means you didn’t try very hard, but you can try harder next time.”

Present student with blank paper and pen/pencil.

Mediator: “I want to see you draw one of these faces to show me how you thought you did in completing your goal. Remember, your goal was to (pre-determined goal). Now draw the face for me.”

Allow student time to respond.

*Use your best judgment to discuss their choice of rating/face.
Ask the student why he/she chose the rating/face.*

Mediator: “Now, I’m going to draw how I thought you did.”

Draw your rating/face and explain why you chose that rating.

Do not provide reward ONLY if you choose a frowny face and follow up with encouragement to meet the goal next time.

Provide reward for any other combination of ratings, even if the student chose a frowny face, and follow up with praise.

*Use your best judgment to end the discussion and meeting with the student.
Remember to show them that you appreciate them working so hard and expect them to try their best the next time you see him/her.*

*Use your best judgment to end the discussion and meeting with the student.
(e.g., Mediator: “I can’t wait to see how many more friends you will talk to and play with tomorrow. You’re doing great so far! See you tomorrow.”)*

Appendix F: School-Home Note

School-Home Note

Student Name: _____

Date: _____

DESCRIPTION OF LESSON	
Skill Name	
Skill Steps	
Skill Purpose	
Researcher Comments	

REQUESTS TO PARENTS: Please indicate all of the practice methods you have completed with your child by marking the appropriate checkboxes below.

If you do not plan on, or have not practiced with your child, please check this box:

1. Please practice this skill with your child by:
 - Asking them to tell you the steps of the skill, correcting if necessary.
 - Modeling the skill by doing it yourself.
 - Role-playing the skill by having your child use the steps with you.

2. Provide recognition and praise for your child's skill use (e.g., "I like how you made eye contact when you talked to me. You're doing so well!").

Parent Comments	
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Please sign and have your child return this home note to your child's teacher by _____.

Appendix G: Treatment Fidelity Checklist

Treatment Fidelity Checklist

Observer: _____

Instructions: Observe the implementer of the intervention and mark either *YES* (step was executed) or *NO* (step was not executed).

Date: ___/___/___		
Step Implemented	YES	NO
Named the skill and described the steps.		
Asked the student to repeat the steps back.		
Gave a reason/rationale for why skill is important.		
Modeled the steps of the skill.		
Role-played the steps with the student.		
Praised the student.		

Date: ___/___/___		
Step Implemented	YES	NO
Named the skill and described the steps.		
Asked the student to repeat the steps back.		
Gave a reason/rationale for why skill is important.		
Modeled the steps of the skill.		
Role-played the steps with the student.		
Praised the student.		

Date: ___/___/___		
Step Implemented	YES	NO
Named the skill and described the steps.		
Asked the student to repeat the steps back.		
Gave a reason/rationale for why skill is important.		
Modeled the steps of the skill.		
Role-played the steps with the student.		
Praised the student.		

Appendix H: Social Validity Questionnaires

Teacher Social Validity Questionnaire

Teacher Name: _____ Date: _____

The purpose of this questionnaire is to obtain information that will aid in the selection of effective social skills interventions. Please circle the number which best describes your agreement or disagreement with each statement.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. This would be an acceptable treatment package for a student's social learning.	1	2	3	4	5	6
2. This treatment package should prove effective in improving children's social competence.	1	2	3	4	5	6
3. I would suggest the use of this treatment package to other teachers.	1	2	3	4	5	6
4. Most teachers would find this treatment package suitable for improving social competence.	1	2	3	4	5	6
5. I would be willing to use this treatment package again.	1	2	3	4	5	6
6. Using this treatment package would <i>not</i> result in negative side-effects for the child.	1	2	3	4	5	6
7. This treatment package is reasonable for furthering children's social development.	1	2	3	4	5	6
8. I liked the procedures used in this treatment package.	1	2	3	4	5	6
9. This treatment package was a good way to prevent student social problems.	1	2	3	4	5	6
10. My involvement in the treatment package was <i>not</i> time-consuming.	1	2	3	4	5	6
11. Home notes were an effective way to inform parents about their child's progress.	1	2	3	4	5	6
12. Overall, this treatment package would be beneficial for children.	1	2	3	4	5	6

Additional Comments:

Parent Social Validity Questionnaire

Parent Name: _____

Date: _____

The purpose of this questionnaire is to obtain information that will aid in the selection of effective social skills interventions. Please circle the number which best describes your agreement or disagreement with each statement.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. This would be an acceptable treatment package for a student's social learning.	1	2	3	4	5	6
2. This treatment package should prove effective in improving children's social competence.	1	2	3	4	5	6
3. Using this treatment package would <i>not</i> result in negative side-effects for the child.	1	2	3	4	5	6
4. This treatment package is reasonable for furthering children's social development.	1	2	3	4	5	6
5. I liked the procedures used in this treatment package.	1	2	3	4	5	6
6. This treatment package was a good way to prevent student social problems.	1	2	3	4	5	6
7. I enjoyed practicing the social skill lessons with my child.	1	2	3	4	5	6
8. There was a reasonable amount of communication between me and the treatment implementer.	1	2	3	4	5	6
9. Practicing the social skill lessons with my child helped improve his/her social competence.	1	2	3	4	5	6
10. My involvement in the treatment package was <i>not</i> time-consuming.	1	2	3	4	5	6
11. Home notes were an effective way to inform me about my child's progress.	1	2	3	4	5	6
12. Overall, this treatment package would be beneficial for children.	1	2	3	4	5	6

Additional Comments:

Student Self-Assessment of Social Validity

Student Name: _____

Date: _____

Teacher Name: _____

Place the sheet in front of the student. Read each item and ask the student to circle the face that best looks like how he/she feels about the item.

1. I liked the social skill lessons.



2. I know how to introduce myself.



3. I know how to start a conversation.



4. I know how to ask to play with others.



5. I know how to play appropriately with others.



6. I will be able to make more friends because of what I've learned.



For the remaining items, read the item and ask the student to fill in the blank.

7. My favorite thing about working with Mr./Mrs. _____ was

_____.

8. My least favorite thing about working with Mr./Mrs. _____ was

_____.