EMOTION SOCIALIZATION AS A MODERATOR OF THE RELATIONSHIP BETWEEN BEHAVIORAL INHIBITION AND PEER SOCIAL SKILLS

by

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Emotion Socialization as a Moderator of the Relationship between Behavioral Inhibition and Peer Social Skills

Abstract

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Behavioral Inhibition (BI) tendencies during infancy and early childhood have been consistently related to the development of anxiety, particularly social anxiety, later in life (Gladstone et al., 2005). Children high in BI tendencies are also more likely than those lower in BI to have negative peer interactions and poor social skills. The ability of a child to interact appropriately with their peers is associated with the child’s emotional understanding and emotion regulation ability (Calkins, 1994). A child’s understanding of emotional processes is partially based on a child’s emotion socialization which primarily occurs through parent-child interactions surrounding emotional situations. For instance, how parents react to their children’s expression of negative emotion is influential in the child’s understanding of emotion in social contexts (Eisenberg et al., 1999). The current study aimed to better understand how parent’s behaviors may influence the relationship between level of BI and social skills with peers.
Introduction

Behavioral Inhibition

Temperament consists of innate behavioral tendencies that vary across individuals and can be identified as early as 4 months of age (Kagan & Snidman, 1991). Behavioral inhibition is a temperament style in which individuals become distressed, wary, fearful or anxious in unfamiliar situations (Kagan, 1989). Children with BI temperaments are likely to seek proximity to their parents, withdraw, or engage in solitary activity when in unfamiliar situations (Asendorpf, 1991). It is estimated that 10-15% of children fall into the BI temperament category as it was originally defined by Kagan (1989).

BI has been found to be predictably stable over time, meaning that children demonstrating BI tendencies at a young age are likely to continue to show these tendencies throughout childhood (Kagan & Snidman, 2004; Broberg, Lamb & Hwang, 1990). Some studies have even shown that 2 year olds categorized as inhibited continued to display these tendencies into adolescence (Kagan & Snidman, 2004). BI was originally defined and is still sometimes used as a dichotomous variable but for the purpose of the current study BI is conceptualized as a continuous variable that can occur in children in varying degrees. For example, a child who responds extremely warily to novelty habitually has a high level of BI while a child who sometimes responds to novel situations warily has a moderate level of BI.

BI has been empirically linked to the development of anxiety disorders, particularly social anxiety (Gladstone et al., 2005; Muirs, Brakel, Arntz & Schouten, 2011). Longitudinal studies have demonstrated that BI tendencies in preschool predict DSM-III Social Anxiety Disorder in middle childhood (Hayward et al., 1998; Schwartz et
Retrospective studies have also linked childhood BI to social anxiety in young adulthood (Mick & Tech 1998; Hayward et al., 1998). BI is associated with other struggles in childhood, including struggles in peer interaction (Biederman et al., 2001; Shwartz et al., 1999). The current study aimed to examine how external forces such as parenting affect the relationship between BI and peer difficulties. See Figure 1.

**Peer Relationships and Behavior Inhibition**

BI has been associated with various difficulties in social competence, including poor peer interactions and non-acceptance by peers throughout childhood (Biederman et al., 2001; Hirshfeld et al., 1992; Shwartz et al., 1999). As early as toddlerhood, children classified as BI are less likely than others to initiate social interactions with peers (Gladstone et al., 2005). The ability to successfully initiate social interaction is an important pro-social skill that is highly related to positive social experiences (Sroufe et al., 1984; Webster-Stratton & Lindsay-Wooley, 1999). Similarly, Asendorpf (1991) also found that temperamentally inhibited children were more likely than other children to engage in solitary play even when there are opportunities for peer play. Other researchers have linked withdrawn behavior to poor verbal and comprehension skills (Broberg, Hwang, Lamb, & Bookstein, 1990; Crozier & Perkins, 2002; Spere, Schmidt, Theall-Honey, & Martin-Chang, 2004). This connection is noteworthy because verbal ability has been consistently shown to relate to negative peer experiences by influencing a child’s responsiveness to others, poor understanding of requests and difficulty coordinating interactions with peers (Spere, Schmidt, Theall-Honey, & Martin-Chang, 2004; Cohen & Mendez, 2009).
BI children have also been found to struggle with appropriate emotional expression and regulation (Asendorpf, 1994), both of which are known to relate to successful peer relations. Emotion regulation and expression are related to positive peer interactions because proper response to emotion facilitates social connection, friendship and productive cooperation (Calkins, 1994). Children who are able to react appropriately in emotional situations are better liked and have more friends while children who struggle with regulation of emotion, particularly negative emotions, are more likely to be disliked by peers (Webster-Stratton & Lindsay, 1999). Emotional expression and regulation are not only crucial for successful peer relationships but peer interactions also foster development of emotion expression and regulation (Blair, Denham, Kochanoff & Whipple, 2004). Therefore, BI children who struggle to engage with peers not only may struggle because they lack emotional understanding and regulation skills crucial to these experiences but they are also at risk for becoming further delayed in their emotional development due to their limited peer interactions.

There is evidence that the social impact of BI is somewhat malleable and that some BI children become better able to cope with their inhibition and have more positive and stable peer experiences and better social skills than other BI children who do not develop such successful social skills. For instance, Asendorpf (1992) found that disruptions in BI children’s social networks (due to school change, friend disruption or general social problems at school) affected parent’s report of their child’s social reticence from year to year, meaning that child social experience had an effect on BI children’s expression of inhibition. These findings led Asendorpf (1994) to theorize that children who learn better strategies for coping with inhibition are less likely to develop anxiety
and other psychopathology symptoms later in life. For example, Asendorpf (1994) found children with higher IQ and better social competence were more likely to become less inhibited over a six year period, while comparison children remained consistently or increasingly inhibited.

The findings of Asendorpf (1994) speak to the importance of positive early peer relationships in the healthy development of BI children. If BI children struggle with these early peer interactions, they are likely to continue to struggle across several domains. Therefore, it is important to understand difficulties that BI children have in early peer interactions. One way to examine these interactions is through play.

**Play and Social Competence**

Most peer interactions among young children (under age 8) occur through play. Therefore, in the current study, play was used as a window into peer interactions. Play encompasses many types of child interactions and is considered a natural activity beginning in early toddlerhood (Lowenthal, 1997). Further, play itself is a complex construct that is believed to be integral in healthy child development across several domains, including cognitive emotional and social domains (Niec & Russ, 1996; Saltz & Johnson, 1977; Russ, 1995). The most elaborate and developmentally advanced play is fantasy play. Fantasy play also has the highest potential for enjoyment, which is the inherent incentive of play (Gottman & Parker, 1989). Research on fantasy play has established that there is a positive relationship between play processes, emotional understanding and emotional expression in children, which illustrates its importance in socioemotional development (Russ & Schafer, 2006; Russ, 1995; Gottman & Parker, 1989).
There has been limited research on the relationship between inhibition and play. Highly inhibited children have been found to demonstrate constrained affective spontaneity during individual fantasy play. These children also demonstrated an inability to promptly recover from or regulate emotions in their play (Gottman & Parker, 1989). Poor emotional expression and regulation in play has been linked to both parent and self-report measures of child general emotion regulation ability (Cohen & Mendez, 2009; Russ, 1995). Further, these skills are important in successful social experiences, therefore BI children’s inability to successfully use these skills in play may be representative of why they are more vulnerable to negative peer interactions.

Peer play is an important part of young children’s social experience. The most valuable and empirically informational social play is fantasy play because it involves the highest level of coordination among children (Gottman & Parker, 1989). When children engage in fantasy play together they immerse themselves in their imaginative world together, ignoring all distractions. This type of play has the highest potential for entertainment and enjoyment but also for interpersonal conflict. Therefore, to engage in this important type of play, children need to have a base knowledge of conflict management. Shared fantasy play is also believed to be the first steps children take in using friends to cope with fears and emotions. They do this by implementing emotional themes into their play and then working through these emotional and interpersonal concerns together (Gottman & Parker, 1989). Connolly & Doyle (1984) proposed that social fantasy play may mediate the relationship between peer interaction and social competence. In their research, amount of dyadic and group fantasy play predicted social competence while peer contact alone, did not. The authors also found that the quantity of
verbal exchange between peers during play was important in the development of social skills (Connolly & Doyle, 1984). Social play has not only been associated with social emotional skills but solitary play on the playground, when there are opportunities for social play, is negatively related to early academic skills, verbal skills, problem solving ability, and self regulation (Coplan, Gavinski-Molina et al., 2001; Coplan, Wichmann et al., 2001). Therefore, peer play is an influential part of child development and a natural setting in which to observe young children’s social skills.

Assessing child interaction during play presents challenges in reliability, feasibility and utility. To address this problem, Webster-Stratton & Lindsay (1999) developed a micro coding system intended to reliably assess child interaction during peer play. Webster-Stratton & Lindsay (1999) used peer play tasks to facilitate social interaction and encourage peer interactions that demonstrated children’s social skills and abilities to successfully interact. Their main goal was to create a system that assessed known indicators of social incompetence in children with conduct disorder because, at the time, there was little known about the precise social skills deficits and information processing difficulties of young children with conduct problems (Crick & Dodge, 1994). By using the Peer Problem-Solving Interaction Communication- Affect Rating Coding System (PPSI-CARE), Webster-Stratton & Lindsay (1999) hoped to assess child behaviors, not only in isolation but reciprocally. The authors believed that examining children’s interactions and their responses to other children would lead to a better understanding of social competency deficits in young children with conduct problems. Since its conception the PPS-I CARE coding system has been used primarily with normal, ADHD and ODD samples to better understand conduct problems in young
children (Stormshak & Webster-Stratton, 1999; Webster-Stratton, Hollingsworth, & Rogers, 1991). However, the PPS-I CARE coding system has not been used to assess the distinct behaviors and exchanges of inhibited or withdrawn children. Given that inhibited children also struggle with peer relations (Biederman et al., 2001; Haward, Killen, Kraemer & Taylor, 1998; Kochaska, 1991), it can be assumed that their presentation across the PPS-I CARE subscales would be different than controls in varying ways as compared to those documented in children with conduct disorder. The PPS-I CARE offers a unique perspective through which to quantify the social difficulties some young BI children experience.

**Parenting and Behavioral Inhibition**

Despite BI children being more vulnerable to the development of poor peer relations, not all BI children have the types of social problems that lead to later anxiety. Certain environmental factors are thought to influence expression of BI. While BI children are likely to demonstrate their reticence in social situations, it is possible that a child’s understanding of emotion, emotional expression and emotion regulation decreases their likelihood of poor social interactions. Children’s understanding of emotion within social contexts is believed to develop through interactions with their parents. Therefore, parenting behaviors may moderate the relationship between behavioral inhibition and problematic peer experiences.

Some parenting characteristics such as overcontrol and intrusiveness have been examined in relation to BI children and their functioning. Intrusive, overcontrolling parents who express high levels of negative affect tend to have BI children who exhibit higher levels of social withdraw, more fears and fewer social skills throughout childhood.
compared to parents of BI children who are not high in intrusiveness or control (Degnan et al., 2008; Rubin, Burgess, & Hastings, 2002). Another aspect of parenting that may be important in the social and emotion development of BI children is parent socialization of emotion. Emotion regulation abilities are thought to be influenced both by biological tendencies and cognitive strategies of maintaining, changing and inhibiting emotion. Emotion regulation strategies are taught to children both implicitly and explicitly by their parents (Sroufe, Schork, Motti, Lawroski & LaFreniere, 1984; Garner & Estep, 2001). This learning process is referred to as emotion socialization and it is viewed as an important part of development, particularly in the context of social interaction (Garner & Estep, 2001).

Emotion socialization can occur in a variety of ways. One way children learn about the role of emotions in life is through the emotional experiences they witness in the home. Children learn how their parents use emotions in everyday life and the consequences of those emotions. For instance, it has been established that when families have high levels of negative affect in their homes, it can have negative effects on children (Garner & Estep, 2001). Emotion socialization also occurs through parents’ reaction to their child’s emotions and the verbal exchange they have with children regarding their emotions. In general, when parents respond negatively to a child’s expression of emotion, it is thought to be problematic in the child’s emotional development. For instance, parents who respond with negative affect when their children express negative emotions or behaviors have children who are less emotionally competent and have difficulty optimally regulating their emotions and behaviors (Denham, Mitchell-Copeland, Strandberg, Auerbach & Blair, 1997; Kliewer, Fearnlow & Miller, 1996). It is theorized
by Buck (1984) and Gross and Levenson (1993) that these negative emotional experiences contribute to maladaptive emotion regulation because children gradually learn to hide their emotions, yet, in emotion-inducing circumstances they feel uneasy and respond with dysregulated behavior or internal distress. These feelings of tension could explain why some children whose parents’ respond to their emotion inappropriately struggle with internalizing disorders later in life. It has also been reported that negative responses to child negative emotion leads to an escalation of negative arousal which further enforces poor regulation in the child (Carson & Parke, 1996; Eisenberg et al., 1999).

It is likely that emotional experiences of early family environment impact a child’s ability to appropriately socialize with peers, because increased negative affect and inability to regulate negative affect are associated with peer problems throughout childhood (Bonney, 1943; Gronlund & Anderson, 1957). For example, escalations of negative emotion between parent and child have been found to relate to low social competence with peers in children (Carson & Parke, 1996). This relationship is believed to exist because support of emotional experiences in early childhood impacts children’s feelings of security in social interactions and therefore influences their social encounters (Cohen & Mendez, 2009; Garner & Estep, 2001; Eisenberg, Fabes & Murphy, 1996). An inappropriate response to negative emotion encompasses a wide array of responses, however, empirical evidence supports that minimizing and punitive reactions to emotional expression are particularly destructive. Both minimizing and punitive reactions to emotion have been found to be related to low levels of socially appropriate behavior, poor constructive coping and teacher report of student unpopularity (Eisenberg et al.,
1999; Eisenberg, Fabes & Murphy, 1996). Given these previous findings and those presented above regarding BI; it is reasonable to conclude that both emotion socialization and temperament relate to positive or negative peer interactions in early childhood and that these interactions are critical for healthy development. The current study aimed to better understand how these two constructs interact to predict child social behavior.

**Purpose**

While many studies have assessed the ramifications of parent’s reactions to negative emotions as it relates to emotional development, fewer have assessed how these reactions relate to peer social competence directly. Those that have, measured peer social competence through teacher and parent report. Observing children physically interacting will likely give a fuller picture of the child’s peer interaction skills than perceived social competence by a third party, and may further illuminate the impact of emotion socialization on peer experiences. Further, the current study looked to investigate how inappropriate responses to negative emotion affect the known relationship between BI and poor peer interaction. More specifically, it is believed that children high in BI will demonstrate less conflict management ability and less pro-social ability than children low in BI in a peer fantasy play task (given the research presented above). However, it is possible that this relationship will change when considering the effects of emotion socialization.

**Hypotheses**

1. It was hypothesized that children high in Behavioral Inhibition (determined by parent report) would engage in less “conflict management” during an imaginative play task, according to the PPS-I CARE coding system.
Conflict Management as defined in the PPS-I CARE coding system is behaviors such as breaking rules, hitting, showing frustration or ignoring others. These behaviors show an inability to properly manage conflict in social situations. These skills demonstrate an inability for a child to appropriately control their emotion and behaviors, empathize, coordinate and effectively problem solve with others, all of which have been linked to poor peer interactions (see above).

2. It was hypothesized that children high in behavioral inhibition would demonstrate fewer “friendship skills” using the PPS-I coding system definition of friendship/pro-social skills.

   Friendship Skills as defined in the PPS-I CARE coding system are pro-social skills including sharing with others, reassuring others, and demonstrating appropriate positive affect. These pro-social behaviors require self regulation and the ability to coordinate with others- skills known to be associated with positive peer interactions in children (see above).

3. It was hypothesized that level of child emotion regulation (measured through parent report) would be negatively related to the child’s demonstration of “conflict management” and “friendship skills” during the play task.

4. It was hypothesized that levels of punitive and minimizing responses to child negative emotion (as measured by the CCNES) would moderate the relationship between child level of BI and amount of conflict management and pro-social skills observed during peer interaction. It was predicted that children high in BI with parents who were more punitive and minimizing when responding to child
negative emotion would demonstrate fewer conflict management and friendship skills during peer interactions while children high in BI with parents who report less punitive and minimizing responses to child negative emotion would demonstrate significantly more conflict management and friendship skills during peer interaction.

5. It was hypothesized that parent levels of punitive and minimizing responses to child negative emotion would moderate the relationship between child emotion regulation ability (as measured by the ERC) and amount of conflict management and pro-social skills observed during peer interaction. It was predicted that children with better emotion regulation ability with parents who were punitive and minimizing when responding to child negative emotion would demonstrate fewer conflict management and friendship skills during peer interaction while children with better emotion regulation ability with parents who are less punitive and minimizing when responding to child negative emotion would demonstrate more conflict management and friendship skills.

Methods

Participants

Forty-two children were recruited out of five schools in the Cleveland, Ohio area. Preschool, kindergarten and 1st grade classroom teachers that agreed to participate sent home packets with consent forms and parent questionnaires with their students. If parents were interested in participation and their child returned a signed parental consent form to the school, the child was included in the study. Of the 42 participants, 19 were male and 23 were female. The participants ranged in age from 4 to 8 with a mean age of 6.17 years.
The sample consisted of 61.9% Caucasian, 26.1% African American, 2.4% Asian American and 9.5% Mixed Race children.

**Procedure**

Children whose parents consented and returned the necessary questionnaire data were matched with a play partner, a classmate with whom they were not good friends. Children were matched as close to their own age as possible and with children of the same gender, when possible. The age difference within dyads ranged from one month to one year in most cases with one exception, a dyad being 2 years different in age. Difference in age within dyad averaged 5 months (SD = 7.6 months). 5 of the 21 dyads were matched across gender due to logistical limitations.

After children were matched, dyads met with the examiner for a play session. During this play session each child verbally consented to participate and to be videotaped. Each child was administered the Vocabulary section of the WISC-IV (Wechsler, 2003) to assess verbal skills. The children were asked to finish a story stem using puppets. This story stem was meant to elicit anger or frustration and involved one puppet losing the other puppet’s pet while they were on vacation. The children were given 2 minutes to act out the end of the story. Each child’s role in the story was decided using random assignment. For a complete Protocol of the play session please see Attached Document – Research Assistant Protocol.

**Measures**

**Behavioral Inhibition Questionnaire** (BIQ: Bishop, Spense & McDonald, 2003). The BIQ is a 30 question parent report of a child’s BI tendencies. BI, as defined by the authors of the BIQ, is a child’s cautious, or restrained response to unfamiliar
people, places, situations, or objects (Bishop, Spence & McDonald, 2003). Parents are asked to rate how often a certain behavior applies for a specific child on a likert scale from 1 (hardly ever) to 6 (almost always). The 30 questions are divided into the five subscales based on experiences believed to be associated with BI: peer situations, physical challenge, separation, unfamiliar situation, unfamiliar adults and performance. These subscales can be summed separately or all questions can be summed together to form a total BI score. For the purpose of the current study, the total BI score will be used as a representation of general level of BI (Broeren & Muris, 2010). The questionnaire has good psychometric properties, with a total score alpha of .95 and alphas for the factor scores ranging from .80 to .91 (Bishop, Spence & McDonald, 2003). Reliability and validity of the BIQ has been demonstrated in school (5-12) and preschool (age 3-5) samples of 531 and 1,019 children, respectively (Bishop, Spence & McDonald, 2003; Broeren & Muris, 2010). In the current study, the mean of the BIQ was 81.33 (SD = 24.34), with a range from 36 to 130, and an internal reliability coefficient of .94.

**Emotion Regulation Checklist** (ERC; Shields & Cicchetti, 1997). The ERC is a 24-item, parent report measure of child emotion regulation. Parents rate statements about their child’s behaviors and emotions on a 4 point likert scale (0= rarely/never like this child, 4= almost always like this child). The measure has 2 subscales: lability/negativity (i.e.- “exhibits wide mood swings) and emotion regulation (i.e.- “can say when he/she is feeling sad, angry or mad, fearful or afraid”). The reliabilty coefficients for the overall scale are .89. The a coefficients for eah subscales are .96 and .83 for the lability/negativity subscale and emotion regulation subscale, respectively. Validity has also been established by demonstrating positive correlations between the ERC and
observers’ ratings of children’s regulatory abilities and proportion of expressed positive and negative affect (Shields & Cicchetti, 1997). In the current study, the mean of the emotion regulation subscale of the ERC (the scale used in the current study) was 26.78 (SD = 3.40), with a range from 18 to 32, and an internal reliability coefficient of .74.

Coping with Children’s Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990). The CCNES is a parent report measure of their response to their child’s negative emotions (anger, sadness and fear). The CCNES consists of 12 items which present typical situations that evoke normal levels of negative emotion in children. Parents then indicate how likely they would be (on a 7-point likert scale) to react in each of six different ways. The six types of responses include parental distress reactions, punitive responses, encouragement of emotional expression, emotion-focused socialization reactions (comforting), problem-focused socialization reactions, and minimizing responses. Items in each subscale can then be averaged across vignette to achieve scores for each response style. The mean Cronbach’s alpha for the subscales of the CCNES have been demonstrated to fall between .68 and .88 with an average of .77 in a sample of 137 parents (Fabes, Eisenberg, & Bernzweig, 1990) In the current study the internal reliability coefficient for the CCNES was .88. The mean score for the punitive and minimizing reactions subscales (the subscales used in the current study) were 2.41 (SD = .73) and 2.56 (SD = .75) and ranged from 1.08 to 4.0 and 1.17 to 4.58, respectively.

Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV; Wechsler, 2003). The WISC-IV is a standardized measure of child cognitive functioning that consists of 10-13 subtests that measure various aspects of intellectual ability. In the
current study, the Vocabulary subtest of the WISC-IV was administered. This subtest was designed to measure verbal reasoning and intelligence. This structured interactive activity involves asking children to define specific words. The vocabulary subtest has an average internal consistency of .89 (Wechsler, 2003). In the current study, raw vocabulary scores for the Vocabulary subtest were used as estimations of vocabulary ability. The WISC-IV subtest was administered by a graduate student trained in the assessment.

**Coding System**

**Peer Problem Solving Interaction Communication Affect Rating Coding System** (PPS-I CARE; Webster-Stratton, Hollingsworth, & Rogers, 1991). The PPS-I CARE is an observational coding system derived from Gottman’s MACRO and MICRO friendship observation measures (Gottman, 1986). The coding system is designed to evaluate social interactions between peers. The system was originally designed to specifically code behaviors related to conduct-problem children including positive and negative social skills. The coding system was developed while observing young children (4-7 years old) interact across both a cooperative and competitive play segment. Interrater reliability has been found to be between 69 and 92% (average 79%). More specifically, reliability among observers for positive communication was .95 and was .91 for conflict management (Stormshak & Webster-Stratton, 1999).

The PPS-I CARE consists of 5 general behavioral codes: Positive Communication, Negative Communication, Conflict Management, Friendship Skills and Level of Play. Each general behavioral code is the culmination of several distinct behaviors that are coded based on frequency (except for the behaviors in the general level
of play code). The concrete behaviors included under the Positive Communication code are the asking of open ended questions, asking permission of the other child, making a descriptive statement, making a suggestion, agreeing with the other child, requesting something from the other child, praising the other child, apologizing to the other child, and making a statement about their own feelings. Those considered Negative Communication are to disagree or argue with the other child, command or demand something from the other child, criticize, reject or give negative feedback to the other child, making a negative statement and giving a reason or a rule for disagreement. Behaviors included in the general Conflict Management scale are grabbing an object, hitting the other child, physically intruding on the other child’s space, wrestling with the other child, playing destructively, threatening the other child, showing frustration, withdrawing from the interaction, ignoring the other child, crying, talking aggressively to the other child, crying because the child was hurt, suggesting a solution, compromising or de-escalating the situation, breaking the rules of the game or setting. Behaviors considered Friendship Skills are offering help to the other child, sharing with the other child, waiting on the other child, smiling or laughing, comforting or reassuring the other child, self-disclosing to the other child, exploring similarities with the other child, exploring differences with the other child and demanding attention from the other child. The general level of play code is derived based on a subjective ranking of the amount of the following behaviors during the play session: parallel play, reciprocal play, aggressive play, imaginary talk or fantasy play, separation, affect and cooperativeness (Stormshak & Webster-Stratton, 1999; Webster-Stratton, Hollingsworth, & Rogers, 1991).
Four undergraduate Research Assistants were trained as coders using the PPS-I CARE through study of the coding manual and practice coding exercises. Each coder completed coding of two example peer play videos on which they achieved a Cohen Kappa of at least .80 with the Master Coder (KMD). 80% reliability was continually insured by random reliability checking of 30% of videos by the Master Coder. Coding involved tallying the number of specific behaviors (listed above) from the time the children started their story until they finished the story.

Results

Data Analysis Plan

Data analysis examined the relationship between child behavioral inhibition and child conflict management and pro-social skill. Further, analyses examined the relationship between child conflict management and pro-social skill and child emotion regulation ability. Linear regression analyses were used to determine whether child level of BI predicted child conflict management, pro-social skill and emotion regulation ability, respectively.

In addition, the moderating effect of parent’s punitive and minimizing response to child negative emotion on the relationship between child level of BI and child demonstration of conflict management and pro-social skill was examined. The moderating effects were determined using multiple hierarchical regression analyses. Before the regression analyses were conducted, the independent and moderating variables were centered to ease interpretation of results. To test the hypothesis that parental reaction to child negative emotion moderates the relationship between level of BI and conflict management skills; parent report of BI was entered in the first step of the
regression analysis, parental punitive and minimizing responses to child negative affect were entered in the second step, and the product of child BI and parental punitive and minimizing responses to child negative affect were entered in the third step of regression analysis. The outcome variable in this analysis was child conflict management. If a significant result is found for the interaction of BI and parenting behaviors, the interaction was further examined by comparing the simple slopes of each interaction at varying levels of the moderating variable (parental response to negative emotion) (Dearing & Hamilton, 2006; Preacher, Curran, & Bauer, 2006). This same process was applied when examining the moderating effects of parenting behavior on the relationship between BI and pro-social skills, and Emotion Regulation and pro-social/conflict management skills, respectively. All analyses will be conducted while statistically controlling for child vocabulary skill (as measured by the WISC-IV) and number of utterances spoken by each child during the interaction, both of which could influence outcome variables.

**Results**

Prior to hypotheses testing, descriptive statistics and correlations among the study variables were examined. For a list of the study variables and their descriptive statistics for the entire sample see Table 1. For descriptive statistics for each school in the study see Tables 2. For a list of correlations among study variables see Table 3.

1. **It was hypothesized that children high in Behavioral Inhibition (determined by parent report) would engage in less “conflict management” during a cooperative play task, according to the PPS-I CARE coding system.**
The Conflict Management composite demonstrated little variability. Many of the participants did not engage in any of the conflictual behaviors in this composite. Therefore, analyses using the composite were completed using Conflict Management as a dichotomous variable where 1 indicated the presence of any conflict management behaviors and 0 indicated the presence of none of these behaviors.

Regression analysis did not indicate a significant relationship between child behavioral inhibition and conflict management after controlling for child vocabulary skill and number of utterances spoken during the task ($R = .48, \Delta F = .20, p = .66, R^2 = .23$ for Step 2, $\Delta R^2 = .01$, with the association between BI and Conflict Management at $B = .001, SE B = .003, \beta = .07$).

2. It was hypothesized that children high in behavioral inhibition would demonstrate fewer “friendship skills” using the PPS-I coding system definition of friendship/pro-social skills.

Contrary to expectation, regression analysis did not indicate a significant relationship between child behavioral inhibition and friendship skills after controlling for child vocabulary skill and number of utterances spoken during the task ($R = .47, \Delta F = 3.51, p = .67, R^2 = .22$ for Step 2, $\Delta R^2 = .02$, with the association between BI and Friendship Skill at $B = -.01, SE B = .02, \beta = -.06$).

3. It is hypothesized that level of child emotion regulation (measured through parent report) will be negatively related to the child’s demonstration of “conflict management” and “friendship skills” during the play task.
Contrary to expectation, regression analysis did not indicate a significant relationship between child emotion regulation ability and friendship skill during the peer play interaction while controlling for child vocabulary and utterances spoken ($R = .45, \Delta F = 2.89, p = .33, R^2 = .20$ for Step 2, $\Delta R^2 = .02$, with the association between ER and Friendship Skill at $B = -.10, SE_B = .10, \beta = -.15$).

Further, regression analysis did not indicate a significant relationship between child emotion regulation ability and conflict management during the play task while controlling for child vocabulary and utterances spoken ($R = .47, \Delta F = .34, p = .56, R^2 = .22$ for Step 2, $\Delta R^2 = .01$, with the association between ER and Conflict Management at $B = -.01, SE_B = .02, \beta = -.09$).

4. It is hypothesized that levels of punitive and minimizing responses to child negative emotion (as measured by the CCNES) will moderate the relationship between child level of BI and amount of conflict management and pro-social skills observed during peer interaction. It is predicted that children high in BI with parents who are more punitive and minimizing when responding to child negative emotion will demonstrate fewer conflict management and friendship skills during peer interactions while children high in BI with parents who report less punitive and minimizing responses to child negative emotion will demonstrate significantly more conflict management and friendship skills during peer interaction.

**Effect of Punitive Reactions to Child Negative Emotion**

Hierarchical multiple regression results demonstrated that parent’s punitive reactions to child negative emotion was not found to influence the relationship between child behavioral inhibition and child friendship skills during
peer interaction while controlling for vocabulary skill and utterance count ($R = .37$, $\Delta F = .46$, $p = .50$, $R^2 = .14$ for Step 4, $\Delta R^2 = .01$, with the association between BI X Punitive and Friendship Skill at $B = .03$, $SE\ B = .05$, $\beta = .31$).

Results indicated that punitive responses did not influence the relationship between child behavioral inhibition and child conflict when controlling for vocabulary skills and utterance count ($R = .52$, $\Delta F = .66$, $p = .43$, $R^2 = .28$ for Step 2, $\Delta R^2 = .02$, with the association between ER and Conflict Management at $B = .004$, $SE\ B = .005$, $\beta = .73$).

**Effect of Minimizing Reactions to Child Negative Emotions**

Contrary to expectation, hierarchical multiple regression results indicated that parent’s minimizing reactions to child negative emotion did not moderate the relationship between child behavioral inhibition and friendship skills during peer interaction while controlling for vocabulary skill and utterance count ($R = .56$, $\Delta F = 2.03$, $p = .17$, $R^2 = .32$, for Step 4, $\Delta R^2 = .05$, with the association between BI X Minimizing and Friendship Skill at $B = .03$, $SE\ B = .02$, $\beta = .58$). However, this regression analysis was approaching significance and a larger sample size could indicate that minimizing reactions to child negative emotion does impact BI expression.

Hierarchical multiple regression results did not indicate that minimizing reactions moderated the relationship between child behavioral inhibition and conflict management during peer play while controlling for vocabulary skill and utterance count ($R = .60$, $\Delta F = .04$, $p = .85$, $R^2 = .36$ for Step 2, $\Delta R^2 = .001$, with the association between ER and Friendship Skill at $B = .001$, $SE\ B = .01$, $\beta = .17$).
These results were also approaching significance and indicate a trend towards moderation in data.

5. *It is hypothesized that parent levels of punitive and minimizing responses to child negative emotion will moderate the relationship between child emotion regulation ability (as measured by the ERC) and amount of conflict management and prosocial skills observed during peer interaction. It is predicted that children with better emotion regulation ability with parents who are punitive and minimizing when responding to child negative emotion will demonstrate fewer conflict management and friendship skills during peer interaction while children with better emotion regulation ability with parents who are less punitive and minimizing when responding to child negative emotion will demonstrate more conflict management and friendship skills.*

**Effect of Punitive Responses to Child Negative Emotion**

As expected, parent’s punitive reaction to child’s negative emotions was found to moderate the relationship between child emotion regulation ability (as measured by parent report) and child’s friendship skills during peer interaction. Results of the multiple regression analysis indicated that the interaction term between child emotion regulation and parent’s punitive reactions (entered in Step 4 of the hierarchical regression) was significantly related to friendship skills during peer interaction while controlling for vocabulary skill, utterance count, emotion regulation and punitive parenting ($R = .56, \Delta F = 4.54, p = .04, R^2 = .31$ for Step 4, $\Delta R^2 = .10$; with the ERC X Punitive interaction significantly associated with Friendship Skills $B = -.27, SE B = .13, \beta = -.33$). To better
understand this relationship, the simple slopes of the relationship between emotion regulation and friendship skills were analyzed for children whose parents were low (1 SD or below the mean), moderate (within 1 SD of the mean) and high (1 SD or above the mean) in punitive reactions to child negative emotion, respectively. Results indicated a positive relationship between emotion regulation and friendship skills in children whose parents reported being less punitive, with vocabulary and utterance controlled ($t = 1.62, p = .21$). This indicates that children whose parents reported being less punitive and reported their children having higher emotion regulation abilities demonstrated more friendship skills in peer interaction. However, the slope is not significantly greater than zero, therefore, the relationship only represents a trend. Simple slope analysis of children whose parents were moderate in punitive reactions to negative emotions demonstrated no significant relationship between emotion regulation ability and friendship skill ($t = -.381, p = .71$). Children whose parents were more punitive demonstrated a negative relationship between emotion regulation and friendship skills ($t = -2.71, p = .22$). This indicates a nonsignificant tendency for children with highly punitive parents and higher emotion regulation abilities to demonstrate less friendship skills. For a graphical representation of the simple slope analysis see Table 4.

Contrary to expectation, punitive reactions to child negative emotions were not found to influence the relationship between child emotion regulation and conflict management skills in peer interaction while controlling for vocabulary and utterance count ($R = .51, \Delta F = 1.26, p = .27, R^2 = .26$ for Step 2, $\Delta R^2 = .03$, 


with the association between ER and Conflict Management at $B = -.03$, $SE B = .03$, $\beta = -1.15$).

**Effect of Minimizing Reactions to Child Negative Emotions**

As predicted, parent’s minimizing reaction to child’s negative emotions was found to moderate the relationship between child emotion regulation ability (as measured by parent report) and child’s friendship skills during peer interaction. Results indicated that the interaction term between child emotion regulation and parent’s minimizing reactions was significantly related to observed friendship skills after controlling for vocabulary skill, utterance count, emotion regulation and minimizing reactions ($R = .62$, $\Delta F = 5.19$, $p = .03$, $R^2 = .38$ for Step 4, $\Delta R^2 = .12$; with the ERC X Minimizing interaction significantly associated with Friendship Skills $B = -.25$, $SE B = .11$, $\beta = -.37$). In order to understand the significance of this relationship, the simple slopes of the relationship between emotion regulation and friendship skills were analyzed for children whose parents were low (1 SD ore more below the mean), moderate (within 1 SD of the mean) and high (1 SD above the mean) in minimizing reactions to child negative emotion, respectively. The slope examining emotion regulation and friendship skills in children whose parents were less minimizing was not significant ($t = .94$, $p = .35$). The simple slope of children whose parents were moderate in minimizing reactions also showed no significant slope relationship ($t = -.77$, $p = .45$). For children whose parents were more minimizing, the relationship between emotion regulation and friendship skills was significant, while controlling for vocabulary skill and utterance count ($t = -2.17$, $p = .04$). This indicates that children with
parents high in minimizing reactions to negative emotion and higher in emotion regulation abilities demonstrated less friendship skills in peer interaction. For a graphical representation of this relationship see Table 5.

Contrary to expectation, parent minimizing reactions to child negative emotion did not influence the relationship between child emotion regulation and conflict management during the peer play task while controlling for vocabulary and utterance count \((R = .49, \Delta F = .17, p = .68, R^2 = .20\) for Step 2, \(\Delta R^2 = .24\), with the association between ER and Conflict Management at \(B = .01, SE B = .03, \beta = .46\)).

**Discussion**

**Behavioral Inhibition and Friendship Skills**

Contrary to expectations, parent report of child behavioral inhibition was not related to observed friendship skills in peer interaction. This finding is inconsistent with similar studies of BI and social competence (Asendorpf, 1994; Biederman et al., 2001; Shwartz et al., 1999). However, most studies involve observational ratings of BI and parent report of social competence (Asendorpf, 1994; Blair et al. 2004, Gladstone et al., 2005; Spinrad et al., 2007). These differences in methods of assessment could have influenced results. However, such variation could be informative regarding what BI behaviors are risk factors for social difficulties and anxiety and how they are best identified for prevention purposes.

The lack of a BI and friendship skill relationship could also be accounted for by the age of the current sample. Past findings have demonstrated that as children get older (over age 2) their level of behavioral inhibition is less predictive of their social
competence. This decrease in association is likely because other environmental factors influence the relationship (Bohlin, Hagekull, & Andersson, 2005). These factors include parental attachment, amount of non-parental care, parental overcontrol, and parental intrusiveness, which were not all accounted for in the current study (Chorpita & Barlow, 1998; Degnan et al., 2008; Fox et al., 2001; Rubin, Burgess, & Hastings, 2002).

Examination of environmental factors that could influence the expression of BI other than parents' response to child negative emotion may help in better understanding the relationship between BI and friendship skills in the current sample.

There is also some evidence that behavioral inhibition does not account for social competence with familiar peers in the same way as it accounts for social competence with unfamiliar peers (Asendorpf, 1990; Bohlin, Hagekull, & Andersson, 2005; Cavell, 1990). In the current study, peer interactions were observed between peers who were relatively familiar to one another. While the dyads were not close friends, they often had interacted before to some degree, which could account for the non-significant relationship between BI and friendship skill in this sample.

Another possible explanation for the lack of BI and friendship skill relationship is that current analyses did not take into account types of subgroups of BI. There is evidence that some children are more inhibited in certain situations than others, and that certain types of BI are more associated with social impairment than others (Kochanska, 1991; Stevenson-Hinde, 1989). Therefore, it may be that some subtypes of BI would better account for friendship skill variation in the current sample, despite a composite BI score not relating to friendship skill. Further analyses of the various subtypes of BI and their
influence on social competence could help in identifying certain types of BI that present
greater risk for social problems and potential social anxiety.

**Emotion Regulation and Friendship Skills**

Child emotion regulation ability and friendship skills were not found to be
significantly related in the current sample. This is likely because parental influence and
possibly other environmental factors greatly influence the relationship between general
emotion regulation and observed friendship skills during peer interaction. Results found
that both parents’ punitive and minimizing reactions to child negative emotions
significantly moderated the relationship between parent report of child emotion
regulation and observed friendship skills. The interaction between emotion regulation and
parenting indicated that the relationship between emotion regulation and friendship skills
operated in distinctly different ways depending on how punitive or minimizing the child’s
parents are when they express negative emotion. For children whose parents reported
high punitive and minimizing behaviors, child emotion regulation and friendship skills
were negatively related. However, for children whose parents reported low punitive
behaviors, child emotion regulation and friendship skills were positively related. These
contradicting relationships likely cancel each other out when analyzing the relationship
between emotion regulation and friendship skill in the whole sample, resulting in the non-
significant result. This finding has implications regarding the current understanding of
emotion regulation’s role in social competence. Current results indicate that
environmental factors, namely parental characteristics, may play a more important role in
young child social competence than general emotion regulation ability (this hypothesis is
examined in more detail below).
Emotion Socialization as a Moderator of the BI and Friendship Skill Relationship

Results indicated that parent’s punitive and minimizing reactions to child negative emotion did not influence the relationship between BI and observed friendship skills in peer interaction. This may be because parent’s inappropriate reactions to child negative emotion effect the expression of BI only for children who are wary and reserved in certain situations (such as situations with unfamiliar peers, unfamiliar adults, high physical demands, novel environments, or performance situations; Bishop, Spense & McDonald, 2003). As demonstrated by Kochanska (1991) there are various types or subsets of BI, which seem to operate differently. Therefore, some types of BI may be more strongly associated with social skill issues than others. It may be that parental characteristics effect some BI children differently than others and have differing impacts on child social skill, none of which could be deciphered by the analyses performed in the current study.

There is also literature suggesting a variety of different environmental factors that may influence the expression of BI in social situations. These include: nonparental care, discipline techniques, social experiences, emotion regulation strategies taught, parental emotional expressiveness and parental emotional availability (Assendorpf, 1992; Bohlin, Hagekull, & Andersson, 2005; Degnan et al., 2008; Rubin, Burgess, & Hastings, 2002). Therefore, environmental factors not accounted for in the current study could explain variations in BI expression, despite inappropriate reactions to child negative emotions not accounting for this variability. However, it should be noted that hierarchical multiple regression analyses demonstrated that the interaction between BI and minimizing reactions was approaching significance. Therefore, further study of this possible
moderation in a larger sample is warranted. Future research on the moderation effect of other environmental factors on the expression of BI will also help in better explaining variation in BI expression and could help identify potential risk factors for social anxiety.

**Emotion Socialization as a Moderator of the Emotion Regulation Ability and Friendship Skill Relationship**

Results indicated that parent punitive and minimizing reactions to child negative emotions significantly moderated the relationship between parent report of child emotion regulation and observed friendship skills. The interaction between emotion regulation and parent’s reactions indicated that the relationship between emotion regulation and friendship skills operated in distinctly different ways depending on how punitive or minimizing the child’s parents are when reacting to child negative emotion. Punitive reactions to child expressions of negative emotions includes behaviors such as punishing or reprimanding children when they express negative affect. Minimizing reactions to child negative emotions include behaviors such as discounting the child’s feelings or telling the child they are not feeling the negative emotion.

**Parents low in punitive/minimizing reactions.** For children whose parents were low in punitive reactions to child negative emotion, as compared to the rest of the sample, emotion regulation and friendship skills were positively related. The slope of this relationship while not significant is approaching significance and represents a trend in the data. However, to confirm the relationship, a larger sample would be needed. For children whose parents were low in minimizing reactions, emotion regulation and friendship skills showed no linear relationship.
These findings indicate that children who are higher in emotion regulation ability that have parents who do not often employ punitive reactions to expressions of their child’s negative emotions show relatively more friendship skills in peer interaction. This supports past research that emotion regulation ability is an important aspect of social competence (Calkins, 1994; Blair et al., 2004; Garner & Estep, 2007), however, this relationship only holds if parents do not penalize their children for expressions of negative emotion. Interestingly, this relationship did not hold for minimizing reactions to child negative emotion, as was predicted. This is consistent with past research using the CCNES that has found an absence of punitive reactions to negative emotions to have a larger impact on child social skill, as compared to lack of less intrusive parenting responses, such as minimization (Eisenberg et al., 1999).

Parents moderate in punitive/minimizing reactions. For children whose parents were moderate in punitive reactions or minimizing reactions to child negative emotion, emotion regulation and friendship skill showed no linear relationship. This finding is surprising given past literature on the relationship between emotion regulation ability and social competence (Calkins, 1994; Blair, Denham, Kochanoff, & Whipple, 2004). Parents obtain moderate scores by endorsing occasional minimizing and punitive responses to their child’s negative emotions. It could be that, unlike children whose parents consistently behave in minimizing and punitive ways, children whose parents only react inappropriately on occasion still have adequate other opportunities, both with their parents and without them, to learn and develop appropriate emotion regulation and social skills. Further, because their parents are neither consistently appropriate nor consistently inappropriate in their reactions to child negative emotions, other
environmental factors may play a larger role in the emotion regulation and social competence relationship for these children.

**Parents high in punitive/minimizing reactions.** For children whose parents were high in punitive reactions, emotion regulation and friendship skills were negatively related. Again, this relationship was not significant but was approaching significance and represents a trend in the data. Increasing sample size would likely help to clarify these findings. For children whose parents were high in minimizing reactions, emotion regulation and friendship skills were significantly negatively related. Meaning, children whose parents reported responding to child expression of negative emotion with punitive or minimizing behaviors who also had lower emotion regulation skills (according to parent report) demonstrated more friendship skills in peer interaction.

These findings are inconsistent with some past research that has found parents high in inappropriate reactions to child emotions as struggling more in both emotional and social competence (Carson & Parke, 1996; Cohen & Mendez, 2009; Eisenberg et al., 1999; Eisenberg, Fabes, & Murphy, 1996). However, current findings are consistent with some theories of emotional socialization. For instance, Gross & Levenson, (1993) and Buck (1984) hypothesized that parents who react negatively to child expression of negative emotion learn to suppress their emotions, however, in emotionally arousing situations without their parents present these children become dysregulated from their “stored” or “bottled up” negative emotion. In the current study, parents who are punitive, but particularly those who are minimizing in response to their children’s negative emotion may report that a child who has learned to suppress these emotions as demonstrating good emotion regulation. Yet, in peer interactions where the child’s
parents are not present to regulate, or in this case suppress, the child’s emotion they appear dysregulated which corresponds to poor friendship skills.

These findings are also consistent with literature on parental psychological control. Psychological control is defined as parenting behaviors that interfere with a child’s ability to become independent and to develop an autonomous sense of self (Barber, 2002; Barber & Harmon, 2006). These parenting behaviors include parental intrusiveness, guilt induction, overprotectiveness, and love withdrawal. Parents who react in punitive and minimizing ways to child negative emotion are trying to control how their children act and feel and are therefore demonstrating psychological control.

Psychological control in various forms has been associated with guilt, aggression, social withdrawal, overcontrol and depressed affect, which all negatively influence social competence, however, most of these studies were done with older children and adolescent (Allen et al., 1994; Beavers, 1982; Becker, 1964; Barber, Olsen & Shagle, 1994; Barber et al., 2005; Nelson & Crick, 2002). Barber (2002) theorizes that psychological control is associated with poor social skill because it supports a maladaptive model of social interactions in which children become dependent on their parent’s for both self and emotion regulation and become unable to do so autonomously. This theory is supported with current findings which also suggest children who appear to allow their parents to regulate their emotions for them appear unregulated in social situations without their parents.

Further, the punitive and dismissing parent who reports their child as having poor emotion regulation may be reporting appropriate displays of negative emotion as poor regulation because of their expectations regarding emotional expression and their desire
to inhibit expressions of negative emotion. However, because expression of positive and negative emotions is linked (Campos, Campos, & Barrett, 1989) these children demonstrate more positive affect in peer interactions, which was included in the Friendship Skill composite score.

**Limitations**

There are several limitations in the current study that affect the generalizability of the findings. The most notable limitation is the small sample size. Power analysis, conducted prior to the study, indicated that to achieve acceptable power for the proposed analyses, 67 participants were needed. Therefore, current findings should be interpreted with caution. Small sample size also constrained the ability to control for partner influence on child behavior in current analyses. Due to the interactive nature of the peer play paradigm, results would be more informative regarding individual child characteristics, if eliciting actions and characteristics of the other child could be accounted for.

Further, the pairing of each dyad was not performed as systematically as desired. For instance, 5 dyads (10 participants) were cross-gender matched, which could affect child behavior as past research demonstrates that children behave differently in same-sex and different-sex groups (Gottman & Parker, 1989). Another limitation with the dyadic pairings was that the degree to which children were familiar with each other varied from complete unfamiliarity to children who interacted on a daily basis. Despite no dyads being extremely close friends, it is known that level of familiarity can impact child behavior (Asendorpf, 1990; Bohlin, Hagekull, & Andersson, 2005; Cavell, 1990).
Another limitation in the current study was the limited variability of the coded data. As described above, the conflict management composite of the PPS-I CARE had very limited variation and extreme positive skew. It may be informative in future analyses to code nonsocial behavior using different parameters. Using a more exhaustive and more variable measure of nonsocial behavior could help further illuminate current findings.

Another notable limitation is that the puppet task examined in the current study has not been empirically validated as a representation of child functioning. There is some evidence that children's behaviors and expressions of emotion during fantasy play mirror those typically demonstrated by the child outside of play (Russ & Schafer, 2006; Russ, 1995; Gottman & Parker, 1989). Assumption of this link was made in the current study, however, further investigation is needed to confirm the relationship between child social behavior outside fantasy play and behavior during fantasy play.

**Future Directions**

Findings of the current study did not support hypotheses or past research on the relationships between BI, social competence and parenting characteristics. Yet, findings did support past research on parental emotion socialization, child emotion regulation and social skill and added to the current understanding of the role parenting, parental response to negative child emotion in particular, plays in emotional processes and how they effect early social interactions. The current study was the first of its kind to analyze relationships between temperament, parenting, and emotion regulation using structured dyadic peer play as a mode of social skill assessment. Utilizing peer play as a conduit of social skill proved to be particularly helpful in gaining a new perspective on young child
social competence, which is an important construct for healthy socioemotional development that is hard to quantify. Further examinations of child functioning using structured fantasy social play versus free social play could be helpful in answering a myriad questions regarding socioemotional development.

Results of the current study indicate several directions for future study. Current findings seem to indicate that parental characteristics, namely those associated with child emotion socialization, are extremely important and influence the negative effects of poor emotion regulation ability on social skill. Yet, further investigation and confirmation of these findings in a larger sample is needed. Other environmental influences on children’s emotional understanding and expression of BI (such as conflict in the home, parent emotional availability, nonparental care, teaching of emotion regulation strategies) are in need of exploration and could shed more light on what environmental factors perpetuate or protect temperamentally vulnerable children from developing both social difficulties and psychopathology.

Future directions may also include investigation of the influence various types of BI have on early child social competence. Better understanding of particular situations in which BI characteristics predict early social skill difficulties could be helpful in better understanding children at risk for developing social anxiety in the future. Further investigation could also help in determining what the interactions between early child temperament, emotion regulation ability and emotion socialization mean for later child adjustment. For instance, are BI children whose parents respond inappropriately to child negative emotion more likely to develop anxiety because of their temperamental disposition, struggles in emotion regulation related to their emotion socialization, their
early difficulties in peer interactions, or a certain combination and interaction of these variables. And once these relationships are uncovered, what does it mean for prevention efforts?

There are many questions prompted by both the hypotheses and findings of the current study regarding what constructs cause some behaviorally inhibited children to become socially anxious and to have difficulties with peers. Using findings of the current study as a basis for further investigation of the relationships between emotion socialization, emotion regulation and temperament could help to answer these questions and guide prevention efforts for children at risk for social anxiety.
Table 1

*Descriptive Statistics of Study Variables*

<table>
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<tr>
<th>Construct</th>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
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<td>BIQ (Total)</td>
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<td>24.34</td>
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<td>18-32</td>
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<td>.73</td>
<td>1.08-4</td>
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<td>CCNES (Minimizing)&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>Peer Social Skill</td>
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<td>PPS-I CARE (Conflict Management Skills)</td>
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<td>7.08</td>
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<sup>a</sup>n = 42  
<sup>b</sup>n = 40  
<sup>c</sup>n = 36  
<sup>d</sup>n = 16 (Only a subset of the participants received the SCAS-P)
Table 2
*Descriptive Statistics for Each School*

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<th>School 3</th>
<th>School 4</th>
<th>School 5</th>
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<tbody>
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<td>M (SD)</td>
<td>Range</td>
<td>M (SD)</td>
<td>Range</td>
<td>M (SD)</td>
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<tr>
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<td>82.8 (22.43)</td>
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<tr>
<td>ERC (ER subscale)</td>
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<td>27.4 (5.50)</td>
<td>18-32</td>
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School 1, n = 14
School 2, n = 5
School 3, n = 6
School 4, n = 4
School 5, n = 12
Table 3
*Pearson-Product Correlations Among Study Variables*

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<th>ERC</th>
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n = 23
a n = 40
b n = 36
* p < .05
** p < .01
Table 4

The Effect of Parent's Punitive Reactions to Child Negative Emotion on the Relationship between Child Emotion Regulation Ability and Friendship Skill

![Graph showing the relationship between Emotion Regulation and Friendship Skill for different levels of Punitive Reactions: high, med, low. The graph displays a downward trend as Emotion Regulation increases for high punitive reactions, while for low punitive reactions, it shows an upward trend.](image-url)
Table 5

*The Effect of Parent's Minimizing Reactions to Child Negative Emotion on the Relationship between Child Emotion Regulation Ability and Friendship Skill*

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Med</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendship Skill</td>
<td>12</td>
<td>11.5</td>
<td>11</td>
</tr>
<tr>
<td>Emotion Regulation</td>
<td>low</td>
<td>med</td>
<td>high</td>
</tr>
<tr>
<td>Minimizing Reactions</td>
<td>high</td>
<td>med</td>
<td>low</td>
</tr>
</tbody>
</table>

Minimizing Reactions
- high
- med
- low
Figure 1. Demonstrates the hypothesis that behavioral inhibition influences social competence. Further, pro-social skills, conflict management skills and emotion regulation are all aspects of social competence. Parenting characteristics are also predicted to have some influence on the behavioral inhibition and social competence relationships.
Research Assistant Protocol

1. Go to the lab and gather the following materials: videocamera, tripod, a child folder for every child that you will be running, the participant log, box on Lincoln Logs, puppets, this protocol, directions to the school, do not disturb sign, stop watch, and contact information for our contact person at the school.
2. Go to Cynthia/Kellie’s office to sign out the WISC and bring it with you.
3. Drive to the school and go to our contact person (secretary, counselor/psychologist, or teacher) to find out where you will be running participants and how students will be called down to the room where you are running participants.
4. Set up the camera focusing on two chairs and a table. The camera viewfinder should show both children’s faces and hands as well as the toys so make sure that you focus it on the chairs in such a way that this will show.
5. When participant 1 arrives, introduce yourself. Then you need to Assent the child. Do this by saying:

   WE ARE DOING A PROJECT TO LEARN HOW CHILDREN PLAY TOGETHER. IN THIS PROJECT, YOU AND ANOTHER STUDENT WOULDN'T PLAY TOGETHER WITH SOME TOYS AND GAMES THAT I HAVE HERE. YOU WOULD ALSO TELL ME HOW YOU FEEL SOMETIMES. IT IS OK IF YOU DO NOT WANT TO DO THIS PLAY PROJECT. ALL YOU HAVE TO DO IS TELL ME THAT YOU DO NOT WANT TO DO IT AND I WILL TAKE YOU RIGHT BACK TO YOUR CLASSROOM/LUNCH. IF YOU SAY YES, YOU CAN START PLAYING AND THEN CHANGE YOUR MIND AND STOP PLAYING AT ANY TIME. YOUR PARENT(S) KNOW THAT I AM ASKING YOU IF YOU WANT TO HELP WITH THIS PROJECT. THIS FORM EXPLAINS THE PROJECT AND WHAT YOU WOULD DO IN THE PROJECT. I AM GOING TO READ IT TO YOU. {read assent form to child}

   DO YOU HAVE ANY QUESTIONS ABOUT WHAT YOU WOULD DO IF YOU DECIDE TO HELP WITH THIS PROJECT? IF NOT, DO YOU WANT TO DO THE PROJECT?

   If child agrees to participate, show them where they can sign the assent form. If child says decides not to participate, take the child back to his classroom or to lunch.

6. Give the Verbal and Block Design sections of the WISC-IV to participant 1.
7. Get Participant 2 and bring them into the room. Have Participant 1 talk or play with RA2 in another part of the room.
8. Assent Participant 2 by saying:
WE ARE DOING A PROJECT TO LEARN HOW CHILDREN PLAY TOGETHER. IN THIS PROJECT, YOU AND ANOTHER STUDENT WOULD PLAY TOGETHER WITH SOME TOYS AND GAMES THAT I HAVE HERE. YOU WOULD ALSO TELL ME HOW YOU FEEL SOMETIMES. IT IS OK IF YOU DO NOT WANT TO DO THIS PLAY PROJECT. ALL YOU HAVE TO DO IS TELL ME THAT YOU DO NOT WANT TO DO IT AND I WILL TAKE YOU RIGHT BACK TO YOUR CLASSROOM/LUNCH. IF YOU SAY YES, YOU CAN START PLAYING AND THEN CHANGE YOUR MIND AND STOP PLAYING AT ANY TIME. YOUR PARENT(S) KNOW THAT I AM ASKING YOU IF YOU WANT TO HELP WITH THIS PROJECT. THIS FORM EXPLAINS THE PROJECT AND WHAT YOU WOULD DO IN THE PROJECT. I AM GOING TO READ IT TO YOU. {read assent form to child}

DO YOU HAVE ANY QUESTIONS ABOUT WHAT YOU WOULD DO IF YOU DECIDE TO HELP WITH THIS PROJECT? IF NOT, DO YOU WANT TO DO THE PROJECT?

If child says agrees to participate, show them where they can sign the assent form. If child says decides not to participate, take the child back to his classroom or to lunch.

9. Turn the video camera back on.
10. Introduce the children to each other; though they most likely know each other already.
11. Now separate the children so that each RA is talking to a child individually. Next pull out the thermometers for the feelings questions. Introduce the questions by saying:

Pull out the Happy thermometer.

I AM GOING TO SHOW YOU SOME THERMOMETERS AND AKS YOU TO SHOW ME HOW YOU FEEL BY POINTING TO THAT SPOT ON THE THERMOMETER.

ON THIS THERMOMETER THIS SIDE IS SUPER SUPER HAPPY (point) AND THIS SIDE IS NOT HAPPY AT ALL (point), THE MIDDLE PART IS A LITTLE HAPPY BUT NOT REALLY HAPPY (point). IF YOU WERE REALLY HAPPY BUT NOT SUPER SUPER HAPPY YOU WOULD POINT HERE (show). DOES THAT MAKE SENSE?

Answer any questions the kid may have.

SO, HOW HAPPY DO YOU FEEL RIGHT NOW?
Pull out the Sad thermometer.

**THIS ONE IS LIKE THE OTHER ONE BUT IS ABOUT SADDNESS. THIS SIDE IS SUPER SUPER SAD (point) AND THIS SIDE IS NOT SAD AT ALL (point), THE MIDDLE PART IS A LITTLE SAD BUT NOT REALLY SAD (point). HOW SAD DO YOU FEEL RIGHT NOW?**

Pull out the scared thermometer.

**THIS ONE IS LIKE THE OTHER ONE BUT IS ABOUT BEING NERVOUS OR SCARED. THIS SIDE IS SUPER SUPER SCARED (point) AND THIS SIDE IS NOT SCARED OR NERVOUS AT ALL (point), THE MIDDLE PART IS A LITTLE SCARED BUT NOT REALLY SCARED (point). HOW SCARED OR NERVOUS DO YOU FEEL RIGHT NOW?**

Pull out the mad thermometer.

**THIS ONE IS LIKE THE OTHER ONE BUT IS ABOUT MADNESS. THIS SIDE IS SUPER SUPER MAD (point) AND THIS SIDE IS NOT MAD AT ALL (point), THE MIDDLE PART IS A LITTLE MAD BUT NOT REALLY MAD (point). HOW MAD DO YOU FEEL RIGHT NOW?**

12. Introduce the first task by saying:

**I AM GOING TO ASK THE TWO OF YOU TO PLAY WITH SOME OF MY TOYS TOGETHER. I WANT YOU TO WORK TOGETHER AND BUILD THE BEST THING YOU CAN WITH THESE LINCOLN LOG BLOCKS. YOU CAN MAKE WHATEVER YOU WANT, BUT MAKE SURE YOU ARE BUILDING IT TOGETHER.**

**DO YOU HAVE ANY QUESTIONS?**

If yes: answer the questions appropriately

If no: continue to task

**OK YOU CAN START WORKING.** Set the box of Lincoln logs in front of them.

*Let them play for 5 minutes.*

If the children are not working on one Lincoln log project within 30 seconds say:
MAKE SURE YOU ARE WORKING TOGETHER TO MAKE ONE THING.

If the children are not working on one project again within 1 minute redirect them again:

MAKE SURE YOU ARE WORKING TOGETHER TO MAKE ONE THING.

When 5 minutes are over:

OK TIME IS UP. THANKS FOR PLAYING WITH MY TOYS, YOUR PROJECT LOOKS GREAT!

13. Quickly separate the children to ask them the thermometer questions separately. Next pull out the thermometers for the feelings questions. Introduce the questions by saying:

Pull out the Happy thermometer.

NOW I AM GOING TO ASK YOU TO SHOW ME HOW HAPPY YOU ARE ON THE THERMOMETER AGAIN. REMEMBER THIS SIDE IS REALLY SUPER HAPPY (point) AND THIS SIDE IS NOT HAPPY AT ALL (point).

SO, HOW HAPPY DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW HAPPY YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED.

Pull out the Sad thermometer.

NOW I AM GOING TO ASK YOU TO SHOW ME HOW SAD YOU ARE ON THE THERMOMETER AGAIN. REMEMBER THIS SIDE IS REALLY SUPER SAD (point) AND THIS SIDE IS NOT SAD AT ALL (point).

SO, HOW SAD DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW SAD YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED.

Pull out the scared thermometer.
NOW, HOW SCARED OR NERVOUS DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW HAPPY YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED

Pull out the mad thermometer.

NOW, HOW MAD DO YOU FEEL RIGHT NOW? REMEMBER I’M ASKING ABOUT THIS MOMENT.

14. NOW LET’S PLAY SOMETHING DIFFERENT. (bring out puppets)

__________ (participant 1) PICK A PUPPET.
__________ (participant 2) PICK A PUPPET.

I AM GOING TO START A STORY AND I WANT YOU TO MAKE UP THE REST OF THE STORY AND ACT IT OUT WITH YOUR PUPPETS. DOES THAT MAKE SENSE?

Answer any questions the kids may have.

SO THIS PUPPET (insert puppets name and point) IS A VETINARIAN AND THIS PUPPET (insert puppets name and point) LEAVES ITS PET WITH THE VET. NOW SHE HAS COME BACK AND THE VET TELLS HIM/HER THE PET IS LOST. YOU CAN FINISH THE STORY HOWEVER YOU WANT.
Do you have any questions?

Answer any questions.

OKAY START!

Let them play for 2 minutes.

15. Again, quickly separate the children to ask them the thermometer questions separately. Next pull out the thermometers for the feelings questions. Introduce the questions by saying:

Pull out the Happy thermometer.
NOW I AM GOING TO ASK YOU TO SHOW ME HOW HAPPY YOU ARE ON THE THERMOMETER AGAIN. REMEMBER THIS SIDE IS REALLY SUPER HAPPY (point) AND THIS SIDE IS NOT HAPPY AT ALL (point).

SO, HOW HAPPY DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW HAPPY YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED.

Pull out the Sad thermometer.

NOW I AM GOING TO ASK YOU TO SHOW ME HOW SAD YOU ARE ON THE THERMOMETER AGAIN. REMEMBER THIS SIDE IS REALLY SUPER SAD (point) AND THIS SIDE IS NOT SAD AT ALL (point).

SO, HOW SAD DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW SAD YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED.

Pull out the scared thermometer.

NOW, HOW SCARED OR NERVOUS DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW HAPPY YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED.

Pull out the mad thermometer.

NOW, HOW MAD DO YOU FEEL RIGHT NOW? REMEMBER I’M ASKING ABOUT THIS MOMENT.

16. Then have the children return to the puppets.

NOW I WANT YOU TO ACT OUT ANOTHER STORY: BOTH OF THE PUPPETS, (puppet name) and (puppet name) ARE IN THE SAME CLASS AT SCHOOL AND THE WHOLE CLASS IS AT RECESS. (puppet name) *point at puppet* IS CLIMBING ON THE JUNGLE GYM AND HE SLIPPS AND FALLS DOWN AND WHEN HE/SHE FALLS HIS/HER PANTS RIP RIGHT DOWN THE BACK. A LOT OF THE OTHER STUDENTS SEE HIM/HER RIP THEIR
PANTS, INCLUDING (puppet name) *point to other puppet* AND SOME OF THEM LAUGH... NOW YOU CAN FINISH THE STORY HOWEVER YOU WANT.

Answer any questions the kids may have.

OKAY START!

Let them play for 2 minutes.

17. THANKS FOR PLAYING WITH OUR TOYS! NOW WE WANT TO ASK YOU A FEW QUESTIONS. ___________ (participant 1) STAY HERE WITH ME. ___________ (participant 2) GO OVER THERE (point) WITH ___________ (RA2).

18. When you are seated with your participant softly introduce and ask the questions.
Pull out the Happy thermometer.

NOW, HOW HAPPY DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW HAPPY YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED.

Pull out the Sad thermometer.

NOW, HOW SAD DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW SAD YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED

Pull out the scared thermometer.

NOW, HOW SCARED OR NERVOUS DO YOU FEEL RIGHT NOW? REMEMBER YOU ARE TELLING ME HOW HAPPY YOU ARE AT THIS MOMENT, SO YOU’RE ANSWER MAY BE DIFFERENT THAN IT WAS THE FIRST TIME I ASKED

Pull out the mad thermometer.

NOW, HOW MAD DO YOU FEEL RIGHT NOW? REMEMBER I’M ASKING ABOUT THIS MOMENT.
NOW I AM GOING TO ASK YOU A FEW OTHER QUESTIONS. I WILL NOT TELL ANYONE HOW YOU ANSWER THESE QUESTIONS, INCLUDING YOUR TEACHER AND PARENTS.

Pull out the Scared Thermometer

HOW SCARED OR NERVOUS DO YOU FEEL WHEN YOU TALK TO CHILDREN YOU DON’T KNOW? THIS SIDE (point) IS SUPER SUPER SCARED or NERVOUS AND THIS SIDE IS NOT SCARED OR NERVOUS AT ALL (point).

HOW NERVOUS OR SCARED DO YOU FEEL TALKING TO CHILDREN YOU DO KNOW? FOR EXAMPLE, HOW NERVOUS DO YOU FEEL WHEN TALKING TO KIDS IN YOUR CLASS AT RECESS? AGAIN, THIS SIDE (point) IS SUPER SUPER SCARED OR NERVOUS AND THIS SIDE IS NOT SCARED OR NERVOUS AT ALL (point).

Pull out Friendship Scale

HOW WELL DO YOU KNOW ___________ (other participants name)? POINT TO YOUR ANSWER ON THIS SCALE. 1- YOU ARE BEST FRIENDS. 2- YOU ARE FRIENDS. 3- YOU ARE FRIENDS THAT PLAY TOGETHER AT RECESS SOMETIMES. 4- YOU KNEW ___________ BEFORE TODAY BUT YOU HAD NEVER REALLY TALKED OR PLAYED TOGETHER. 5- YOU DIDN’T KNOW _______ UNTIL TODAY.

19. Then thank participant 1 send them back to their class and do the 2 WISC-IV sections with Participant 2 (Verbal and Block Design).

20. Thank Participant 2 and send them back to their class.
**BIQ**

Please indicate how often your child demonstrates the following behaviors with 1 being *hardly ever* and 6 being *almost always.*

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<tr>
<th>My Child....</th>
<th>Never</th>
<th>Always</th>
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<td>27</td>
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**Descriptions:**

1. Will happily approach a group of unfamiliar children and join in their play
2. Is confident in activities that involve physical challenge (e.g. climbing, jumping from heights)
3. Is very quiet around new (adult) guests to our home
4. Approaches new situations or activities very hesitantly
5. Quickly adjusts to new situations (e.g., kindergarten, preschool, child care)
6. Seems nervous or uncomfortable in new situations
7. Is happy to perform in front of others (e.g., singing, dancing)
8. Is outgoing
9. Happily separates from parent (s) when left in a new situation for the first time (e.g., kindergarten, preschool, childcare)
10. Enjoys being the center of attention
11. Settles in quickly when we visit the homes of people we don’t know well
12. Gets upset at being left in new situation for the first time (e.g. kindergarten, preschool, childcare)
13. Is clingy when we visit the homes of people we don’t know well
14. Dislikes being the center of attention
15. Is very friendly with children he or she has just met
16. Is shy when first meeting new children
17. Takes many days to adjust to new situations
18. Is comfortable asking other children to play
19. Happily explores new play equipment
20. Is reluctant to perform in front of others (e.g., singing, dancing)
21. Seems comfortable in new situations
22. Is very talkative to adult strangers
23. Tends to watch other children, rather than join in their games
24. Is independent
25. Happily approaches new situations or activities
26. Is cautious in activities that involve physical challenge (e.g., climbing, jumping from heights)
27. Happily chats to new adult visitors to our home
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<tbody>
<tr>
<td>28</td>
<td>Is reluctant to approach a group of unfamiliar children and ask to join in</td>
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<tr>
<td>29</td>
<td>Is very quiet with adult strangers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>Is hesitant to explore new play equipment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**ERC**

Please rate the following on a scale of: 

<table>
<thead>
<tr>
<th></th>
<th>Rarely/Never like this child</th>
<th>Sometimes like this child</th>
<th>Often like this child</th>
<th>Almost Always like this child</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is a cheerful child</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Exhibits wide mood swings (child's emotional state is difficult to anticipate because s/he moves quickly from a positive to a negative mood).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Responds positively to neutral or friendly overtures by adults</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Transitions well from one activity to another, doesn't become angry, anxious, distressed or overly excited when moving from one activity to another.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Can recover quickly from upset or distress (doesn't pout or remain sullen, anxious or sad after emotionally distressing events).</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>6</td>
<td>Is easily frustrated.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Responds positively to neutral or friendly overtures by peers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Is prone to angry outbursts/ tantrums easily</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>9</td>
<td>Is able to delay gratification.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Takes pleasure in the distress of others (laughs when another person gets hurt or punished; seems to enjoy teasing others).</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>11</td>
<td>Can modulate excitement (doesn't get carried away in high energy play or overly excited in inappropriate contexts).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Is whiny or clingy with adults</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>13</td>
<td>Is prone to disruptive outbursts of energy and exuberance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>Responds angrily to limit setting by adults</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>15</td>
<td>Can say when s/he is feeling sad, angry or mad, fearful or afraid.</td>
<td>1</td>
<td>2</td>
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Parent Attitude/Behavior Questionnaire (CCNES)

Instructions: In the following items, please indicate on a scale from 1 (very unlikely) to 7 (very likely) the likelihood that you would respond in the ways listed for each item. Please read each item carefully and respond as honestly and sincerely as you can. For each response, please circle a number from 1-7.

1. If my child becomes angry because he/she is sick or hurt and can't go to his/her friend's birthday party, I would:
   a. send my child to his/her room to cool off 1 2 3 4 5 6 7
   b. get angry at my child 1 2 3 4 5 6 7
   c. help my child think about ways that he/she can still be with friends (e.g., invite some friends over after the party) 1 2 3 4 5 6 7
   d. tell my child not to make a big deal out of missing the party 1 2 3 4 5 6 7
   e. encourage my child to express his/her feelings of anger and frustration 1 2 3 4 5 6 7
   f. soothe my child and do something fun with him/her to make him/her feel better about missing the party 1 2 3 4 5 6 7
If my child falls off his/her bike and breaks it, and then gets upset and cries, I would:

a. remain calm and not let myself get anxious
b. comfort my child and try to get him/her to forget about the accident.
c. tell my child that he/she is over-reacting
d. help my child figure out how to get the bike fixed
e. tell my child it’s OK to cry
f. tell my child to stop crying or he/she won’t be allowed to ride his/her bike anytime soon

If my child loses some prized possession and reacts with tears, I would:

a. get upsetn with him/her for being so careless and then crying about it
b. tell my child that he/she is over-reacting
c. help my child by talkinga bout happy things
d. distract my child by talking about happy things
e. tell him/her it’s OK to cry when you feel unhappy
f. tell him/her that’s what happens when you’re not careful

If my child is afraid of injections and becomes quite shaky and teary while for his/her turn to get a shot, I would:

a. tell him/her to shape up or he/she won’t be allowed to do something he/she likes to do (e.g., watch TV)
b. encourage my child to talk about his/her fears
c. tell my child not to make a big deal of the shot
d. tell him/her not to embarrass us by crying
e. comfort him/her before and after the shot
f. talk to my child about ways to make it hurt less (such as relaxing so it won’t hurt or take deep breaths

If my child is going over to spend the afternoon at a friend’s and becomes nervous or upset because I can’t stay there with him/her, I would:

a. distract my child by talking about all of the fun he/she will have with his/her friends
b. help my child think of things that he/she could do so that being at the friend’s house without me wasn’t scary (e.g., take a favorite book or toy with him/her)
c. tell my child to quit over-reacting and being a baby
d. tell the child that if he/she doesn't stop that he/she won't be allowed to go out anymore 1 2 3 4 5 6 7
e. feel upset and uncomfortable because of my child's reaction 1 2 3 4 5 6 7
f. encourage my child to talk about his/her nervous feelings 1 2 3 4 5 6 7

6 If my child is participating in some group activity with his/her friends and proceeds to make a mistakes and looks embarrassed and on the verge of tears, I would:
   a. comfort my child and try to make him/her feel better 1 2 3 4 5 6 7
   b. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
c. feel uncomfortable and embarrassed myself 1 2 3 4 5 6 7
d. tell my child to straighten up or we'll go home right away 1 2 3 4 5 6 7
e. encourage my child to talk about his/her feelings of embarrassment 1 2 3 4 5 6 7
f. tell my child that I'll help him/her practice so that he/she can do better next time 1 2 3 4 5 6 7

7 If my child is about to appear in a recital or sports activity and becomes visibly nervous about people watching him/her, I would:
   a. help my child think of things he/she could do to get ready for his/her turn (e.g., to do some warm ups and not to look at the audience) 1 2 3 4 5 6 7
   b. suggest that my child think about something relaxing 1 2 3 4 5 6 7
c. remain calm and not get nervous myself 1 2 3 4 5 6 7
d. tell my child that he/she is being a baby about it 1 2 3 4 5 6 7
e. tell my child that if he/she doesn't calm down, we'll have to leave and go home right away 1 2 3 4 5 6 7
f. encourage my child to talk about his/her nervous feelings 1 2 3 4 5 6 7

If my child receives an undesirable birthday gift from a friend and looks obviously disappointed, even annoyed, after opening it in the presence of the friend, I would:
   a. encourage my child to express his/her disappointed feelings 1 2 3 4 5 6 7
   b. tell my child that the present can be exchanged 1 2 3 4 5 6 7
c. NOT be annoyed with my child for being rude 1 2 3 4 5 6 7
d. tell my child that he/she is over-reacting 1 2 3 4 5 6 7
e. scold my child for being insensitive to the friend's feelings 1 2 3 4 5 6 7
f. try to get my child to feel better by doing something fun 1 2 3 4 5 6 7

8 If my child is panicky and can't go to sleep after watching a scary TV show, I would:
   a. encourage my child to talk about what scared him/her 1 2 3 4 5 6 7
   b. get upset with him/her for being silly 1 2 3 4 5 6 7

9
c. tell my child that he/she is over-reacting

d. help my child think of something to do so that he/she can get to sleep (e.g., take a toy to bed, leave the lights on)
e. tell him/her to go to bed or he/she won't be allowed to watch any more TV
f. Do something fun with my child to help him/her forget about what scared him/her

10 If my child is at a park and appears on the verge of tears because the other children are mean to him/her and won't let him/her play with them, I would:
   a. NOT get upset myself
   b. tell my child that if he/she starts crying then we'll have to go home right away
   c. tell my child it's OK to cry when he/she feels bad
   d. comfort my child and try to get him/her to think about something happy
   e. help my child think of something else to do
   f. tell my child that he/she will feel better soon

11 If my child is playing with other children and one of them calls him/her names, and my child then begins to tremble and become tearful, I would:
   a. tell my child not to make a big deal out of it
   b. feel upset myself
   c. tell my child to behavior or we'll have to go home right away
   d. help my child think of constructive things to do when other children tease him/her (e.g., find other things to do)
   e. comfort him/her and play a game to take his/her mind off the upsetting event
   f. encourage him/her to talk about how it hurts to be teased

12 If my child is shy and scared around strangers and consistently becomes teary and wants to stay in his/her bedroom whenever family friends come to visit, I would:
   a. help my child think of things to do that would make meeting my friends less scary (e.g., to take a favorite toy with him/her when meeting my friends)
   b. tell my child that is OK to feel nervous
   c. try to make my child happy by talking about the fun things we can do with our friends
   d. feel upset and uncomfortable because of my child's reactions
   e. tell my child that he/she must stay in the living room and visit with our friends
   f. tell my child that he/she is being a baby
References


parenting style on internalizing and externalizing problems from early childhood through adolescence. *Journal of Abnormal Child Psychology, 37* (8), 1063-1075.