

SOCIAL COGNITIVE FACTORS IN PARENTAL COACHING: MOTHERS' REASONING  
ABOUT AND SUGGESTIONS FOR THEIR CHILDREN IN SOCIAL DILEMMAS

by

BLAKE LAWRENCE NIELSEN

JEFFREY G. PARKER, COMMITTEE CHAIR

JOAN M. BARTH

WILLIAM HART

JOHN E. LOCHMAN

KRISTINA L. MCDONALD

A DISSERTATION

Submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the Department of Psychology  
in the Graduate School of  
The University of Alabama

TUSCALOOSA, ALABAMA

2015

Copyright Blake Lawrence Nielsen 2015  
ALL RIGHTS RESERVED

## ABSTRACT

Parental management of their children's peer experiences and skillful efforts to coach and advise their children with social problems has recognized benefits to children. Yet very little is understood about the reasoning and beliefs behind parents' coaching and how coaching is related to parents' broader social orientations. Mothers of 32 male and 39 female young adolescents were given a structured interview about hypothetical friendship dilemmas involving jealousy and the sophistication of their understanding of the dilemmas, their apparent self-efficacy, and their spontaneous references to advice they would give their young adolescent were coded from their responses. Mothers and young adolescents also provided self-reports of their relationship warmth and various aspects of child social adjustment. Mothers that made many suggestions to their children for handling the friendship dilemma had children who were generally less jealous and had higher social self-esteem. However, this was only true when the mother-child relationship was warm. The opposite pattern appeared in less warm mother-child relationships. In addition, coaching ideas were not related to the closeness of best friendships in offspring. Mothers with more sophisticated understanding of the social situation could produce more suggestions for their child on how to handle friendship dilemmas. Better understanding, in turn, was more characteristic of mothers with secure orientations toward relationships in their own life. Mothers that could produce more recommendations for their child were not necessarily mothers who felt efficacious in this area, contrary to expectations. Results represent a step toward a more complete understanding of the cognitions behind parental coaching and when it will be effective.

## DEDICATION

This dissertation is dedicated to all my family members and friends that served as a constant source of inspiration, encouragement, and guidance as I completed this project. I would not be where I am today without the continuous support from my parents, Kevin and Sabrina, my brothers, Zach and Tyler, my sister, McKenzie, and my sister-in-law, Alyssa. Special thanks to Rachel for her endless encouragement, support, and warm messages throughout this process.

This dissertation is dedicated to all of you.

## LIST OF ABBREVIATIONS AND SYMBOLS

$\alpha$	Cronbach's index of internal consistency
$b$	Unstandardized regression coefficient
$\beta$	Standardized regression coefficient
$df$	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
$F$	Fisher's $F$ ratio: A ration of two variances
$M$	Sum of a set of measurements divided by the number of measurements in the set
$N$	Total sample size
$n$	Subsample size
$p$	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
$r$	Pearson product-moment correlation
$R^2$	Percentage of variation accountable for by all variables in the regression analysis
$\Delta R^2$	Increment in $R^2$ attributable to the addition of a set of predictable variables
$SD$	Standard deviation
sig.	Probability obtaining a test result that occurs by chance under the null hypothesis
$t$	Computed value of $t$ -test
$<$	Less than
$=$	Equal to

## ACKNOWLEDGMENTS

I would like to express my sincere gratitude to my advisor and dissertation chair, Dr. Jeffrey Parker, for his patience and continuous support throughout the development and completion of this project. I am deeply grateful for his dedication, guidance, and mentorship during my academic and professional development at The University of Alabama. I would also like to thank Dr. Kristina McDonald for her guidance, support, and encouragement during our collaboration in the Peer Relationships Research Group. Additionally, I would like to thank Dr. Joan Barth, Dr. John Lochman, and Dr. Will Hart for serving on my dissertation committee. Your constructive feedback during the proposal meetings greatly improved my project.

Sincere thanks to my fellow graduate students in the Peer Relationships Research Group who devoted time and energy to helping me practice my presentations. Many thanks are also needed for my undergraduate student collaborators in the Friendship Lab. This project would not have been possible without your support with collecting the data for my dissertation project.

Finally, I would like to acknowledge my first Psychology instructor, Mr. James Reed. Your class undoubtedly opened the door to a lifelong love and fascination for the field of Psychology. Thank you.

## CONTENTS

ABSTRACT.....	ii
DEDICATION.....	iii
LIST OF ABBREVIATIONS AND SYMBOLS.....	iv
ACKNOWLEDGMENTS.....	v
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
INTRODUCTION.....	1
HYPOTHESES.....	29
METHODOLOGY.....	30
RESULTS.....	44
DISCUSSION.....	54
REFERENCES.....	68
APPENDIX.....	81

## LIST OF TABLES

1. Table 1.....	45
2. Table 2.....	46
3. Table 3.....	48
4. Table 4.....	50
5. Table 5.....	52
6. Table 6.....	53
7. Table 7.....	53

## LIST OF FIGURES

1. Figure 1.....	4
2. Figure 2.....	47
3. Figure 3.....	49

## INTRODUCTION

Parents contribute to their children's successful and unsuccessful peer relations in a variety of active and proactive ways (Abaied & Rudolph, 2011; Ladd & Pettit, 2002; Mounts, 2008; Parke et al., 2002; Ross & Howe, 2009; Rubin, Bukowski, & Parker, 2006). For example, parents often facilitate and provide permission for children to participate in peer activities (McDowell & Parke, 2009; Vernberg, Beery, Ewell, & Abwender, 1993), direct children away from deviant peers and toward prosocial peers (Mounts, 2000), and provide problem-solving or coaching about social challenges with peers both concurrently (Finnie & Russell, 1988; Mize & Pettit, 1997) and reactively (Laird, Pettit, Mize, Brown, & Lindsey, 1994; McDowell, Parke, & Wang, 2003). Of course, positive child outcomes also appear for a variety of reasons outside of parents' efforts to help (e.g., Pettit, Bates, & Dodge, 1997; Steinberg, Fletcher, & Darling, 1994), but when parents are motivated to prevent or remediate social difficulties, their children benefit (Ladd & Pettit, 2002).

Although existing evidence lends support for linkages between parents' efforts to assist their children with peer difficulties and their offspring's social adjustment, little is understood about why some parents provide such intervention whereas others do not (Tilton-Weaver & Galambos, 2003). In addition to contributing to our broader understanding of why parents parent the way they do, a better understanding of parents' thinking and motivations around decisions to assist their children in this domain could be helpful for emerging efforts to foster such behaviors in parents. Recently, several efforts to promote parents' involvement in their offspring's peer relationships have been reported (Mikami, Jack, Emeh, & Stephens, 2010; Mikami, Lerner,

Griggs, McGrath, & Calhoun, 2010). To date, however, these efforts have lacked a firm basis for understanding the reluctance of some parents in this area.

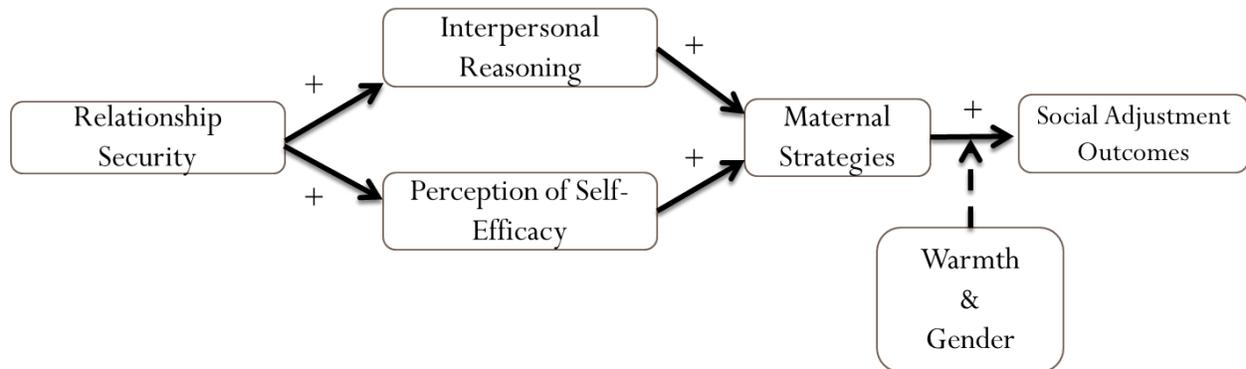
In this dissertation, I explore two factors that may predict parents' effective coaching in their children's peer-related difficulties. First, I propose that some parents possess a more elaborate understanding of the nuances related to their children's social challenges than others do. I argue that parents that possess a more sophisticated understanding of their children's peer-related difficulties are more likely to intervene because they are better positioned to recognize emerging problems and devise thoughtful strategies for how their children can resolve social dilemmas. To make this argument, I draw parallels with an established literature demonstrating that the ability to effectively reason through social difficulties helps individuals diagnose their own and others' behaviors and solve interpersonal conflicts. This body of literature has focused on the interpersonal conflicts of children and adolescents (e.g., Selman, 1980; Selman, Beardslee, Schultz, Krupa, & Podorefsky, 1986), but has also been applied to the conflicts of adults in a few investigations (e.g., P. F. Weitzman, 2001; P. F. Weitzman & Weitzman, 2000; P. F. Weitzman & Weitzman, 2001). The present study is designed to explore whether better interpersonal reasoning skill enables parents to effectively think about their children's interactions with peers and provide more coaching suggestions to their children during peer-related challenges.

I also propose that parents are more likely to provide coaching ideas when they consider this domain to be an area where parents have the responsibility and authority to assist their children and possess an expectation that their coaching will be successful. In the present study, I investigate if perceived self-efficacy over children's social relationships will predict parents' coaching suggestions regarding their young adolescents' peer-related difficulties.

Finally, to understand why some parents feel more efficacious and reason more soundly about their child's peer difficulties, I propose that these qualities are outgrowths of parents' secure and trusting attitudes about relationships. I hypothesize that parents with secure and trusting attitudes toward relationships in general are more likely to have a flexible, deep, and proficient understanding of not only their own problems, but the problems faced by their adolescent as well. These parents may also be more likely to perceive a greater sense of parenting self-efficacy in their children's friendship interactions. Numerous prior studies have shown that adults with secure and trusting social outlooks are more socially adjusted and capable of reasoning in sophisticated ways about the social problems they face than adults with insecure outlooks (e.g., Davila, Hammen, Burge, Paley, & Daley, 1995). To my knowledge, however, it has not been previously demonstrated that a secure and trusting relationship outlook predicts parents' ability to reason about their children's interpersonal difficulties or how parents' perceive the management of their young adolescents' friendships. Thus, in addition to helping better understand parental coaching, this study will advance our broader understanding of the implications of security for development.

Figure 1 summarizes the guiding framework for this study in the form of a conceptual model. Greater parental relationship security is hypothesized to contribute better interpersonal reasoning and more parental self-efficacy. The sophistication of parents' interpersonal reasoning and their feeling more efficacious about their ability to positively influence their children's social relationships are hypothesized to positively relate to more effective coaching suggestions. In turn, parents' coaching ideas will have positive implications for their children's social adjustment outcomes. Mother-child relationship warmth and adolescent gender are examined as

being potential moderators on the link between maternal strategies and adjustment outcomes, as mixed and contrary results have been found in previous studies (see Figure 1).



*Figure 1. Conceptual model*

To test the conceptual model in Figure 1, mothers were given dilemmas in which their child became embroiled in a disagreement with a peer over third-party interferences in a friendship that caused feelings of jealousy. Friendship jealousy is a challenging social circumstance with known risks for aggression, poor self-view, loneliness, and friendship difficulties (Parker, Kruse, & Aikins, 2010). Therefore if this study is successful it will provide insight into how parents think about and assist their children with friendship difficulties related to jealousy. In the first section of the following literature review I discuss the research on adolescents' friendship jealousy.

Next, I review the general literature on parental influences on their offspring's peer relationships. I describe the little research to date that has assessed this parenting behavior and present support for the premise that it is beneficial to children when parents manage and provide assistance in their children's peer-related difficulties.

Following this, I introduce the concept of interpersonal reasoning skill, outlined particularly in the conceptual framework offered by Robert Selman (Selman, 1971, 1980, 1981; Selman et al., 1986). I discuss Selman's framework and describe evidence supporting the

premise that individuals who are capable of reasoning about interpersonal difficulties in more sophisticated ways are better adjusted. Then, I suggest that the ability to reason about interpersonal difficulties could account for why some parents' actively manage their young adolescents' social relationships

Next, I introduce the concept of parents' self-efficacy as it applies to their adolescents' friendships. Parenting self-efficacy includes parents' feelings of empowerment, expectancy of success, and beliefs about the appropriate domains of parental authority. I argue the more parents feel effective and believe their adolescents' social relationships fall within their domain of authority, the more inclined they are to provide advice to their children about peers.

Lastly, I review the role of relationship security on parents' interpersonal reasoning about their children's social difficulties. I review evidence that the tendency to view relationships in more secure ways is linked to various elements of parenting, and make an argument that relationship security should relate to how parents think and reason about their young adolescents' interpersonal dilemmas. I also argue that such parents are also more likely to feel efficacious regarding their children's social relationships.

My introduction concludes by presenting a summary of my research aims and hypotheses.

## **Friendship Jealousy**

Friendship jealousy is a negative cognitive, emotional, and behavioral reaction triggered by a close friend's actual or anticipated involvement with another peer (see Parker et al., 2010, for review). Although all individuals experience disappointment and distress to some degree when third parties threaten to monopolize a friend's attention, research suggests that some individuals are consistently possessive and react negatively to their friend's relationships with

others (Lavallee & Parker, 2009; Parker, Low, Walker, & Gamm, 2005). While the experience and expression of jealousy vary based upon the extent of situational factors, research with children and young adolescents indicates that a proneness to jealousy is stable over periods up to a year. Girls and younger children appear to be more prone to jealousy than boys and older children (Parker et al., 2010).

Reviewing numerous studies in this area, Parker and colleagues (2010) suggest that jealous individuals are at risk for a variety of inter- and intrapersonal difficulties during childhood and adolescence. Specifically, jealous individuals report being victimized and feel less well liked by peers, experience anxiety and sensitivity to rejection, and feel more dissatisfied and lonely in relationships (Parker et al., 2010; Parker et al., 2005). Highly jealous individuals also report strong feelings of anger, low self-worth, increased conflict in relationships, and less relational closeness, more so than their less jealous peers (Lavallee & Parker, 2009; Parker et al., 2010).

In addition to the strong emotional responses linked with jealousy, highly jealous individuals also engage in maladaptive behavioral responses. Highly prone individuals have a reputation with their peers as being aggressive (Parker et al., 2005). This aggression can appear in direct forms as efforts to intimidate, yell, or physically assault another peer. However, jealous individuals may also try to minimize these direct forms of aggression to escape the social stigma attached to being jealous and avoid appearing as a less desirable social partner (White & Mullen, 1989). As such, they may engage in passive (e.g., whining, threats of friendship termination, guilt induction) or social (e.g., spreading rumors, gossiping, or excluding others) aggression. By behaving in these indirect ways, highly jealous individuals may achieve retaliation while avoiding some of the social accountability linked to direct forms of aggression (Björkqvist,

1994). Regardless of form, however, aggression undermines and compromises the quality of a friendship when friendship partners grow weary of it or of the chronic demands for exclusivity in a relationship (Lavallee & Parker, 2009; Parker et al., 2010). In short, being jealous in a friendship can present many emotional and behavioral difficulties in a relationship. It disrupts friendships, disturbs group functioning, and leads to a reputation for being aggressive and becoming less well liked.

In view of the overall difficulties associated with being jealous, it is arguably important to investigate how parents think about and respond to jealousy when it arises in their children's friendships. Peer-focused parenting may be an important protective factor for offspring that are jealous. However, before they can effectively provide assistance, parents need to be able to notice and think powerfully about the cues signaling their child's difficulty with jealousy. Some of these cues will be obvious, as when a child has an emotional outburst of fights with a peer. But others can be subtle, as a child that suddenly loses or denies interest in talking with or spending time with a particular child who has been a friend. In fact, one form of subtle aggression that is a documented response to jealousy is ignoring someone (Parker et al., 2010). It may take special vigilance for a parent to notice when something expected is not happening rather than when something unexpected is happening.

In summary, jealousy can negatively influence peer experiences (Parker et al., 2010). This should be an area that challenges parents to think about their children's emotions and understand how it can impact their children's interactions with peers. Parents may be able to help their children with jealousy by clarifying the social circumstances with peers and by giving suggestions on how children can best respond to it.

## **Parental Influences on Young Adolescents' Social Adjustment**

There are many ways in which parents can intentionally influence their children's peer experiences (Ladd & Hart, 1992; Mounts, 2000). One example is through direct conversations with their children with the intent to prevent or remediate difficulties that arise within friendships and interactions with peers. The term coaching is used to describe the direct parental practice of giving advice and assistance with the intention to promote positive interactions with peers (Mize & Ladd, 1990; Mize & Pettit, 1997; Pettit & Mize, 1993). Coaching involves discussing the motives of their child and child's peers, clarify their child's goals, encourage their child to engage in adaptive coping strategies, and instruct their child to rehearse precise social responses. Parental coaching can either be prompted by the child or can occur spontaneously. Parents of young children often coach during their children's live peer interactions, but as their children develop, coaching typically takes place after-the-fact and away from peers. When parents coach behind the scenes and at a later time, they are often reliant on what their children divulge regarding the peer difficulty to inform their decision making on how to coach their child (Brown & Bakken, 2011; Bumpus & Rodgers, 2009; Smetana, 2008). However, parents can also utilize knowledge from their own past experiences when responding to their children (Bourdeau, Miller, Duke, & Ames, 2011; Crouter, Bumpus, Davis, & McHale, 2005; Updegraff, McHale, Crouter, & Kupanoff, 2001)

Researchers have used several techniques to study parents' coaching. On occasion, researchers place parents in live-but-contrived experimental situations in which they are presented with opportunities to spontaneously help their children with an ongoing peer interaction (Finnie & Russell, 1988; Russell & Finnie, 1990). For example, Russell and Finnie (1990) created a staged peer interaction in the lab to provide an opportunity to study mothers'

efforts to help integrate their young children into a play session. Their findings indicated that children had higher teacher-rated social status when mothers provided concrete suggestions on how to join a peer activity and lower teacher-rated social status when mothers gave little to no instruction (Russell & Finnie, 1990). While this methodology allows researchers to realistically capture differences in the ways in which mothers encourage children's peer interactions, it is not helpful for uncovering what motivates the techniques mothers select and the factors mothers follow before deciding to influence their children's peer relationships (Ladd, Le Sieur, & Profilet, 1993).

As an alternative, some researchers prefer videotaped or written hypothetical social dilemmas with discussion prompts to determine the cognitions and reasoning behind mothers' coaching (Werner & Grant, 2009). For example, Werner, Senich, and Przepyszny (2006) studied the qualities of mothers' responses to hypothetical situations depicting their young children engaged in physical and relational aggression with peers. Videotaped and hypothetical dilemmas have the advantage of permitting researchers to control the conditions under which conflict arises, the nature and behavior actors involved, and the complexity of the dilemma (Hopmeyer & Asher, 1997). Because my interest in the present study centers on the thoughts and motivations of mothers in these types of situations, like these researchers, I use hypothetical vignettes and open-ended interview questions that permit me to better understand the social cognitions and processes behind parents' coaching ideas.

Regardless of the specific method used, the existing literature suggests that children benefit when parents engage in coaching about peer relationships and actively promote positive peer interactions (Ladd & Pettit, 2002; Parke et al., 2002). Werner and colleagues (2014), for example, investigated whether the quality of mothers' coaching discourages the development of

young children's relationally aggressive behavior. Werner et al. (2014) found that among young children with initially high levels of relational aggression, when their mothers employed moderate to high levels of elaborative, emotion-focused coaching, children were less relationally aggressive with peers one year later. Emotion coaching in this instance consisted of global and discrete codes for elaborative emotional references. Children whose mothers had lower levels of elaborative, emotion-focused coaching were more aggressive (Werner et al., 2014). In light of evidence that relational aggression is generally stable across early and middle childhood (Ostrov, 2010), Werner et al.'s evidence that mothers' effective coaching disrupts the trajectory of young children's aggression is noteworthy.

Mikami et al. (2010a; 2010b) conducted a friendship-coaching intervention for parents of children and young adolescents with attention-deficit hyperactivity disorder. Mikami et al. (2010a; 2010b) found that children improved in social skills when their parents learned better coaching techniques. Coaching in this instance consisted of parents using praise about their children's interactions with others, facilitating their child's activities with peers, or instructing their child to behave in a desired manner with peers. Children of parents that completed the training had more teacher-reported peer acceptance, higher parent-reported friendship quality, and lower parent-reported peer conflict compared to children of parents that did not receive the training.

The quantity of parents' coaching also appears to predict greater adolescent-reported friendship intimacy and companionship in newly formed friendships (Vernberg et al., 1993). In a study of young adolescents who had just moved to a new geographic area, Vernberg and colleagues (Vernberg et al., 1993; Vernberg, Greenhoot, & Biggs, 2006) investigated the friendship facilitation strategies parents provided to their young adolescents. Coaching in

Vernberg et al.'s studies (1993; 2006) was operationalized as parental encouragement of activity, talking with children, and specific efforts to promote proximity to peers, such as encouraging children to talk or make an effort to spend time with peers. Vernberg et al. found that children of parents that gave more coaching had better social adjustment over an eight-month period compared to children of parents that did not.

Studies have also found that parents are more likely to engage in coaching when their children are having broad adjustment difficulties. For example, McDowell and colleagues (2009; 2003) investigated parent-child discussions with older children and found parents of children with lower peer-rated acceptance and social competency did more coaching than parents of better-adjusted children. Similar findings have been reported by Laird and colleagues (1994). Mize (1995) found that mothers encouraged more peer interaction in an observational study when they viewed their children as lacking in social skills. At first glance, these findings appear contrary to the conclusion that parents' intentional efforts to give advice and facilitate children's social relationships are beneficial. However, the authors of these studies offer an alternative explanation. They suggest that parents of children who have difficulties with peers are more motivated to encourage peer activity and engage in conversations about peers than are other mothers.

To be motivated to help, however, mothers must be aware of and remain knowledgeable about their children's peer-related difficulties. That is, parents are likely to provide assistance only when they see the need to prepare their children for particular peer problems or when they correctly recognize that their child is experiencing a problem with a peer (Kerr & Stattin, 2000; Stattin & Kerr, 2000). Parker, Nielsen, and McDonald (2015) explored parental accuracy by representing mothers' ability to recognize their young adolescents' vulnerability to jealousy. The

authors posed identical vignettes to mother-adolescent dyads. These authors found when mothers were accurate about their children's jealousy their children had better social adjustment. Parker et al., however, did not directly study mothers' coaching and instead simply assumed coaching was the mechanism that linked mothers' accuracy to their child's social success. Direct assessment of mothers' coaching would be helpful.

Parents' beliefs and goals about their children's peer relationship influences can also impact parental intervention and children's social adjustment. MOUNTS and colleagues (MOUNTS, 2008, 2011; MOUNTS & KIM, 2007) have found that parents' beliefs and goals about improving their adolescents' peer relationships were linked with parents' intervention and coaching techniques. In a 9-month longitudinal study, MOUNTS (2011) found that when parents had a greater number of goals about improving their adolescents' peer relationships, they were more likely to coach and have fewer conflicts with their adolescents about peers. Subsequently, mothers that coached more and had fewer conflicts with their offspring about peers also had adolescents that reported better social skills over time.

Another social-cognitive factor that may play a role in parental coaching includes parents' thoughts and recollections about their own peer experiences and friendships (PUTALLAZ, COSTANZO, & KLEIN, 1993; PUTALLAZ, COSTANZO, & SMITH, 1991). PUTALLAZ et al. (1991) found that mothers with anxious recollections of their own childhood peer experiences also had children who were more socially competent compared to mothers with positive or negative recollections of their peer interactions. Mothers with anxious thoughts and memories about peers expressed more suggestions for their children to avoid and bypass negative experiences with peers. PUTALLAZ et al. suggest that parents with anxious memories take a more active role in their children's social

development because they are able to use their memories of their distressing experiences with peers to anticipate their children's peer difficulty.

The child's gender may also influence parents' coaching quality and quantity. Studies have shown that boys report more peer-related parental intervention than do girls (Soenens, Vansteenkiste, Smits, Lowet, & Goossens, 2007). Conversely, other work indicates that parents communicate more preferences about friendships (Tilton-Weaver & Galambos, 2003) and to give more friendship facilitation advice (Vernberg et al., 1993) to their adolescent girls than to their adolescent boys. Thus, aside from indicating that gender may be an important consideration, existing research is inconsistent regarding whether parents get involved and coach more with boys versus girls. I investigate whether mothers provide more coaching strategies for their sons versus daughters.

The effectiveness of coaching and involvement in the peer domain may also differ between sons and daughters. In one stance, parental involvement was shown to predict greater friendship closeness for adolescent boys, but not for adolescent girls (Updegraff et al., 2001). Conversely, the quality of mothers' coaching predicts girls' social competency, but not that of boys' (Mize & Pettit, 1997). Other studies show mothers' normative beliefs about relational aggression are linked to girls' normative beliefs but not to boys' (Werner & Grant, 2009) and that maternal attributions of hostility are strongly correlated with girls' hostile attributions (MacBrayer, Milich, & Hundley, 2003). Thus, existing studies are also inconsistent regarding whether coaching is more successful with one gender or another. Accordingly, in this dissertation, I examine whether gender moderates the association between mothers' coaching ideas and young adolescents' social adjustment.

As mentioned earlier, children's social adjustment can be influenced by many aspects other than parents' intentional efforts to promote social success in their children through coaching. For example, children's social adjustment and aggressiveness has been found to be sensitive to strife and discord between other family members, especially marital violence (e.g., Wilson & Gottman, 2002). In addition, a great deal of accumulated evidence exists that highlights how broader factors of the parent-child relationship—that is, factors other than parents' intentional efforts to control, coach, or discipline their child—also influence children's social adjustment (see Ladd & Pettit, 2002). Of particular interest, there is considerable evidence that children who have warm and responsive relationships with their parents generally also have more successful friendships, feel more positive about their peer relations, and behave in more socially skilled ways (Isley, O'Neil, Clatfelter, & Parke, 1999; McFadyen-Ketchum, Bates, Dodge, & Pettit, 1996).

Evidence that children's social adjustment is also influenced by broader aspects of the parent-child relationship poses a challenge to conclusions about coaching. Specifically, because parents who coach are also likely to be more warm and responsive (Ladd & Pettit, 2002), it is difficult to establish that links between coaching and good adjustment outcomes in children are due to coaching *per se* rather than these broader factors.

Few studies have addressed the role that warmth and responsiveness may play in confounding the conclusions between coaching and child adjustment. Of the several studies cited above on this topic, only one appears to have given explicit attention specifically to this issue. Mize and Pettit (1997) controlled for parental responsiveness before considering how coaching was related to outcomes in children. They reported that coaching contributed over and above the

influence of the broader relationship, pointing to the unique contribution of coaching to children's adjustment.

However, Mize and Pettit (1997) also considered the possibility that the broader warmth and closeness of the relationship might moderate the relationship between coaching and adjustment in children. These authors reasoned that, like other forms of intentional socialization parents engage in (Ladd & Pettit, 2002), the effectiveness of coaching for peer adjustment depends importantly on the receptivity of the children to their parents' efforts. A child will not be influenced by parents' coaching unless it takes place in the broader context of a relationship that is warm and responsive and promotes interest and receptivity on the part of the child.

Results for this provocative hypothesis were mostly inconclusive however. All but one of the child outcomes they considered did not show evidence of moderation. The exception was aggressiveness. Parental responsiveness did not moderate the relation between coaching and aggressiveness among girls. However among boys, and contrary to hypotheses, greater coaching was associated with less aggression only among boys whose mothers were less warm and unresponsive.

Mounts (2002) also examined the impact of parenting style as moderating the relation between coaching and adjustment in adolescents. Mounts found that adolescents reported lower levels of deviant behavior (e.g., drug use) when their parents used authoritative compared to uninvolved parenting styles. The findings suggest that adolescents may be more responsive to parental involvement in their peer relationships if the style of parents' involvement is warm and responsive rather than less warm and unresponsive. Thus, Mounts' findings are consistent with the argument that coaching effectiveness depends on warmth and responsiveness, but

inconsistent with the findings from Mize and Pettit (1997). Overall, then, it is difficult to reach any conclusions about the possible moderating role of the relationship.

In the present study, I determine if coaching strategies are linked to adjustment after controlling for relationship warmth. As others have found, I anticipate that coaching suggestions will be related to outcomes even after controlling for relationship warmth. Thus, I expect to observe that coaching ideas make a unique contribution to adjustment. I will also explore whether relationship warmth moderates the link between coaching strategies and adjustment for boys and girls. Because of the mixed and contrary results found in the past, this analysis is considered exploratory.

In summary, mothers may coach more when they recognize that a child is especially vulnerable to adjustment difficulties, but not all mothers are equally accurate. Coaching is influenced by mothers' own past experiences, by the value they place on social success, and perhaps also by their adolescent's gender and parental climate.

This study examines the impact of mothers' coaching strategies around a circumstance that has been associated with many other peer difficulties with friends. As noted earlier, a proneness to jealousy is related to feelings of low self-worth and can compromise the quality of a friendship (Lavalley & Parker, 2009; Parker et al., 2005). Given jealousy's link with these friendship difficulties, it is arguably an important domain in which to examine mothers' coaching effectiveness. I hypothesize more coaching ideas in jealous circumstances will predict less friendship jealousy, higher social self-esteem, and greater friendship closeness. These associations between coaching strategies and social adjustment are expected to appear over and above the contributions of relationship warmth. I also explore if the link between coaching suggestions and social adjustment is moderated by adolescents' gender or relationship warmth.

## **The Importance of Interpersonal Reasoning**

Although coaching studies have started to address how and why mothers provide assistance to their children when peer-related difficulties surface in children's lives, more information is needed to determine which factors enhance and promote parents' coaching effectiveness. Specifically, the existing coaching literature has several gaps related to parents' social cognitions about their children's peer interactions and the process about how cognitions can foster better parental intervention. For example, despite the promising work on parents' knowledge, beliefs, and past histories, there is still much to be learned about the social cognitive variables related to parenting techniques in the peer domain. It has not been established how parents interpret, reason through, and provide assistance when they are confronted with their child's problem with a peer.

One promising approach to investigating the social cognitive factors related to parents' coaching techniques includes investigating how individuals understand and coordinate multiple perspectives within interpersonal dilemmas (Selman, 1980; Selman et al., 1986; Selman & Demorest, 1984, 1986). Influenced by theories of cognitive development and based on over 30 years of research, Selman and his colleagues have posited a model of social cognitive development in the context of interpersonal problem solving (Selman, 1980; Selman et al., 1986; Selman & Schultz, 1990). Selman's model describes a developmental sequence of qualitative changes in social perspective taking resulting in increasingly abstract, powerful, and flexible ways of thinking about social dilemmas and effective strategies for how to handle them.

Selman's development model was inspired by the structural-developmental approaches of Piaget (Inhelder, Piaget, Parsons, & Milgram, 1958; Piaget, 1932) and by Kohlberg's (1969) stage theory of moral judgment. Both emphasize a stage-like progression of cognitive

understanding and restructuring of information in social interactions. Selman's (1980) model also closely mirrors and is influenced by Mead's (1934) social conceptual model in which the ability to engage in role taking is both at the core of social intelligence and is a source of a sense of self. To chart developmental changes, following Kohlberg (1969), Selman and colleagues use individuals' open-ended responses to semi-structured prompts based on craft dilemmas (Brion-Meisels & Selman, 1984; Selman, 1971; Selman, Schorin, Stone, & Phelps, 1983).

According to Selman (1980), the strategies that individuals employ to resolve interpersonal conflict can be ordered hierarchically from very poor to very good. Better strategies integrate the points of view of the self and others and are powerful. Poorer strategies are one-sided and often lack flexibility. The lowest developmental level of social perspective taking (Level 0) characterizes young children as egocentric thinkers. Individuals are unaware of the presence of others' perspectives and may act impulsively when confronted with interpersonal dilemmas. As sophisticated perspective taking increases (Level 1), children gradually identify others' perspectives as being separate from their own. However, children often have difficulty examining others' views simultaneously and favor one perspective, often their own, over others. By early adolescence, individuals get better at simultaneously recognizing others' points of view and imagining what their own perspective looks like from the viewpoints of others (Level 2). However, it is not until the period of adolescence and early adulthood that individuals develop mutuality in their relationships. As perspective taking grows, individuals begin to perceive their own and others' perspectives from a third-person vantage point. Adolescents collaboratively develop goals when they think about and attempt to resolve their interpersonal disputes with others (Level 3). However, this final level is only attained by some individuals during adolescence, whereas others never reach it (Selman et al., 1986).

Selman and colleagues (Selman, 1980; Selman, et al., 1986; Selman & Schultz, 1990) also assume considerable individual variability exists at any given age. To assess these individual differences, Selman and colleagues created the Interpersonal Negotiation Strategies (INS) Interview (Schultz, Yeates, & Selman, 1989; Selman et al., 1986). The INS Interview consists of hypothetical vignettes depicting a protagonist that encounters interpersonal dilemmas with familiar and unfamiliar peers. After hearing each vignette, participants are asked open-ended questions to assess their capacity to coordinate multiple perspectives and reason about the dispute. To structure their responses and ensure the opportunity for thorough evaluation, respondents are prompted to define the problem, generate and select strategies and evaluate the outcome. Responses in these areas are used to classify individuals into one of the four overarching developmental levels outlined above

Studies with the INS have found that important links exist between level of reasoning and social adjustment. In an observational study of adolescents ranging in age from 13 to 18, Leadbeater, Hellner, Allen, and Aber (1989) found that boys with lower interpersonal reasoning had greater involvement in problem behaviors (e.g., drug use, risky sexual activity, delinquent acts). Conversely, higher reasoning for both adolescent boys and girls was positively associated with better social problem solving skills. In another sample of adolescents, ranging in age from 11 to 19, reasoning level predicted adolescents' adaptive social functioning after controlling for the age and gender of the adolescents (Beardslee, Schultz, & Selman, 1987). Finally, in a sample of young adolescents ranging in age from 9 to 12, Yeates, Schultz, and Selman (1991) found that INS level was associated with higher teacher-reported interpersonal negotiation in actual conflict situations and greater peer acceptance.

Although not originally intended to investigate adults' reasoning and resolution of interpersonal dilemmas, Selman's (1980) developmental model has been applied to adult conflicts (e.g., Schultz & Selman, 1998; Selman et al., 1986; P. F. Weitzman, 2001; P. F. Weitzman & Weitzman, 2000). Modifying the INS interview, Weitzman and Weitzman (2001) coded adult women's interpersonal negotiation strategy levels from open-ended interviews involving recent conflicts with coworkers, spouses, parents, and friends, Weitzman and Weitzman (2001) found that lower-level INS reasoning was associated with greater emotional distress over relationships. Women that reasoned poorly also had difficulty generating adaptive strategies to conflicts and were likely to become emotionally overwhelmed. Conversely, women that reasoned at higher-levels remained aware of their emotional states, clearly understood the context in which their dispute occurred, and maintained a greater social understanding as it related to the others' behaviors. The authors argue that higher levels of reasoning positions women to effectively manage their interpersonal conflicts.

Given Selman's original work and the follow-up contributions provided by Weitzman and colleagues (E. A. Weitzman & Weitzman, 2014; P. F. Weitzman, 2001; P. F. Weitzman, Chee, & Levkoff, 1999; P. F. Weitzman & Weitzman, 2001), it would appear mothers that are able to understand and reason powerfully about their children's behaviors should be positioned to more effectively provide assistance to their children about social disputes. Conversely, mothers who are unable to understand and reason powerfully may have difficulty providing help to their child. As such, I predict that mothers with better interpersonal reasoning will be mothers that provide more coaching strategies and have more socially successful children.

## **Parental Self-efficacy**

Parental self-efficacy may be a second factor that influences parents' efforts to help their children through peer difficulties. Self-efficacy generally is the belief that one has the authority and capability to do a behavior or task (Bandura, 1977, 1982, 1989). Applied to the domain of parenting, self-efficacy refers to parents' estimations of their competence in the parenting role, parents' perceptions of their ability to have a positive impact on their children's behavior, and parents' beliefs that they have a legitimate right to intervene in their children's lives (Bandura, 1977; Coleman & Karraker, 1998; Grusec & Goodnow, 1994; T. L. Jones & Prinz, 2005).

Parents with a high perceptions of self-efficacy are likely to be parents that create nurturing, healthy, and positive environments for their children (Coleman & Karraker, 1998). They adopt adaptive parenting behaviors and are responsive and nonpunitive when interacting with their children (Donovan & Leavitt, 1985). These parents experience greater parental warmth with offspring (Dumka, Stoerzinger, Jackson, & Roosa, 1996) and engage in positive and active parenting interactions with their children (Mash & Johnston, 1983a). When these parents are faced with difficult behavior from their children they face it optimistically and creatively utilize their parenting skills and environmental resources to address it (Donovan, Leavitt, & Walsh, 1990; Elder, 1995). Indeed, children of parents with greater parenting self-efficacy indicate that their parents engage in more positive and effective parenting practices (Bogenschneider, Small, & Tsay, 1997).

There is evidence that children benefit from parents that believe they have the ability to effectively influence their children's behavior (Coleman & Karraker, 2000). Adolescents of parents with high parenting self-efficacy report better adjustment, fewer behavioral problems such as substance abuse and delinquency, and greater seeking out parents to confer about

personal problems (Bogenschneider, et al., 1997). In a review of the role of parenting self-efficacy on child adjustment, Jones and Prinz (2005) found that parenting self-efficacy was both directly and indirectly related to children's self-regulation, self-worth, and social interactions. Researchers have also found greater parenting self-efficacy to be negatively correlated to children's anxiety (Hill & Bush, 2001) and positively associated with children's self-efficacy (Ardelt & Eccles, 2001). Parents with high self-efficacy maintain more positive influences on their children's social competence compared to parents that lack efficacy in their parenting role (Swick & Hassell, 1990).

Conversely, when mothers feel they have little or no efficacy over their childrearing, their responses to children are harsh and punitive (Bugental, Lewis, Lin, Lyon, & Kopeikin, 1999). Parents with low parenting self-efficacy view their children as being difficult and unresponsiveness (Halpern, Anders, Garcia Coll, & Hua, 1994). In addition, low self-efficacy is linked to feelings of helplessness in parents (Donovan et al., 1990) and a greater likelihood to give up when faced with stressful parenting situations (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Mash & Johnston, 1983b). Parents with low efficacy are also likely to be parents with more parental stress (Scheel & Rieckmann, 1998).

Although parenting self-efficacy is generally lower among parents of adolescents than among parents of young children (Ballenski & Cook, 1982), it presumably is still salient as children achieve more autonomy during adolescence (Shumow & Lomax, 2002). Adolescents typically believe that their peer relationships and friendships fall outside of their parents' reach and are a personal choice (Smetana & Asquith, 1994). However, some parents perceive jurisdiction in their children's social interactions and expect success from their intervention. Mounts (2011) reported that parents who intervene and regulate their children's peer

relationships are also parents with greater feelings of authority in their children's social relationships.

In summary, associations between parenting self-efficacy and positive parenting have been found. Given this, it is reasonable to propose that to effectively provide coach ideas regarding social difficulties to their children, mothers need to believe that they would be efficacious and capable of having an impact and they need to feel that they have legitimate authority in this domain.

### **Relationship Security and Mothers' Parenting Cognitions**

Attachment theory offers a useful framework for representing interpersonal schemas and cognitions that mothers hold about the self and others. According to attachment theory (Bowlby, 1969, 1973, 1980), initial experiences with a caregiver create an internal working model through which individuals come to view the self and others and guide their interpersonal behavior. An individual that experiences early rejection from a caregiver constructs a working model of others as unreliable, threatening, and unpredictable (Bowlby, 1979). Conversely, individuals that experience early caregiver acceptance develop a working model of the self as worthy of support, and the expectation that others are reliable, comforting, and predictable (Bowlby, 1979). The internal working model an individual develops is assumed to be stable and increasingly resistant to change over time (Bowlby, 1980). In fact, recent empirical investigations have found that attachment styles are stable across the period of adulthood (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010).

For over 30 years, attachment researchers have investigated how parents' attachment styles relate to the quality of parent-child relationships and parenting (see J. D. Jones, Cassidy, & Shaver, 2015). Studies have found that lower levels of attachment-related security in

relationships is predictive of poor parental responsiveness and less support in parent-child relationships (Berlin et al., 2011; Edelstein et al., 2004; Mills-Koonce et al., 2011). For example, Selcuk and colleagues (2010) found that lower relationship security is associated with mothers' insensitivity and missing young children's signals of discomfort and distress. In a study of parent-child conflict management, La Valley and Guerrero (2012) similarly found that lower levels of parents' relationship security was related to impoverished resolution styles, whereas compromising, collaborative styles of conflict management were linked to higher levels of security. Feeney (2006) also found that greater relationship security related to more constructive parental conflict management, whereas lower relationship security was linked to children's perceptions that their parents were poor problem solvers during parent-child disputes (Feeney, 2006).

The security felt in a relationship is also predictive of how parents perceive themselves in a parenting role (Mikulincer & Florian, 1998), the parent-child relationship (Berlin et al., 2011), and family responsibilities (Kohn et al., 2012). Parents who have more secure views of relationships have more positive outlooks about parenthood (Berant, Mikulincer, & Florian, 2001; Vasquez, Durik, & Hyde, 2002). Conversely, parents with less secure views of relationships hold more negative outlooks about parenthood and view their children as more likely to be negatively adjusted (Lench, Quas, & Edelstein, 2006). Parents with less relationship security also report less responsiveness, less supportiveness, less relationship closeness, and more intrusiveness during parent-child interactions (Edelstein et al., 2004; Rholes, Simpson, & Blakely, 1995).

Parenthood is undeniably an experience rich with emotion. Well-documented links in the attachment literature have been found between parents' attachment styles and the emotions they

experience. The amount of stress experienced in parenting (Rholes, Simpson, & Friedman, 2006), the distress that appears after separating from children (Mayseless & Scher, 2000), and the dissatisfaction or hostility felt toward children (Scher & Dror, 2003) have all been linked to parents' attachment styles. Of particular interest to the current study, the less security that parents feel in their relationships, the more difficult it is for them to recall emotion-laden information (Fraley, Garner, & Shaver, 2000). In addition, parents with less relationship security are less aware of their own emotions and have difficulty recalling emotional experiences (Mallinckrodt & Wei, 2005).

While the work on how relationship security relates to parents' emotions continues to expand, more work is needed regarding how secure versus insecure parents recognize and think about their children's emotions. Attachment researchers argue that a defining feature of the security felt in caregiver-child relationships is the ease of communication about negative emotions (Bowlby, 1980; Etzion-Carasso & Oppenheim, 2000). Comfort when discussing negative emotions presumably helps parents talk to their children and recognize their children's signals of distress. In fact, parents with higher relationship security are more responsive and aware of their children's signals of sadness and fear compared to parents lacking in security (DeOliveira, Moran, & Pederson, 2005). Being at ease when communicating about negative or mixed emotions should help parents when they talk to their children to find out more about peer-related difficulties, including disputes involving jealousy.

Attachment theory also makes predictions about how parental relationship security influences interpersonal functioning and reasoning (Bartholomew & Horowitz, 1991). Bowlby (1973) proposed that the internal working model someone has is linked to how they gather and interpret the thoughts and behaviors of others. This premise has been supported in later empirical

work insofar as individuals with more relationship security have been shown to be more likely to identify and process social information in a positive manner (Dykas & Cassidy, 2011).

Conversely, individuals with less relationship security are more likely to interpret and reflect upon social information in a less favorable light (Dykas & Cassidy, 2011). In processing social information, attachment-related schemas take into account the expectations and attitudes about the responsiveness and dependability of others (Ainsworth, 1989). When interpersonal problems arise, possessing less relationship security should impede the ability to classify, strategize, and collaborate. A large body of evidence supports the claim that adults with less relationship security have difficulty processing and resolving interpersonal conflicts (e.g., Cohn, Silver, Cowan, Cowan, & Pearson, 1992; Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993; Kobak & Hazan, 1991). Adults that consistently view attachment figures as rejecting and unresponsive lack the ability to positively and adaptively generate strategies when facing conflict with important others (Corcoran & Mallinckrodt, 2000). These adults also tend to respond with anger and frustration during problem-solving episodes (Kobak et al., 1993).

In addition, Davila and Hammen (1996) found the less security women felt in their relationships the more impairment they experienced when reasoning about their interpersonal difficulties—specifically, impoverished problem identification, strategy generation, and consequential thinking. Following Selman and colleagues, these authors used hypothetical dilemmas with structured open-ended prompts to code the levels of interpersonal reasoning of women concerning peer relationships in personal and work domains. The association between interpersonal reasoning and relationship security was mediated by global self-worth, insofar as lower relationship security associated with poorer interpersonal reasoning through low self-worth. Although the findings suggested that relationship security is related to an individual's

own interpersonal reasoning about peer issues (Davila & Hammen, 1996), the study did not directly examine if security related to reasoning about the peer difficulties of someone else. Presumably, relationship security also relates to mothers' ability to reason about their children's interpersonal disputes with peers.

With regard to possible links between security and feelings of parental efficacy, Lovejoy, Verda, and Hays (1997) found that mothers' of young children with more relationship security also had higher parenting-self efficacy. Likewise, Caldwell, Shaver, and Minzenberg (2011) found that higher relationship security negatively predicted higher parental self-efficacy in a sample of at-risk mothers with children under the age of 18. Other researchers have studied first-time mothers (Kohlhoff & Barnett, 2013) and mothers of young infants (Berant et al., 2001). These studies also show that lower relationship security is related to lower parental self-efficacy, whereas greater relationship security is linked with more parenting self-efficacy.

In summary, the security mothers feel in their relationships may predict both parenting self-efficacy and interpersonal reasoning. When mothers feel more security in their relationships they should also feel authority over and expect success in helping with their children's social relationships. In addition, parents with more security in their relationships may be better equipped to understand the emotions and motives of their children and children's social partners. Accordingly, I hypothesize that more security felt in relationships will predict more sophistication in mothers interpersonal reasoning around their young adolescent's peer-related difficulties.

### **Present Study and Hypotheses**

The first aim is to explore how mothers' constructive strategies are related to their children's social adjustment. The broader warmth of the mother-child relationship also predicts

social adjustment, thus maternal suggestions' influence on adjustment will be examined over and above the contribution of relationship warmth. I also investigate whether the warmth of the mother-child relationships moderates the association between mothers' strategies and adolescents' social adjustment. Additionally, I examine whether mothers' suggestion frequency differs with their sons versus daughters and whether gender moderates the link between mothers' coaching ideas and adolescents' social adjustment. Existing literature is limited and inconsistent on these two points. In this study, mothers' constructive strategies are captured in response to situations involving friendship jealousy. Friendship jealousy is related to several maladaptive behaviors and negative social adjustment outcomes. Specifically, I explore whether more suggestions are related to adolescents' friendship jealousy and to two other variables linked with jealousy, best friendship closeness and social self-esteem. Mother-child relationship warmth and gender are also explored as moderating the association between mothers' coaching strategies and adolescents' social adjustment as exploratory analyses.

The second aim is to investigate two factors that may explain why some mothers provide behavioral strategies to their children in peer-related challenges whereas others do not. The existing coaching literature has gaps concerning how parents' social cognition of peer relationships and can foster more maternal suggestions. This study investigates the impact of interpersonal reasoning on mothers' constructive strategies as one approach. The second factor is maternal efficacy surrounding their adolescents' social relationships. Studies report associations between parenting self-efficacy and parenting behaviors. This study investigates if maternal suggestions are related to mothers' feelings that they are capable of having an impact and have legitimate authority in their child's peer domain.

The third aim of this study is to explore an antecedent to mothers' interpersonal reasoning ability and their parenting self-efficacy, namely, mothers' security in their own relationships. Previous studies demonstrate that relationship security predicts adult women's reasoning related to their own relationship difficulties, but do not establish whether their relationship security also predicts their reasoning about their children's social dilemmas. Studies also show relationship security is related to parents' feeling of self-efficacy across various parenting domains.

### **Hypotheses**

1. More maternal suggestions will predict less jealousy, higher social self-esteem, and better friendship closeness in adolescents, over and above the contribution of mother-child relationship warmth.
2. More sophisticated interpersonal reasoning will predict more constructive strategies.
3. Mothers that feel greater perceptions of parenting self-efficacy in their adolescents' peer relationships will generate more maternal suggestions.
4. Greater relationship security will predict more sophisticated interpersonal reasoning as well as greater perceptions parenting self-efficacy in adolescents' peer relationships.

In addition, analyses will examine if the warmth of the mother-child relationship as well as the gender of the young adolescent moderate the link between the strategies mothers generate and young adolescents' social adjustment outcomes. These analyses will be considered exploratory as contrary and mixed findings have been found in previous literature.

## METHODOLOGY

### **Participants and Recruitment**

Participants were 71 mother-child dyads, including the mothers of 39 young adolescent girls and 32 young adolescent boys. Mothers ranged in age from 29 to 55 years ( $M = 42.6$ ,  $SD = 5.40$ ). One Native American mother's child was Caucasian and one African-American mother's child was mixed-race, otherwise, all mothers were the same race as their young adolescent. Young adolescents ranged in age from 10 years to 15 years ( $M = 12.3$  years;  $SD = 1.30$ ). Consistent with the larger county, 55 (77%) of the participating young adolescents were Caucasian, 12 (17%) Africa-American, 2 (3%) Hispanic-American, and 2 (3%) Asian-American, other, or mixed race.

All mothers were the primary caretakers of the young adolescent, and, in instances of divorce, were the young adolescent's legal guardian. Sixty three mothers (89%) indicated that they were currently married, four (6%) had never married, three (4%) were divorced and not remarried, and one (1%) was widowed and not remarried. Subjects' household size ranged from three to nine individuals, including parents, and according to census data, families varied in socioeconomic status from lower class to upper-middle class. One mother did not finish high school, 32 (44%) were high school graduates with limited or none community college experience, 21 (29%) graduated from a four-year college or a university, and 18 (25%) had either a graduate or advanced professional degree.

Mothers were recruited as part of a larger, observational project investigating the family correlates of young adolescent friendship adjustment. The telephone numbers, names, and

addresses of 1738 families were obtained from a service that specialized in the collection of census data. The families represented all families in the census data within a single county with young adolescents in the target age range. The county consisted of largely rural or small communities located in the southern United States, and also contained a city of approximately 200,000 residents. A smaller sample of 760 potential families was randomly selected from this comprehensive pool of potential families and mailed a recruitment letter that outlined the study and invited their participation. Six hundred and sixty-three families that were mailed information on the study were subsequently telephoned during the three months following the mass mailing to ascertain their eligibility and interest. Families were required to have a young adolescent in the target age range with at least one sibling within five years of age to be eligible for the larger study. Of the participating young adolescents, 29 (41%) were first-borns, 23 (33%) were second borns, 13 (18%) were third borns, and 6 (8%) had three to five older siblings. Of the 665 families that were telephoned, 383 (58%) were not reached due to outdated or incorrect contact information or were never contacted by phone despite several call back attempts. A further 192 (28%) were contacted, but were ineligible or declined to participate in the study. Of the remaining 90 (14%) eligible and willing families, a sample of 72 was scheduled and tested in a timely manner. One family had incomplete data for technical reasons and was not used in analyses, resulting in a final sample of 71.

## **Procedure**

As part of the larger, observational project, mother-adolescent dyads were contacted by phone to schedule a 3-hour assessment in an on-campus lab. Upon arrival, trained graduate students, undergraduate students, and project staff introduced young adolescents and their mothers to the facilities and procedures. After securing informed consent, subjects were escorted

to separate rooms for individual testing. This testing lasted approximately one hour. During individual testing, young adolescents and their mothers were administered a battery of paper-and-pencil questionnaires and interviews, including all the measures used in the present investigation. Following testing, the dyads were reunited for a 2-hour sequence of interactive activities that were not utilized in this investigation. Young adolescents received \$25 and mothers received \$75 for their participation in the larger, observational study.

### **Stimulus Materials and Measures**

**Vignettes.** Mothers' interpersonal reasoning, feelings of efficacy, and dispositions to provide behavioral and emotional suggestions to their children were assessed from their open-ended responses to two of three possible structured vignettes featuring their child as the protagonist in a hypothetical dispute involving two other fictitious children of the same age and gender. The three possible stimulus vignettes presented distinct but realistic social circumstances that resulted in friendship jealousy on the part of either the mother's child or another child who is described as a long-standing friend of the mother's child. The second hypothetical child in every instant acted as the rival or interloper at the source of the confrontation.

Events in the vignettes led to an aggressive confrontation between the child and one of the two others. In particular, in one vignette the child is expecting to accompany the best friend and his or her family on a ski vacation but learns that the second child is going so instead. In retaliation, the mother's child goes into the friend's book bag and dumps the contents into the trash.

In the second vignette, the child's plan for a birthday party surprise for the best friend are ruined when the interloper pre-empts them by throwing the best friend a more lavish and exotic

party. The target child confronts the best friend and subsequently throws a cup of water on him or her in the students' homeroom.

Finally, in the third vignette, the target child becomes closer to a third child when that child confides that his or her family is moving far away and he or she is stressed and depressed and needs someone to talk with. The longstanding best friend, who is very popular in the peer group, gets upset and embarrasses the target child by tripping him or her in the cafeteria. The target child retaliates by damaging the interloper's expensive coat.

Although the circumstances and behaviors of all three individuals in the vignettes are unambiguous, their motives, feelings, understanding, and intentions are not expressly stated to permit assessment of mothers' interpretation and understanding of these. To assist them with following the characters and events and to lessen the memory load, mothers were presented with a diagram of circles that included the name of their child and the two fictitious children. As they read the story aloud to the mother, experimenters pointed to the circles signifying the corresponding characters.

The three, lengthy vignettes appear in Appendix A and all three have a common global structure and were of generally similar length. An initial portion of each vignette establishes the premise of the dispute and the characters. For example, for the vignette involving the vacation, this segment read:

“Imagine your child, has a best friend named Jamie. (Child) and Jamie have gone on a weekend skiing trip with Jamie's family every winter for the last five years. The two of them are both becoming good skiers and have always looked forward to this trip as a way to relax before going back to school after the Holiday Break. The best part is that all the expenses are paid by Jamie's family. Last year, Jamie and (Child) had a lot of fun and

(Child) can't wait to go again this year. However, one night Jamie calls (Child) and says that he is really sorry but he can't take (Child) skiing this year because his parents have invited his cousin instead. (Child) is disappointed, but he understands why Jamie can't bring him this year.

A few days later, (Child) hears that that the cousin broke his leg and can't go. (Child) calls Jamie but Jamie doesn't say anything about the trip and when (Child) asks, Jamie just shrugs it off and says his parents won't tell him anything.

One day just before Holiday Break, (Child) is out shopping. He walks into a sports store, and spots another boy from school named Kelly trying on a ski jacket and goggles. Kelly and Jamie's fathers work together. (Child) goes over to him to be friendly and asks about the ski equipment he is buying. Kelly says he needs new stuff because he is going on a ski trip with Jamie. He says 'Jamie's cousin was supposed to go, but he broke his leg. So I guess Jamie thought it'd be great if I went instead. Didn't he tell you?'

After presenting the premise segment, experimenters paused to ask the mothers a series of seven open-ended questions to solicit her interpretation and understanding (see Appendix B).

These questions in order were:

1. What's the problem here? Any why are these/is this a problem(s)?
2. What is (Child) feeling? Some people might think that is a little out of line or unnecessary. Do you feel s/he has the right to feel that way? Has s/he overreacted? Why? Is there anything else s/he could be feeling? Are there any other reasons you can think of why s/he would feel that way?
3. (Friend)'s behavior is very puzzling here. Is there any way to understand it? Do you feel (Friend) has the right to feel/act that way? Why? Is there anything else (Friend)

- could be feeling? Are there any other reasons you could think of why s/he would feel that way?
4. How about (Interloper)? How can you explain their behavior here? Do you feel (Interloper) has the right to feel/act that way? Why? Is there anything else (Interloper) could be feeling? Are there any other reasons you could think of why he would feel that way?
  5. If we were just brainstorming and you were faced with this problem with (Child), what are all the things you can think of that (Child) can do to solve this problem, if any? [After each] How would that solve the problem? Is there any way that could go wrong?
  6. What would be the best thing to do?
  7. What would be the worst thing for (Child) to do?

Experimenters then continued to the last portion of the vignette, the parental provocation. In this segment, the mother is asked to imagine that the events of the vignette have come to her attention because the events in the scenario escalated further to the point where the behavior of her child or one of the others came to the attention of school authorities, who deemed them inappropriate and contacted her. This segment was designed to permit assessment of the mothers' likely behavioral responses, her expectancies of success, and her attitudes and attributions toward the events and their children. For example, the vignette featuring the vacation disappointment concluded:

“The next day you receive a call from (Child)’s homeroom teacher. He tells you that another student saw (Child) go into Jamie’s book bag when everyone else was in the library and dump almost everything in it in the trash.”

After presenting the provocation, experimenters again prompted mothers with a series of open-ended questions (see Appendix B). Specifically:

1. What do you think parents can do in these types of situations? Is this the type of situation that parents can help with or is it out of parents' control? What would you do if this happened to your child?
2. What would you do if this really happened and you received a call from the homeroom teacher telling you that (Child) dumped Jamie's book bag? What would your immediate reaction be? Is there any more information you need to determine how you would react? What would you do and say, if anything, about the situation when you saw (Child) next? Why do you think you would react like that? How could that be helpful? How could it hurt? What else would you do? What kind of punishment does (Child) deserve? Why?

Most mothers received two of the three vignettes. Due to technical difficulties, one mother received only one. Vignettes were randomly counterbalanced such that the vignettes were assigned randomly to individual mothers and in random order but the vignettes were assigned with equal frequency across the sample of mothers. Presentation and questioning took mothers approximately 10 minutes per vignette to complete. The interviews were conducted and audiotaped by the author and trained research assistants.

**Mothers' Relationship Security.** Mother's attachment security was assessed using a subscale from the *Relationship Questionnaire* (Bartholomew & Horowitz, 1991). In the larger scale, respondents are presented with four short sketches of possible ways individuals may view personal relationships and asked to rate the extent to which they identify with each on a 7-point continuum. This rating ranged from 1 (*absolutely not at all like me*) to 7 (*absolutely like me*).

The four items were designed to correspond to the four theoretical profiles thought to characterize the significant profiles in adults' orientations to others. Given the focus of this study, various forms of insecurity were not of interest. Instead, interest was primarily in distinguishing the extent to which respondents had an open, flexible, and non-defensive orientation to social relationships. Thus, only the security item was used in analyses. This item read: "It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me" (Appendix F).

**Relationship warmth.** The warmth of the mother-child relationship was assessed using five items developed by Lamborn, Mounts, Steinberg, and Dornbusch (1991). These items tap children's perceptions of their mothers as being warm, responsive, and involved in parenting them (e.g., "I can count on her to help me out if I have some kind of problem" and "She spends time just talking with me"). To maintain consistency with other measures in the battery, the original response format was altered from having participants select true or false to a three-item scale ranging from "Not at all" (1) to "Really true" (3). Internal consistency for this five-item scale was  $\alpha = .74$  (Appendix G).

**Friendship jealousy.** To assess how jealous they were over their best friend, young adolescents were given six items (Appendix H). Items included "I think my best friend may like other friends better than me" and "I'm worried that my best friend hangs out with other people and doesn't tell me or invite me." Young adolescents were asked to read each item and indicate how often it was true of them on a 5-point scale ranging from "Never" (1) to "All the time" (5). Jealousy scores were computed by averaging responses across all 6 items. Internal consistency was high,  $\alpha = .84$ .

**Friendship closeness.** Young adolescents were asked to report on the closeness they typically experienced within their best same-sex friendship using items from the *Friendship Quality Questionnaire* (FQQ; Parker & Asher, 1993). The original FQQ consists of 41 items designed to assess young adolescents' perceived best friendship along six dimensions: conflict and five dimensions of closeness (help and guidance, personal validation and caring, intimate disclosure, companionship and recreation, and conflict resolution). Using a continuous scale ranging from 0 (not at all true) to 4 (really true), subjects were asked to indicate whether each item was accurate for their best friendship. Sample items included "We care about each other's feelings" and "We make each other feel important and special." Due to time constraints in the present study, only 10 of the original 38 closeness items were retained by selecting the 5-item help and guidance domain and the 5-item personal validation and caring domain. These 10 items were averaged to yield a single score of friendship closeness (Appendix H), and had a high internal consistency,  $\alpha = .90$ .

**Social self-esteem.** Young adolescents' social self-worth was examined by combining items from the group acceptance (4 items) and the friendship (5 items) subscales of the *Self Perception Profile for Adolescents* (SPPA; Harter, 1988). To reduce confusion and maintain consistency with other questionnaires in the battery, the SPPA response format was altered slightly from the original in the present study. Whereas the original SPPA measure required subjects to review contrasting positive and negative statements and indicate which each of the polar choices characterized themselves, in the present study, one choice from each of the polar pair of choices was presented as a declarative statement (e.g., "I have a close friend I can share a secret with" and "I am able to make really close friends"). Subjects rated how well each

statement described them on a four point scale ranging from “Not at all like me” (1) to “Really like me” (4) (Appendix H). Internal consistency was  $\alpha = .77$ .

### **Mothers’ Interpersonal Reasoning, Efficacy, and Strategies Scoring**

Mother’s responses to the vignettes were transcribed verbatim and these transcripts and the videotapes of the sessions were used to score mothers for level of interpersonal reasoning, sense of efficacy surrounding the confrontation their child experienced in the hypothetical vignette, and spontaneous explicit references to strategies they would provide to their child through this or similar peer difficulties. Separate teams of trained coders, blind to the focus of coding by the other teams, coded each domain (i.e., reasoning, efficacy, strategies) to ensure that judgments in each domain were independent. In addition, coders were kept blind to hypotheses of the study and to all other data on the participants. Each team of coders was provided a detailed training manual that included explicit definitions of the codes, sample transcripts and examples, and coding rules of thumb for resolving ambiguities. Before formal coding, coders coded pilot interviews and discussed their coding with a master coder.

Formal coding did not begin until the individuals and the team of coders as a whole reached criterion performance in terms of inter-rater reliability and conformity with the master coder. After formal coding of the actual interviews began, intermittent checks were introduced to assess and correct possible coder drift as necessary. Coders on a team were randomly assigned to code specific interviews and at least two coders were assigned to code each interview. Within an interview, coders scored each of the two vignettes separately, and scores for the separate vignettes were later combined by averaging to yield a single score for each coder. Before assigning scores, coders listened once to the entire session to lessen the memory load, become accustomed to the mother’s speaking style and idioms, and to ensure that the full context of a

statement made by the mother was evident (i.e., to ensure that a connection to an earlier thought or statement was apparent and avoid interpreting it too narrowly or incorrectly). Reliabilities over coders for specific codes are reported below.

**Level of Interpersonal Reasoning.** The sophistication of mothers' reasoning surrounding jealous conflicts was represented from coders' judgments of her open-ended responses to the seven prompts that followed the introduction of the premise in the initial portion of the vignettes. Specifically, following Selman (1980) and Schultz et al. (1989), four coders considered mothers' responses to the questions concerning how best to characterize the problem the child faced, what the child, the friend, and the interloper might be feeling, and how to resolve the dispute. For each of the seven prompts, coders assigned one of Selman's four levels of sophistication to the mother's responses, as follows:

Mothers were given a score of 0 if the response reflected a lack of consideration for the multiple perspectives involved. Responses at this level showed an apparent neglect of the motives and feelings of the parties involved, apart from superficial references to what might happen next. Examples at this level include: "I don't see a problem" or "He (the Interloper) should get a different friend." Responses that consisted of global, diffuse, passive, unworkable, wishful, and superficial suggestions (e.g., "there is nothing he can do," "it happens", "just ignore them") when they were not accompanied by evidence of any insight into the problem or individual, were scored at this level.

Mothers were given a level of 1 for responses that demonstrated some insight into the problem and some connection between the problem and recommendations to the child but were otherwise singularly concerned with only one party's perspective on the issue (typically the mother's own child's). Consideration of multiple perspectives could be scored as a 1 if the

mother mentioned these but did not make connections between these multiple perspectives and the actions of the characters or did not recognize complex or conflicting feelings that may be behind confusing behavior. Solutions offered at Level 1 were simplistic and resolved it by skirting the core issues.

Mothers were given a score of 2 for responses that recognized competing motives and perspectives in the various actors and a concern for fairness for all. However, at Level 2 insights into the various characters and their motives and options were not well coordinated. Responses that did not address how the actors could reach a mutually satisfying agreement were also coded as level 2.

Finally, mothers were scored as Level 3 when their responses reflected not only mutual recognition and understanding and the desire for all actors to work together to solve the problem, but also respect for each child's concerns and evidence that the mother could envision a way for the children to collaborate to solve the issue and move forward successfully and in ways that would minimize later difficulty and resentment.

The complete scoring of mother's interpersonal reasoning sophistication is outlined in Appendix C. Because mothers' responses to each of the seven prompts were not independent (i.e., answers to one prompt often served as the necessary basis for answers to a later one), coders' scoring of each separate prompt were summed across prompts to yield an overall score for each coder. Following Brennan (1992), reliability across coders was assessed using an inter-class correlation with appropriate modification to account for the fact that the design was not fully crossed (i.e., sets of coders coded only partially overlapping sets of mothers; Alkharusi, 2012). Inter-rater reliability was .88, .88, and .91 for the ski trip, birthday surprise, and big move

vignettes, respectively. Accordingly, the coders' judgments of the mothers' responses were averaged into a composite score for each vignette.

**Parenting self-efficacy.** Mothers' sense of efficacy surrounding her child's peer difficulty was scored primarily from her responses to the prompts "What do you think parents can do in these types of situations?", "Is this the type of situation that parents can help with or is it out of parents' control?", and "What would YOU do if this happened to your child?" following the complete presentation of the vignette, including the introduction of the information on the escalation of the problem to the point of school intervention. Although the three coders that scored this construct focused primarily on the mothers' responses to these three questions, coders were also encouraged to use pertinent maternal responses to other part of the interview to make their judgments. Coders rendered a single comprehensive rating of each mother using a five-point scale (see Appendix D).

A score of (4) was assigned to responses that were optimistic and indicated responsibility for intervening (e.g. "I'd make sure to help my son in these types of situations because this is something I can help my child with"). A score of 3 was given to mothers that expressed some explicit or implied responsibility or reference to authority in their child's peer domain but some reservation was present. A score of 2 was assigned when mothers professed to some influence over their children's peer relationship problems but also the attitude that often problems like this are outside the control of themselves and other parents. Mothers who expressed only skepticism concerning their ability or responsibility to help with the problem were scored as 1. Lastly, mothers that expressed an unwillingness to be involved and the belief that their involvement would be ineffectual, counterproductive, or unwarranted were scored as 0. The inter-class correlations of reliability across coders for these ratings were .89, .75, and .82 for the ski trip,

birthday surprise, and big move vignettes, respectively. Accordingly, for each subject, the two coders were averaged to yield a final score for use in subsequent analyses.

**Maternal suggestions.** The extent to which mothers' produced constructive strategies for their child as a solution to the friendship dilemmas was scored by tallying the instances of behavioral or emotion suggestions offered during the interview to the prompts at the end asking them what they would do or say to their child (Appendix E). Behavioral coaching ideas were defined as efforts to assist the child in clarifying their behavioral goals; clarifying the intent, motives, and attributions of their child or child's peers in the circumstance; helping the child devise possible actions including references to specific things the child might say or do. Emotion coaching ideas were defined as clarifying and labeling the emotions of the characters in the vignette including the child's feelings. By focusing on mothers' responses to the interview prompts as though their young adolescents were engaged in a social dispute, two coders counted the number of distinct references to acts of maternal suggestions in mothers' answers (see Appendix E). Inter-rater reliability for these counts was .89, .93, and .97 for the ski trip, birthday surprise, and big move vignettes, respectively. Accordingly, mothers' scores were averaged to yield a final score for analyses.

## RESULTS

### **Preliminary Analyses**

Appendix I provides the means and standard deviations for all variables included in this study as well as their intercorrelations.

Because each mother received a pair of vignettes from a pool of three vignettes, preliminary analyses were conducted to examine the consistency of maternal responses and reasoning across vignettes. Specifically, following Narayanan, Greco, and Campbell (2010) and Brennan (1992), a generalizability study was conducted to determine whether mothers were consistent in their reasoning level, feelings of efficacy, and proclivity to provide suggestions across vignettes. These analyses made adjustments for the uncrossed and nested nature of the study created by randomly presenting mothers with two of the three possible vignettes counterbalanced by order and frequency of use.

Results indicated that generalizability from vignette to vignette was .96 for reasoning level, .85 for feelings of efficacy, and .71 for maternal strategies. Mothers, then, appeared to have a consistent approach to their reasoning, feelings of efficacy, and suggestions in the various situations portrayed in the vignettes. To simplify analyses, then, mothers' reasoning, feelings of efficacy, and strategies for the separate vignettes were combined by averaging before subsequent analyses.

### **Maternal Suggestions and Adolescent Social Adjustment**

Table 1 presents the means and standard deviations for the social adjustment outcome variables for boys and girls along with the results of *t*-tests for gender differences. Consistent

with past research, boys reported significantly less social self-esteem and friendship closeness compared to girls. Boys did not report less jealousy than girls however (see Table 1). Consistent with past research, young adolescents' social self-esteem was negatively related to friendship jealousy ( $r = -.29, p = .01$ ) and positively related to the closeness of best friendships ( $r = .43, p = .01$ ). Contrary to past research (Parker et al., 2010), however, greater friendship jealousy was not associated with lower friendship closeness ( $r = .20, p = .09$ ). Mothers' level of education ( $r$ 's  $-.01$  to  $.6$  and  $p$ 's  $.60$  to  $.99$ ) and the size of the family household ( $r$ 's  $-.18$  to  $.01$  and  $p$ 's  $.12$  to  $.93$ ) did not significantly correlate with friendship jealousy, social self-esteem, or friendship closeness. Adolescents who were born earlier in the birth order had greater social self-esteem than later borns ( $r = -.30, p = .01$ ) but were not more jealous and did not have less close friendships ( $r$ 's  $-.17$  to  $.14$  and  $p$ 's  $.14$  to  $.25$ , respectively). Older mothers had young adolescents who were less jealous ( $r = -.29, p = .02$ ) and had better social self-esteem ( $r = .25, p = .04$ ), but not closer friendships ( $r = .06, p = .65$ ). Younger adolescents had more close friendships than older ones ( $r = -.23, p = .05$ ) but adolescent age was otherwise unrelated to social self-esteem or friendship jealousy ( $r$ 's from  $-.07$  to  $-.15$  and  $p$ 's from  $.21$  to  $.55$ ).

Table 1

*Summary of Means and t-test Results Comparing Boys and Girls for Social Adjustment*

Variables	Overall (N=71)		Boys (n=32)		Girls (n=39)		t(69)
	M	SD	M	SD	M	SD	
1. Friendship Jealousy	1.92	.81	1.75	.62	2.05	.93	1.58
2. Social Self-Esteem	3.39	.48	3.24	.48	3.50	.44	-2.37*
3. Friendship Closeness	3.75	.86	3.20	.78	4.21	.63	-6.05***

Note. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$

To test the hypothesis that maternal strategies predict better social adjustment outcomes, three parallel hierarchical linear regressions were conducted. The child's gender was entered at Step 1 in these regressions. In Step 2, relationship warmth was entered. Strategies were entered

in Step 3 followed by the two-way interactions among gender, strategies, and relationship warmth in Step 4. Finally, the three-way interaction of gender, strategies, and relationship warmth was entered in Step 5.

Table 2 displays the results of this analysis for friendship jealousy. Adolescent gender and relationship warmth were not significant predictors of friendship jealousy. Mothers who provided more suggestions did not necessarily have children with less friendship jealousy. However, there was a significant two-way interaction between maternal strategies and the warmth of the mother-child relationship. The remaining interactions were not significant.

Table 2  
*Results of Hierarchical Multiple Regression Analyses Predicting Jealousy from Mothers' Strategies*

Step/Variable	<i>b</i>	$\beta$	<i>t</i>	sig.	$\Delta R^2$
Step 1:					
Child Gender	-.30	-.19	-1.58	.12	.04
Step 2:					
Relationship Warmth	-.36	-.17	-1.44	.15	.03
Step 3:					
Maternal Strategies	.06	.09	.75	.46	.01
Step 4:					
Gender x Strategies	.01	.01	.08	.94	
Gender x Relationship Warmth	.44	.10	.89	.38	
Strategies x Relationship Warmth	-.44	-.25	-2.15	.04	0.07
Step 5:					
Gender x Strategies x Relationship Warmth	.28	.08	.65	.52	.01

*Note.* \* $p < .05$ ;  $N = 71$

Figure 2 presents the significant two-way interaction between mother-child warmth and maternal suggestions about jealousy. The link between mothers' strategies and jealousy is represented for three contrasting levels of relationship warmth. As shown, coaching ideas were related to less jealousy in the context of mother-child relationships of high warmth ( $b = -.37$ ,  $t = -$

1.72,  $p = .08$ ). Maternal strategies were unrelated to jealousy in the context of mother-child relationships of average warmth ( $b = .07$ ,  $t = .92$ ,  $p = .38$ ). More strategies, however, was associated with increased jealousy in relationships characterized by relatively low warmth ( $b = .51$ ,  $t = 2.31$ ,  $p = .02$ ).

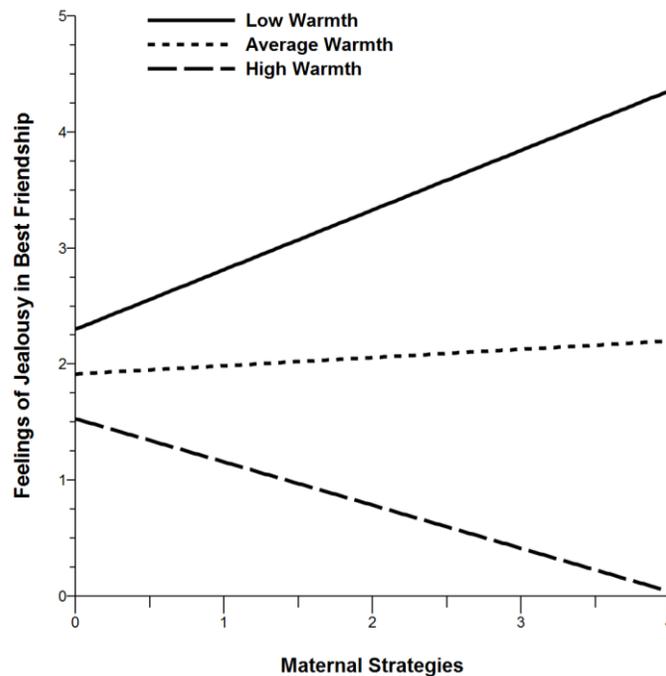


Figure 2. Relation of maternal strategies to friendship jealousy for young adolescents in high-, average-, and low-warmth mother-child relationships.

Table 3 reports the results of the regressions for social self-esteem. Girls and young adolescents in homes with greater warmth between the mother and adolescent had higher self-esteem than boys or children in less close relationships. Mothers' strategies, though, was not directly associated with higher self-esteem. However, a significant two-way interaction between maternal suggestions and mother-child relationship warmth was present. The remaining two- and three-way interactions were not significant.

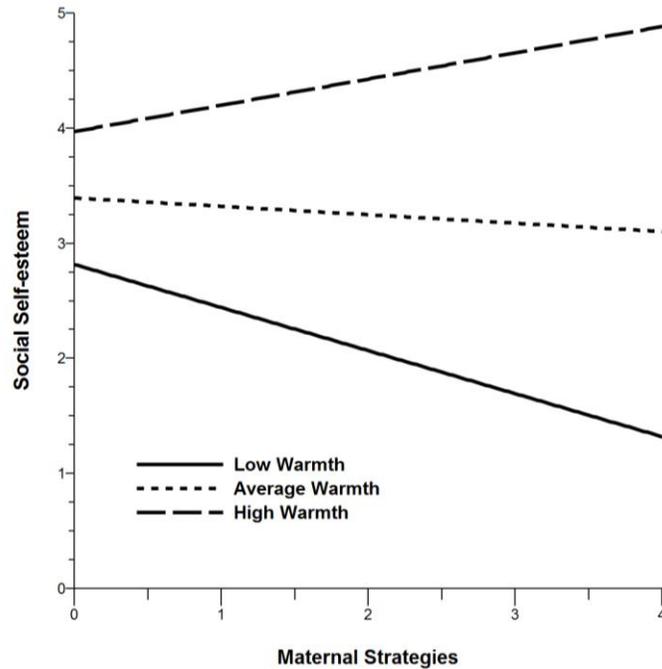
Figure 3 displays the link between constructive strategies and social self-esteem for children in high-, average-, and low-warmth mother-child relationships. As shown, maternal

strategies related to better outcomes in pairs where the relationship warmth was high ( $b = .23, t = 2.11, p = .03$ ). Mothers' suggestions were unrelated when relationships were average on warmth ( $b = -.07, t = 1.63, p = .10$ ). However, greater maternal strategies associated with lower social self-esteem when relationship were low on warmth ( $b = -.37, t = 3.37, p = .001$ ).

Table 3  
*Results of Hierarchical Multiple Regression Analyses Predicting Social Self-Esteem from Mothers' Strategies*

Step/Variable	<i>b</i>	$\beta$	<i>t</i>	sig.	$\Delta R^2$
Step 1:					
Child Gender	-.26	-.27	-2.37	.02	.08*
Step 2:					
Relationship Warmth	.54	.44	4.19	.001	.19***
Step 3:					
Maternal Strategies	-.07	-.17	-1.64	.12	.03
Step 4:					
Gender x Strategies	-.05	-.06	-.63	.53	
Gender x Relationship Warmth	.20	.08	.81	.42	
Strategies x Relationship Warmth	.30	.29	2.95	.004	0.10*
Step 5:					
Gender x Strategies x Relationship Warmth	.06	.03	.28	.78	.001

*Note.* \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ ;  $N = 71$



*Figure 3.* Relation of maternal strategies to social self-esteem for young adolescents in high-, average-, and low-warmth mother-child relationships.

Table 4 reports the results of analyses of best friend closeness. As shown, and as reported earlier, adolescent girls reported greater feelings of closeness in their best friendships than did boys. Young adolescents with closer mother-child relationships also had closer best friendships. Contrary to hypothesis, after controlling for the warmth of the mother-child relationship, mothers who offered more coaching suggestions did not necessarily have children with better friendship closeness. There were also no significant two- or three-way interactions (see Table 4).

Table 4  
*Results of Hierarchical Multiple Regression Analyses Predicting Friendship Closeness from Mothers' Strategies*

Step/Variable	<i>b</i>	$\beta$	<i>t</i>	sig.	$\Delta R^2$
Step 1:					
Child Gender	-1.02	-.59	-6.05	.001	.35***
Step 2:					
Relationship Warmth	.69	.31	3.37	.001	.09***
Step 3:					
Maternal Strategies	.02	.02	.23	.82	.001
Step 4:					
Gender x Strategies	-.06	-.04	-.42	.68	
Gender x Relationship Warmth	.64	.14	1.54	.13	
Strategies x Relationship Warmth	-.21	-.11	-1.21	.23	0.03
Step 5:					
Gender x Strategies x Relationship Warmth	.20	.05	.55	.55	.003

Note. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ ;  $N = 71$

### Maternal Strategies and Mothers' Interpersonal Reasoning and Feelings of Efficacy

Mothers of boys ( $M = 2.09$ ,  $SD = 1.15$ ) did not differ from mothers of girls ( $M = 1.94$ ,  $SD = 1.20$ ) in the frequency of their maternal suggestions,  $t(69) = .53$ ,  $p = .60$ . Mothers' strategies increased with decreasing birth order ( $r = -.26$ ,  $p = .03$ ) and increased with maternal education ( $r = .24$ ,  $p = .04$ ). Coaching suggestions were not related to the young adolescents' age ( $r = -.03$ ,  $p = .79$ ), the mothers' age ( $r = .03$ ,  $p = .82$ ), or the size of the family household ( $r = -.02$ ,  $p = .88$ ).

Mothers of boys ( $M = 1.35$ ,  $SD = .34$ ) and mothers of girls ( $M = 1.37$ ,  $SD = .29$ ) did not differ on their interpersonal reasoning,  $t(69) = -.20$ ,  $p = .85$ . Similarly, mothers of boys ( $M = 2.74$ ,  $SD = .66$ ) and mothers of girls ( $M = 2.66$ ,  $SD = .61$ ) did not differ on their feelings of efficacy,  $t(69) = .54$ ,  $p = .59$ . Additionally, reasoning and feelings of efficacy did not significantly correlate ( $r = .10$ ,  $p = .40$ ).

Young adolescents' age, birth order, or family household size did not significantly correlate with mothers' interpersonal reasoning ( $r$ 's  $-.06$  to  $.21$  and  $p$ 's  $.08$  to  $.71$ ) or feelings of efficacy ( $r$ 's  $-.15$  to  $.08$  and  $p$ 's  $.21$  to  $.49$ ). Mothers' education did not relate with their feelings of efficacy ( $r = .01, p = .98$ ). However, mothers with more education tended to have more sophisticated reasoning ( $r = .23, p = .05$ ). Mothers' age did not relate to reasoning ( $r = .10, p = .44$ ), but younger mothers felt more efficacious concerning their offspring's' peer dilemmas than did older mothers ( $r = -.24, p = .05$ ).

To explore the primary hypotheses related to the additive contributions of interpersonal reasoning and efficacy on mothers' coaching ideas, a hierarchal multiple linear regression was computed. The young adolescent's gender was entered as a control variable in the first step. Mothers' reasoning and feelings of efficacy were entered on Step 2. The two-way interactions of gender by reasoning, gender by feelings of efficacy, and reasoning by efficacy were entered on Step 3. Finally, the three-way interaction of gender by reasoning by feelings of efficacy was entered on Step 4.

As shown in Table 5 and as predicted, mothers who displayed greater interpersonal reasoning were also more likely to generate strategies for their children in response to the dilemmas. Contrary to hypotheses, however, mothers' feelings of efficacy concerning their offspring's' peer dilemmas were not a significant predictor of their suggestions. There were also no significant two- or three-way interactions (see Table 6). Thus, gender did not moderate the link between either reasoning and efficacy and maternal strategies. In addition, efficacy and reasoning did not interact to predict maternal strategies.

Table 5  
*Results of Hierarchical Multiple Regression Analyses Predicting Maternal Strategies from Interpersonal Reasoning and Parental Self-Efficacy*

Step/Variables	<i>b</i>	$\beta$	<i>t</i>	sig.	$\Delta R^2$
Step 1:					
Child Gender	.08	.06	.53	.60	.004
Step 2:					
Interpersonal Reasoning (INS)	1.28	.35	3.00	.01	
Parenting Self-Efficacy (PSE)	-.05	-.02	-.21	.84	.12*
Step 3:					
Gender x INS	.06	.08	.15	.88	
Gender x PSE	.23	.54	1.01	.32	
INS x PSE	.20	.22	.32	.75	.02
Step 4:					
Gender x PSE x INS	-.21	-.69	-.32	.75	.001

Note. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ ;  $N = 71$

### **Maternal Relationship Security and Interpersonal Reasoning and Feelings of Efficacy**

Mothers of girls ( $M = 4.77$ ,  $SD = 1.83$ ) had higher relationship security than did mothers of boys ( $M = 3.19$ ,  $SD = 1.80$ ),  $t(69) = -3.65$ ,  $p = .01$ . Otherwise, relationship security was not associated with other demographic variables, including the young adolescents' age ( $r = .10$ ,  $p = .42$ ), birth order ( $r = -.12$ ,  $p = .32$ ), the mothers' level of education ( $r = .17$ ,  $p = .16$ ) and age ( $r = .23$ ,  $p = .06$ ), or the size of the family household ( $r = -.01$ ,  $p = .93$ ).

To explore the contribution of relationship security to interpersonal reasoning and parenting self-efficacy, two parallel hierarchal linear regressions were computed. In the first step of each, the young adolescent's gender was entered as a control variable. Step 2 included mothers' relationship security. Finally, in Step 3, the two-way interaction of gender and relationship security was entered.

Table 6 reports of the prediction of interpersonal reasoning. As shown, mothers with greater feelings of security in their own relationships tended to be mothers with more sophisticated interpersonal reasoning. This finding was only marginally significant but it was

consistent with hypotheses. The link between relationship security and reasoning was not moderated by gender (see Table 6).

Table 6  
*Results of Hierarchical Multiple Regression Analyses Predicting Interpersonal Reasoning from Relationship Security*

Step/Variables	<i>b</i>	$\beta$	<i>t</i>	sig.	$\Delta R^2$
Step 1:					
Child Gender	-.01	-.02	-.20	.85	.001
Step 2:					
Relationship Security	.04	.24	1.88	.07	.05 <sup>†</sup>
Step 3:					
Gender x Relationship Security	.01	.03	.15	.91	.001

Note. <sup>†</sup>*p* < .10; *N* = 71

Table 7 presents the corresponding analyses for mother's feelings of self-efficacy. As shown, feelings of efficacy were not predicted by relationship security. This finding was also not moderated by the adolescent's gender.

Table 7  
*Results of Hierarchical Multiple Regression Analyses Predicting Parenting Self-Efficacy from Relationship Security*

Step/Variables	<i>b</i>	$\beta$	<i>t</i>	sig.	$\Delta R^2$
Step 1:					
Child Gender	.04	.07	.54	.59	.004
Step 2:					
Relationship Security	-.01	-.02	-.13	.90	.001
Step 3:					
Gender x Relationship Security	-.05	-.32	-1.08	.29	.02

Note. *N* = 71

## DISCUSSION

For most of the history of the scientific study of children, children's relations with parents and their relations with their peers have been treated as distinct, even competing, spheres of socialization and influence (Parke & Ladd, 1992). Over the past two decades this view has given way to a more refined view that emphasizes the important connections between experiences in these domains (Brown & Bakken, 2011). Of particular interest, there is now limited but compelling evidence that parents can help promote positive peer experiences and adjustment in their offspring through their efforts to monitor and anticipate difficulties and intercede directly and indirectly on their behalf (Ladd & Pettit, 2002).

The results of this dissertation support and extend this conclusion in important ways. As others have found, I found that mothers faced with hypothetical dilemmas involving their children can have rich repertoires of things they suggest their children could do to handle it. Further, to the extent that this is the case, their young adolescents appear to be better socially adjusted. In particular, the young adolescents of these mothers with more ideas had better social self-esteem and lower jealousy in certain circumstances. Because these findings are correlational, it is important to be cautious in assigning causality. However, these findings are consistent with theoretical arguments (e.g., Mounts, 2008) and with findings in which parents' coaching has been manipulated experimentally through intervention (Mikami, Jack, et al., 2010; Mikami, Lerner, et al., 2010).

Notwithstanding the general support for the importance of coaching in this study, an important issue to stress is the subtle and contingent nature of the links between mothers' ideas

and young adolescents' outcomes. Mothers' ideas predicted better social self-esteem and lower friendship jealousy, but only when young adolescents reported warm relationships with their mothers (see also Mounts, 2002). Thus, having many ideas alone was not important. It became important only in the context of a warm relationship. This finding is consistent with Darling and Steinberg's (1993) suggestion that parental involvement will not be effective unless offspring are receptive to it. My findings, too, seem to suggest that a warm parental climate may foster young adolescents' perceptions of their mothers' ideas as being valuable, prompting them to notice, take heed of the ideas, and adjust their behavior accordingly.

It is noteworthy that this relation was observed in a group of young adolescents from 10 to 15 years in age, because most past research on parental coaching has been conducted with children of preschool or early elementary-school age. Moreover, even within the pretty substantial age range included in this study there was no relation between coaching and adolescents' age. Coaching, it would seem, is appropriate to children of almost all ages. Nonetheless, parental involvement must surely change with development. Parents who coach older adolescents may also have to contend with their adolescent's relationships with peers of the opposite gender, a challenge not posed to the parents in this study (Updegraff et al., 2001). One interesting direction for future research will be to consider whether the same parents who have the best ideas and are most effective at coaching younger children with same-sex peers are also parents that have the best ideas and are the most effective at older ages, when the challenges of cross-sex and romantic relations surface. It is possible that some parents are "specialists" in one domain or another. To study this issue, it will be important in the future to conduct long-term, longitudinal studies.

A closely related point is that mothers' ideas were examined in the context of dilemmas involving third party interferences in friendships. As discussed, this decision was motivated by the interest in studying coaching suggestions in a circumstance of significance with implications for other peer difficulties. The peer difficulties that were the focus in this study were friendship jealousy, poor social self-esteem, and poor quality friendships. However, many other important social outcomes might have been studied. For example, friendship jealousy is associated with forms of aggression. It would be interesting to see if mothers' ideas about how their young adolescent could handle dilemmas involving jealousy are also related to reductions in aggressive behavior. Another interesting outcome might be young adolescents' peer victimization, as habitually jealous adolescents often face less peer acceptance and have more peer enemies. By providing their adolescents with strategies on how to minimize or avoid feelings of jealousy in a relationship, mothers may be protecting their adolescents from the intra- and interpersonal difficulties associated with jealousy. Researchers should be encouraged to examine the outcomes related to jealousy and to articulate how mothers' understanding of how different types of specific social challenges are linked to broader adjustment problems guide their decisions to provide strategies to their adolescents.

While the results indicated that more maternal suggestions can promote optimal outcomes for young adolescents, one very surprising finding was that they can also have the opposite effect if not provided within the right context. In this study, when young adolescents felt their mothers were less warm and unresponsive, the more strategies mothers provided related to worse adjustment outcomes for their young adolescents. One possible reason for this is that young adolescents who do not feel warm toward their mothers are not comfortable divulging upsetting peer issues to their mothers or soliciting their mothers' suggestions. Mothers in less

warm and distant relationships with their adolescents may be less involved in their young adolescents' peer difficulties and unable to give suggestions because their young adolescents are not forthcoming about their difficulty in the first place. Thus, when mothers are not as involved in their young adolescents' lives in general and thereby less aware of their adolescents' friendships, what these friendships are typically like, and their adolescents' habitual patterns, the strategies they are able to generate in response to peer difficulties would not influence their adolescents' social adjustment. Lacking general knowledge about their young adolescents' peer relationships, mothers with less warmth are not well-positioned to notice and inquire about the changes in relationship activities that indicate a problem in a friendship, the breakup of an old relationship, or the introduction of a new peer.

It is important to note the level of mother-child relationship warmth in this sample was generally high with a grand mean of 2.5 ( $SD = .38$ ) on a 3 point scale (see Appendix I). These levels are similar to previous work examining the link between adjustment outcomes and children's perceptions of maternal warmth using a similar version of the relationship warmth measure used in this study (see Galliher, Evans, & Weiser, 2007; Martínez & García, 2007). Thus, even the least warm mothers in this study should properly be considered to be only minimally warm. Young adolescents were not reporting that their mothers were harsh and cold. Nevertheless, future research should more carefully consider when young adolescents are willing to come to their mothers about friendship difficulties and when mothers are prompted to provide feedback to their young adolescents.

An additional issue to note is that the maternal strategies in this study were assessed by mothers' responses to hypothetical dilemmas. Specifically, mothers who made many references during the interview to actions their adolescent could take to solve the social problem or feel

better about it were assumed to be more able and willing coaches to their adolescents. As noted, hypothetical dilemmas are a preferred means of understanding the thoughts behind maternal behavior. This begs the question of whether mothers who can think of many things in hypothetical circumstances also think of these and recommend them to their adolescents in actual peer dilemmas. If the strategies that mothers provided in the study do not reflect their actual parenting behavior, it may explain why I found that the links between mothers' ideas and adjustment outcomes were modest. One possibility might be to ask mothers to catalogue over a period of time their actual coaching behavior using a daily-diary approach. This would generate a list of how often and in what circumstances mothers provide suggestions to their adolescents in the real world. Presumably, mothers only provide constructive strategies to their young adolescents in response to specific signals. For instance, they may only give suggestions when they see their young adolescent acting out of character, visibly upset, or when mothers learn about their adolescents' friendship difficulties from another source (e.g., principal, adolescent's peers, or siblings). A daily-diary assessment would be well-suited to provide insight into what elicits mothers' suggestions to their adolescents and in what form these take.

An important consideration in interpreting my findings relates to the nature of the suggestions mothers offered. Mothers' received high scores when they made many references to constructive strategies their adolescent could follow to handle the situation or to things the adolescent could do to feel better and rethink what happened in the social dispute. The emphasis was only on the prosocial strategies mothers provided to their young adolescents and antisocial or inappropriate strategies were disregarded. In hindsight, it would have been beneficial to look more specifically at the quality of the suggestion and to include alongside prosocial suggestions the number of counterproductive strategies mothers offered. Perhaps suggestions are linked to

negative outcomes in less warm mother-adolescent relationships because mothers with less warmth offer combinations of prosocial and negative strategies. Young adolescents in less warm relationships with their mothers could pay attention only or mostly to their mothers' antisocial suggestions (e.g., telling the friend to shut up, spreading rumors about the friend, or threatening to end the relationship) and disregard or miss the constructive, prosocial strategies. In this regard, it is necessary for future research to not only judge the quantity of suggestions mothers' provide to their children, but also the quality of those suggestions.

The present findings are also consistent with emerging work on parental psychological control (Kernis, Brown, & Gene, 2000; Wouters, Doumen, Germeijs, Colpin, & Verschueren, 2013). Parental psychological control refers to behaviors aimed at controlling children by taking advantage of children's psychological and emotional needs, such as invalidating children's ideas or feelings, criticizing, threatening to withdraw love, expressing disappointment, shaming, and using guilt induction (Nelson, Yang, Coyne, Olsen, & Hart, 2013; Olsen et al., 2002). I regarded a mother's suggestions to be evidence of her willingness to be a supportive coach. But it is possible that if offered in the context of a low-warmth relationship, young adolescents regard maternal strategies as overbearing, manipulative, and unhelpful. That is, the association between young adolescents' negative perceptions of low warm mothers' strategies and poorer social adjustment fits the concept of a psychologically controlling parent. This study did not incorporate a conventional measure of psychological control and it is unclear if the young adolescents would have reported these mothers as being psychologically controlling. It would be beneficial in future research to operationalize parental psychological control to more closely align with how it is assessed in the previous literature. A more thorough investigation of young adolescents' perceptions of maternal strategies surrounding their social dilemmas is needed. For

example, researchers should explore if the same suggestions made by warm mothers in children's peer disputes are better received and regarded as less psychologically invasive and controlling by their children compared to mothers with less relational warmth.

Future work should also examine mothers' strategies in relation to characteristics of the adolescent. Ideas that are not carefully tailored to the adolescent may be of little value to that adolescent. Suggestions for how boys could resolve friendship disputes may not have the same effectiveness for girls. An effective strategy for a popular or extraverted adolescent may be unworkable and even counterproductive if attempted by unpopular or reserved adolescent. The fact that my assessment of maternal strategies ignored many aspects of the quality and suitability of mothers' suggestions to the characteristics of their adolescent suggests that it would be helpful in the future to examine these aspects. This could be another reason to explain why my findings for social self-esteem and friendship jealousy were modest and conditional and why maternal suggestions did not associate with greater closeness felt in a best friendship.

Another interesting approach in the future would be to study fathers' coaching along with that of mothers. A few studies have done so (McDowell & Parke, 2009; McDowell et al., 2003) and reported that fathers are also able to serve as a coach for their children. These authors found that paternal advice predicted outcomes over and above maternal advice. However, these authors argue that more work is needed to disentangle these influences. The possibility that fathers' coaching also influences children's adjustment raises the issue of the consistency of coaching across parents. It would be fruitful to examine if children benefit from the involvement of two parents compared to one. It would also be interesting to investigate if having two parents providing conflicting advice related to the same issue would be counterproductive or adaptive in some instances. For example, a father that suggests that a young adolescent give the cold

shoulder to a friend while a mother suggests that the young adolescent approach the other adolescent and talk it out could be no more helpful than no advice at all.

Given the importance of maternal suggestions in my study and in previous work, an important question has become why some mothers do this whereas others do not. I posited that one probable cause may be that some mothers are simply less skilled at reasoning about their adolescent's problems than are others. The findings are suggestive of this. Mothers who displayed a more sophisticated and flexible understanding of the actions, motives, and feelings of her adolescent and the other parties embroiled in the social dilemmas posed to them also offered the greatest number of suggestions for their adolescent to follow to solve the issue and feel better. It is not remarkable that individuals who have a better grasp of a social problem also have more ideas for solving it, but to my knowledge this is the first study to demonstrate that this principle holds for someone else's difficulties and not just one's own. That is, the issue for the mothers in this study was not whether they could solve their own problems but whether they could set aside their own views and effectively place themselves in the circumstance of their young adolescent. Indeed, by design, all the vignettes ended with a disciplinary problem for the mother (e.g., a call from the school principal) and it might have been understandable if mothers became fixated on this aspect and could not set it aside to focus on the needs of their young adolescent.

In this regard, it is interesting that the adolescent's gender did not moderate the link between maternal reasoning and constructive suggestions. That is, mothers offered as many suggestions to their sons as their daughters and there was a link between mothers' ideas for their adolescent and their adolescent's adjustment for both boys and girls. It might have been expected that mothers' reasoning skill would have been greater with their daughters compared to their

sons because they can draw more deeply on personal experience when reasoning about their daughters versus sons. It would seem instead that the ability to view peer problems in nuanced ways and generate effective strategies is not strongly dependent on at least this characteristic of the adolescent.

More broadly, my findings raise an interesting issue regarding the generality of interpersonal reasoning. In formulating his framework, Selman (Selman, 1980; Selman et al., 1986; Yeates, Schultz, & Selman, 1991) postulated that interpersonal reasoning skills represent a fundamental quality of individuals that can be applied to many interpersonal contexts in much the same way that one's stage of cognitive development applies to problems in many physical domains at the same time. In this study, mothers' reasoning was assessed in the context of her understanding of her young adolescent's dilemma, but I did not simultaneously ask her to reason about her own or additional individuals' social problems. Selman's theory implies that had I asked mothers to reason not just about a social problem facing her adolescent—but also problems she faced or problems faced by her spouse, another child, a co-worker, and so on—her level of reasoning would not have differed. If mothers use a consistent reasoning skill, regardless of who is facing an interpersonal dilemma, it could influence how researchers attempt to improve mothers coaching ability. For instance, instead of only helping a mother to better interpret and reason through her child's difficulties, researchers could focus their efforts on helping mothers confront and think through interpersonal dilemmas in general. This approach would not only help mothers become a better advice giver for their child, but would have broad implications for how mothers attempt to resolve interpersonal disputes faced by others and themselves.

An obvious fruitful direction for this research includes designing interventions to help parents engage in their children's friendship difficulties. Parents could be assigned guided

homework to direct them on what they attend to and think about when they confront their adolescents' real-life conflicts with peers. For instance, parents could be prompted to think about the perspectives, needs, and wants of their adolescents and their adolescents' peers. Parents could also attend weekly training sessions that include watching videotaped scenarios that depict adolescents' social challenges. In this setting, parents could be guided on how to view and think about adolescents' peer disputes and how to develop effective strategies that best solve peer problems. This type of intervention work may be particularly well-suited for parents that lack the ability to powerfully understand the nuanced elements in conflicts and are unable to generate strategies to resolve interpersonal disputes.

Mothers' suggestions were related to the caliber of their interpersonal reasoning, but they were not related to their feelings of efficacy. Mothers' feelings of parenting self-efficacy have been found in the past to be important determinants of their involvement in their children's relationships with peers (e.g., Mounts, 2011). In the present study, however, feelings of efficacy were not related to interpersonal reasoning skill. Feelings of efficacy were examined as possible moderators of the link between reasoning and maternal strategies, but they did not function as such. Future work in this area would also benefit by examining the role of parenting self-efficacy as a direct or moderating influence on young adolescents' social adjustment rather than mothers' strategies. Several factors may have undermined the power of efficacy as a predictor in this study. First, it is possible that some mothers do not feel efficacious or think that parents should get involved in their adolescents' social disputes, but they do so anyways out of a felt obligation to their child. In the hypothetical vignettes used in this study, mothers receive a phone call from the school principal about their young adolescent's dispute with a peer. This is an event that may happen from time to time for some parents. During instances like these, mothers may feel

compelled to act even if they are uncertain if they can be effective or have the authority to intervene. An important influence, then, would be the resourcefulness of their ideas and not their feelings of efficacy. Indeed, this is what the findings appeared to indicate. Feelings of efficacy could assume greater significance in circumstances where mothers have greater discretion to act.

Another factor that may have undermined the link between feelings of parental self-efficacy and maternal suggestions may have been the hypothetical vignettes used in this study. Some mothers may feel confident in their ability to intervene and bring about change in their adolescents' peer challenges in a laboratory setting with hypothetical dilemmas. However, when faced with a similar real-life situation with their young adolescent, these same mothers may feel less certain about the success of their efforts. Conversely, some mothers may have underrepresented their feelings of efficacy in response to the fictional conflicts, but when confronted with actual dilemmas they may leap into action and feel confident about their ability to influence their young adolescents' behavior. If either of these scenarios represents some of the mothers in this study, it may explain why a link did not appear between feelings of efficacy and the number of ideas mothers' had in relation to how their adolescent should handle the situation. Future studies should explore mothers' feelings of efficacy in both hypothetical and real-life scenarios to examine if these feelings are consistent across contexts.

Attachment theory provides a powerful model for understanding behavior in relationships generally and parenting specifically (J. D. Jones et al., 2015). In the present study, I posited that the sense of security so often discussed as the working model behind adaptive relationship behavior could be an important precursor to sophisticated reasoning and feelings of efficacy around a child's social difficulty. In particular, I proposed that security in relationships could explain why some mothers reason more effectively and express greater feelings of efficacy in

this area and by implication are more likely to coach. Support was weak, but consistent with this premise. Specifically, mothers who expressed a secure outlook on relationships in general also reasoned in more sophisticated ways about their young adolescent's social difficulties.

Other researchers have shown that secure women reason more powerfully about their own dilemmas (Davila et al., 1996) and that mothers use their broader secure and insecure views to guide their direct responses to their child (Main, Kaplan, & Cassidy, 1985). To my knowledge, however, this is the first study to demonstrate that relationship security guides not just what mothers say and do, but also what they recommend their children say and do to others. Future work should examine other variables that may be included in this process. Presumably, secure feelings are only one of several dispositions in mothers that influence their interventions. Davila et al., (1996), for example, found the link between attachment cognitions and interpersonal reasoning to be mediated by feelings of self-worth. The ability to generate more effective, collaborative strategies may be promoted because a mother's model of self is more optimal for viewing conflict.

### **Limitations and Future Directions**

As noted, because my research design was correlational, it is important to be cautious in presuming causality. For instance, young adolescents' relationship warmth with their mothers predicted greater social self-esteem, better friendship closeness, and less jealousy. However, the direction of influence could also operate reversely. Perhaps mothers form warmer relationships with their well-adjusted adolescents whereas mothers have less warm relationships with their hostile, maladjusted adolescents. The direction of effects is likely reciprocal and would suggest that it would be valuable to incorporate experimental and longitudinal research designs in the future to clarify the links found in this study.

In addition, the reciprocal association between parenting behaviors and children's behaviors is well documented (Ladd, 1992; Ladd & Pettit, 2002; Parke, 1992), but is relatively understudied in the peer domain. Researchers should be encouraged to adopt transactional models to devise and test hypotheses related to the mutual influences (e.g., parent vs. child) that may change direction over time and across contexts (Parke, 1992). This study considered factors of the mother and the mother-adolescent relationship that might influence coaching ideas, but did not closely examine the characteristics of young adolescents that might help to understand why some are better than others at coming up with coaching suggestions for their adolescents. This is an important direction for the future. It might be fruitful to consider whether adolescents' dispositions influence mothers' constructive strategies. For example, adolescents that lack emotion regulation skills may cue their mothers into the difficulties they are having with a peer. Mothers, then, may be equipped with the knowledge they need to address their adolescents' difficulties. Researchers have suggested that parents of maladjusted children may be more motivated to engage in conversations about peers because they recognize a lack in social skills whereas mothers of well-adjusted children do not see a similar need (Laird et al., 1994; Mize, 1995). More research about child factors as they relate to parental feedback would be valuable.

Although this study has yielded insight into the presumed proximal contributions to maternal coaching, a more comprehensive model of parents' thinking regarding their adolescent's social difficulties would be helpful. Social information processing models of behavior have been successfully applied to the study of both children's and parents' behavior (Crick & Dodge, 1994; Miller, 1995; Mize & Pettit, 2008) and elements of such models are included in studies that examine parents' management of their children's interactions with peers (Shumow & Lomax, 2002; Tilton-Weaver & Galambos, 2003). Researchers should be

encouraged to utilize these models as a framework for understanding how parents seek out social cues in adolescents' peer difficulty, how these cues shape how parents feel about their ability to intervene, how parents generate and evaluate the quality of their intervention strategies, when adolescent factors influence the strategies that are selected, and if the strategies effectively serve the adolescent.

To close, the study of how family experiences relate to children's experiences with peers has grown exponentially over the past two decades and it is now better recognized that, if they choose to do so, parents can intentionally assist their children to address interpersonal challenges effectively. Much less is known about why some parents coach their children and others do not. This study's findings indicate that one factor that may play a role is parents' reasoning about their young adolescent's peer difficulties. Whether parents can reason through their adolescents' peer relationships may depend on other factors, particularly the security they feel in relationships. Coaching suggestions did not translate automatically into better outcomes for young adolescents. Instead, this relation was moderated by the warmth of the relationship with their young adolescent. Further research is needed to acquire a better understanding of the broader process behind how mothers' coaching strategies associate with better outcomes for their young adolescents. This research should incorporate the family climate, social-cognitive variables in the parent, and other factors in the young adolescent.

## REFERENCES

- Abaied, J. L., & Rudolph, K. D. (2011). Maternal influences on youth responses to peer stress. *Developmental Psychology, 47*(6), 1776-1785. doi:10.1037/a0025439
- Ainsworth, M. D. S. (1989). Attachments Beyond Infancy. *American Psychologist, 44*(4), 709-716. doi:10.1037/0003-066X.44.4.709
- Alkharusi, H. (2012). Generalizability Theory: An Analysis of Variance Approach to Measurement Problems in Educational Assessment. *Journal of Studies in Education, 2*(1). doi:10.5296/jse.v2i1.1227
- Ardelt, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues, 22*(8), 944-972. doi:10.1177/019251301022008001
- Ballenski, C. B., & Cook, A. S. (1982). Mothers' perceptions of their competence in managing selected parenting tasks. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 31*(4), 489-494. doi:10.2307/583923
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122-147.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development: Six theories of child development-Revised formulations and current issues* (pp. 1-26). Greenwich, CT: JAI Press.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Social cognitive theory: an agentic perspective. *Child Development, 67*, 1206-1222.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment Styles Among Young Adults: A Test of a Four-Category Model. *Journal of Personality and Social Psychology, 61*(2), 226-244.
- Beardslee, W. R., Schultz, L. H., & Selman, R. L. (1987). Level of social-cognitive development, adaptive functioning, and DSM-III diagnoses in adolescent offspring of parents with affective disorders: Implications of the development of the capacity for mutuality. *Developmental Psychology, 23*(6), 807-815. doi:10.1037/0012-1649.23.6.807

- Berant, E., Mikulincer, M., & Florian, V. (2001). Attachment style and mental health: A 1-year follow-up study of mothers of infants with congenital heart disease. *Personality and Social Psychology Bulletin*, 27(8), 956-968. doi:10.1177/0146167201278004
- Berlin, L. J., Whiteside-Mansell, L., Roggman, L. A., Green, B. L., Robinson, J., & Spieker, S. (2011). Testing maternal depression and attachment style as moderators of Early Head Start's effects on parenting. *Attachment & Human Development*, 13(1), 49-67. doi:10.1080/14616734.2010.488122
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, 30, 177-188.
- Bogensneider, K., Small, S. A., & Tsay, J. C. (1997). Child, parent, and contextual influences on perceived parenting competence among parents of adolescents. *Journal of Marriage and the Family*, 59(2), 345-362. doi:10.2307/353475
- Bourdeau, B., Miller, B. A., Duke, M. R., & Ames, G. M. (2011). Parental strategies for knowledge of adolescents' friends: Distinct from monitoring? *Journal of Child and Family Studies*, 20, 814-821. doi:10.1007/s10826-011-9449-0
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York, NY: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2 Separation, anxiety and anger*: New York: Basic Books.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London, England: Tavistock.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss, sadness, and depression*: New York: Basic Books.
- Brennan, R. L. (1992). Generalizability theory. *Educational Measurement: Issues and Practice*, 11, 27-34. doi:10.1111/j.1745-3992.1992.tb00260.x
- Brion-Meisels, S., & Selman, R. L. (1984). Early adolescent development of new interpersonal strategies: Understanding and intervention. *School Psychology Review*, 13(3), 278-291.
- Brown, B. B., & Bakken, J. P. (2011). Parenting and peer relationships: Reinvigorating research on family-peer linkages in adolescence. *Journal of Research on Adolescence*, 21(1), 153-165. doi:10.1111/j.1532-7795.2010.00720.x
- Bugental, D. B., Lewis, J. C., Lin, E., Lyon, J., & Kopeikin, H. (1999). In charge but not in control: The management of teaching relationships by adults with low perceived power. *Developmental Psychology*, 35(6), 1367-1378.
- Bumpus, M. F., & Rodgers, K. B. (2009). Parental knowledge and its sources: Examining the moderating roles of family structure and race. *Journal of Family Issues*, 30(10), 1356-1378. doi:10.1177/0192513X09334154

- Caldwell, J. G., Shaver, P. R., Li, C.-S., & Minzenberg, M. J. (2011). Childhood maltreatment, adult attachment, and depression as predictors of parental self-efficacy in at-risk mothers. *Journal of Aggression, Maltreatment & Trauma, 20*(6), 595-616. doi:10.1080/10926771.2011.595763
- Cohn, D. A., Silver, D. H., Cowan, C. P., Cowan, P. A., & Pearson, J. (1992). Working models of childhood attachment and couple relationships. *Journal of Family Issues, 13*(4), 432-449.
- Coleman, P. K., & Karraker, K. H. (1998). Self-efficacy and parenting quality: Findings and future applications. *Developmental Review, 18*(1), 47-85.
- Coleman, P. K., & Karraker, K. H. (2000). Parenting self-efficacy among mothers of school-age children: Conceptualization, measurement, and correlates. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 49*(1), 13-24.
- Corcoran, K. O. C., & Mallinckrodt, B. (2000). Adult attachment, self-efficacy, perspective taking, and conflict resolution. *Journal of Counseling & Development, 78*(4), 473-483.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74-101. doi:10.1037/0033-2909.115.1.74
- Crouter, A. C., Bumpus, M. F., Davis, K. D., & McHale, S. M. (2005). How do parents learn about adolescents' experiences? Implications for parental knowledge and adolescent risky behavior. *Child Development, 76*(4), 869-882. doi:10.1111/j.1467-8624.2005.00883.x
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487-496. doi:10.1037/0033-2909.113.3.487
- Davila, J., & Hammen, C. (1996). Cognitive/interpersonal correlates of adult interpersonal problem-solving strategies. *Cognitive Therapy & Research, 20*(5), 465-480. doi:doi.org/10.1007/BF02227908
- Davila, J., Hammen, C., Burge, D., Paley, B., & Daley, S. E. (1995). Poor interpersonal problem solving as a mechanism of stress generation in depression among adolescent women. *Journal of Abnormal Psychology, 104*(4), 592-600. doi:10.1037/0021-843X.104.4.592
- DeOliveira, C. A., Moran, G., & Pederson, D. R. (2005). Understanding the link between maternal adult attachment classifications and thoughts and feelings about emotions. *Attachment & Human Development, 7*(2), 153-170. doi:10.1080/14616730500135032
- Donovan, W. L., & Leavitt, L. A. (1985). Simulating conditions of learned helplessness: The effects of interventions and attributions. *Child Development, 56*(3), 594-603.

- Donovan, W. L., Leavitt, L. A., & Walsh, R. O. (1990). Maternal self-efficacy: Illusory control and its effect on susceptibility to learned helplessness. *Child Development, 61*(5), 1638-1647.
- Dumka, L. E., Stoerzinger, H. D., Jackson, K. M., & Roosa, M. W. (1996). Examination of the cross-cultural and cross-language equivalence of the parenting self-agency measure. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 45*(2), 216-222.
- Dykas, M. J., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: Theory and evidence. *Psychological Bulletin, 137*(1), 19-46.
- Edelstein, R. S., Alexander, K. W., Shaver, P. R., Schaaf, J. M., Quas, J. A., Lovas, G. S., & Goodman, G. S. (2004). Adult attachment style and parental responsiveness during a stressful event. *Attachment & Human Development, 6*(1), 31-52.  
doi:10.1080/146167303100001659584
- Elder, G. H., Jr. (1995). Life trajectories in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies*. (pp. 46-68). New York, NY, US: Cambridge University Press.
- Etzion-Carasso, A., & Oppenheim, D. (2000). Open mother–pre-schooler communication: Relations with early secure attachment. *Attachment & Human Development, 2*(3), 347-370. doi:10.1080/14616730010007914
- Feeney, J. A. (2006). Parental attachment and conflict behavior: Implications for offspring's attachment, loneliness, and relationship satisfaction. *Personal Relationships, 13*(1), 19-36. doi:10.1111/j.1475-6811.2006.00102.x
- Finnie, V., & Russell, A. (1988). Preschool children's social status and their mothers' behavior and knowledge in the supervisory role. *Developmental Psychology, 24*(6), 789-801.  
doi:10.1037/0012-1649.24.6.789
- Fraley, R. C., Garner, J. P., & Shaver, P. R. (2000). Adult attachment and the defensive regulation of attention and memory: Examining the role of preemptive and postemptive defensive processes. *Journal of Personality and Social Psychology, 79*(5), 816-826.  
doi:10.1037/0022-3514.79.5.816
- Galliher, R. V., Evans, C. M., & Weiser, D. (2007). Social and individual predictors of substance use for native American youth. *Journal of Child & Adolescent Substance Abuse, 16*(3), 1-16. doi:10.1300/J029v16n03\_01
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*(1), 4-19. doi:10.1037/0012-1649.30.1.4
- Halpern, L. F., Anders, T. F., Garcia Coll, C., & Hua, J. (1994). Infant temperament: Is there a relation to sleep-wake states and maternal nighttime behavior? *Infant Behavior & Development, 17*(3), 255-263.

- Harter, S. (1988). *Manual for the Self-Perception Profile for Adolescents*. University of Denver. Denver, CO.
- Hill, N. E., & Bush, K. R. (2001). Relationships between parenting environment and children's mental health among African American and European American mothers and children. *Journal of Marriage and Family*, *63*(4), 954-966. doi:10.1111/j.1741-3737.2001.00954.x
- Hopmeyer, A., & Asher, S. R. (1997). Children's responses to peer conflicts involving a rights infraction. *Merrill-Palmer Quarterly*, *43*(2), 235-254.
- Inhelder, B., Piaget, J., Parsons, A., & Milgram, S. (1958). *The growth of logical thinking: From childhood to adolescence*. New York, NY, US: Basic Books.
- Isley, S. L., O'Neil, R., Clatfelter, D., & Parke, R. D. (1999). Parent and child expressed affect and children's social competence: Modeling direct and indirect pathways. *Developmental Psychology*, *35*(2), 547-560.
- Jones, J. D., Cassidy, J., & Shaver, P. R. (2015). Parents' self-reported attachment styles: A review of links with parenting behaviors, emotions, and cognitions. *Personality and Social Psychology Review*, *19*(1), 44-76. doi:10.1177/1088868314541858
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, *25*(3), 341-363.
- Kernis, M., Brown, A., & Gene, B. (2000). Fragile self-esteem in children and its associations with perceived patterns of parent-child communication. *Journal of Personality*, *68*(2), 225-252. doi:10.1111/1467-6494.00096
- Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology*, *36*(3), 366-380. doi:10.1037/0012-1649.36.3.366
- Kobak, R. R., Cole, H. E., Ferenz-Gillies, R., Fleming, W. S., & Gamble, W. (1993). Attachment and emotion regulation during mother-teen problem solving: A control theory analysis. *Child Development*, *64*(1), 231-245.
- Kobak, R. R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology*, *60*(6), 861-869.
- Kohlberg, L. (1969). Stage and sequence: The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research*. Chicago: Rand McNally.
- Kohlhoff, J., & Barnett, B. (2013). Parenting self-efficacy: Links with maternal depression, infant behaviour and adult attachment. *Early Human Development*, *89*(4), 249-256. doi:10.1016/j.earlhumdev.2013.01.008

- Kohn, J. L., Rholes, W. S., Simpson, J. A., Martin, A. M., III, Tran, S., & Wilson, C. L. (2012). Changes in marital satisfaction across the transition to parenthood: The role of adult attachment orientations. *Personality and Social Psychology Bulletin*, 38(11), 1506-1522. doi:10.1177/0146167212454548
- La Valley, A. G., & Guerrero, L. K. (2012). Perceptions of conflict behavior and relational satisfaction in adult parent–child relationships: A dyadic analysis from an attachment perspective. *Communication Research*, 39(1), 48-78.
- Ladd, G. W. (1992). Themes and theories: Perspectives on processes in family–peer relationships. In R. D. Parke & G. W. Ladd (Eds.), *Family–peer relationships: Modes of linkage* (pp. 3-34). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Ladd, G. W., & Hart, C. H. (1992). Creating informal play opportunities: Are parents' and preschoolers' initiations related to children's competence with peers? *Developmental Psychology*, 28(6), 1179-1187.
- Ladd, G. W., Le Sieur, K. D., & Profilet, S. M. (1993). Direct parental influences on young children's peer relations. In S. Duck (Ed.), *Learning about relationships*. (pp. 152-183). Thousand Oaks, CA, US: Sage Publications, Inc.
- Ladd, G. W., & Pettit, G. S. (2002). Parenting and the development of children's peer relationships. In M. H. Bornstein (Ed.), *Handbook of Parenting* (Vol. 5, pp. 269-309). Mahwah, NJ: Erlbaum.
- Laird, R. D., Pettit, G. S., Mize, J., Brown, E. G., & Lindsey, E. (1994). Mother-Child Conversations about Peers: Contributions to Competence. *Family Relations*, 43(4), 425-433.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62(5), 1049-1065. doi:10.1111/j.1467-8624.1991.tb01588.x
- Lavallee, K. L., & Parker, J. G. (2009). The role of inflexible friendship beliefs, rumination, and low self-worth in early adolescents' friendship jealousy and adjustment. *Journal of Abnormal Child Psychology*, 37(6), 873-885. doi:10.1007/s10802-009-9317-1
- Leadbeater, B. J., Hellner, I., Allen, J. P., & Aber, J. L. (1989). Assessment of interpersonal negotiation strategies in youth engaged in problem behaviors. *Developmental Psychology*, 25(3), 465-472. doi:10.1037/0012-1649.25.3.465
- Lench, H. C., Quas, J. A., & Edelman, R. S. (2006). My child is better than average: The extension and restriction of unrealistic optimism. *Journal of Applied Social Psychology*, 36(12), 2963-2979. doi:10.1111/j.0021-9029.2006.00137.x

- Lovejoy, M. C., Verda, M. R., & Hays, C. E. (1997). Convergent and discriminant validity of measures of parenting efficacy and control. *Journal of Clinical Child Psychology, 26*(4), 366-376.
- MacBrayer, E. K., Milich, R., & Hundley, M. (2003). Attributional Biases in Aggressive Children and Their Mothers. *Journal of Abnormal Psychology, 112*(4), 698-708.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development, 50*(1-2), 66-104. doi:10.2307/3333827
- Mallinckrodt, B., & Wei, M. (2005). Attachment, Social Competencies, Social Support, and Psychological Distress. *Journal of Counseling Psychology, 52*(3), 358-367. doi:10.1037/0022-0167.52.3.358
- Martínez, I., & García, J. F. (2007). Impact of parenting styles on adolescents' self-esteem and internalization of values in Spain. *The Spanish Journal of Psychology, 10*(2), 338-348.
- Mash, E. J., & Johnston, C. (1983a). Parental perceptions of child behavior problems, parenting self-esteem, and mothers' reported stress in younger and older hyperactive and normal children. *Journal of Consulting and Clinical Psychology, 51*(1), 86-99.
- Mash, E. J., & Johnston, C. (1983b). The prediction of mothers' behavior with their hyperactive children during play and task situations. *Child & Family Behavior Therapy, 5*(2), 1-14.
- Maysless, O., & Scher, A. (2000). Mother's attachment concerns regarding spouse and infant's temperament as modulators of maternal separation anxiety. *Journal of Child Psychology and Psychiatry, 41*(7), 917-925. doi:10.1111/1469-7610.00679
- McDowell, D. J., & Parke, R. D. (2009). Parental Correlates of Children's Peer Relations: An Empirical Test of a Tripartite Model. *Developmental Psychology, 45*(1), 224-235.
- McDowell, D. J., Parke, R. D., & Wang, S. J. (2003). Differences between mothers' and fathers' advice-giving style and content: Relations with social competence and psychological functioning in middle childhood. *Merrill-Palmer Quarterly, 49*(1), 55-76.
- McFadyen-Ketchum, S. A., Bates, J. E., Dodge, K. A., & Pettit, G. S. (1996). Patterns of change in early childhood aggressive-disruptive behavior: Gender differences in predictions from early coercive and affectionate mother-child interactions. *Child Development, 67*(5), 2417-2433.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Mikami, A. Y., Jack, A., Emeh, C. C., & Stephens, H. F. (2010). Parental influence on children with attention-deficit/hyperactivity disorder: I. Relationships between parent behaviors and child peer status. *Journal of Abnormal Child Psychology, 38*(6), 721-736. doi:10.1007/s10802-010-9393-2

- Mikami, A. Y., Lerner, M. D., Griggs, M. S., McGrath, A., & Calhoun, C. D. (2010). Parental influence on children with attention-deficit/hyperactivity disorder: II. Results of a pilot intervention training parents as friendship coaches for children. *Journal of Abnormal Child Psychology*, 38(6), 737-749. doi:10.1007/s10802-010-9403-4
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships*. (pp. 143-165). New York, NY, US: Guilford Press.
- Miller, S. A. (1995). Parents' attributions for their children's behavior. *Child Development*, 66(6), 1557-1584. doi:10.2307/1131897
- Mills-Koonce, W. R., Appleyard, K., Barnett, M., Deng, M., Putallaz, M., & Cox, M. (2011). Adult attachment style and stress as risk factors for early maternal sensitivity and negativity. *Infant Mental Health Journal*, 32(3), 277-285. doi:10.1002/imhj.20296
- Mize, J. (1995). Coaching preschool children in social skills: A cognitive-social learning curriculum. In G. Cartledge & J. F. Milburn (Eds.), *Teaching social skills to children: Innovative approaches* (pp. 237-261). Boston: Allyn & Bacon.
- Mize, J., & Ladd, G. W. (1990). Toward the development of successful social skills training for preschool children. In S. R. Asher & J. D. Coie (Eds.), *Peer Rejection in Childhood* (pp. 338-361). Cambridge, NY: Cambridge University Press.
- Mize, J., & Pettit, G. S. (1997). Mothers' social coaching, mother-child relationship style, and children's peer competence: Is the medium the message? *Child Development*, 68(2), 312-332. doi:10.1111/j.1467-8624.1997.tb01942.x
- Mize, J., & Pettit, G. S. (2008). Social information-processing and the development of conduct problems in children and adolescents: Looking beneath the surface. In C. Sharp, P. Fonagy, & I. Goodyer (Eds.), *Social Cognition and Developmental Psychopathology* (pp. 141-174). New York: Oxford University Press.
- Mounts, N. S. (2000). Parental management of adolescent peer relationships: What are its effects on friend selection? In K. A. Kerns, J. Contreras, & A. Neal-Barnett (Eds.), *Family and peers: Linking two social worlds*. Westport, CT: Praeger.
- Mounts, N. S. (2008). Linkages between parenting and peer relationships: A model for parental management of adolescents' peer relationships. In M. Kerr, H. Stattin, & R. C. M. Engels (Eds.), *What can parents do? New insights into the role of parents in adolescent problem behavior* (pp. 163-189). Malden, MA: Wiley.
- Mounts, N. S. (2011). Parental management of peer relationships and early adolescents' social skills. *Journal of Youth and Adolescence*, 40(4), 416-427. doi:10.1007/s10964-010-9547-0

- Mounts, N. S., & Kim, H. (2007). Parental goals regarding peer relationships and management of peers in a multiethnic sample *New Directions for Child & Adolescent Development* (Vol. 2007, pp. 17-33): John Wiley & Sons, Inc.
- Narayanan, A., Greco, M., & Campbell, J. L. (2010). Generalisability in unbalanced, uncrossed and fully nested studies. *Medical Education*, *44*(4), 367-378. doi:10.1111/j.1365-2923.2009.03606.x
- Nelson, D. A., Yang, C., Coyne, S. M., Olsen, J. A., & Hart, C. H. (2013). Parental psychological control dimensions: Connections with Russian preschoolers' physical and relational aggression. *Journal of Applied Developmental Psychology*, *34*, 1-8. doi:10.1016/j.appdev.2012.07.003
- Olsen, S. F., Yang, C., Hart, C. H., Robinson, C. C., Wu, P., Nelson, D. A., . . . Wo, J. (2002). Maternal Psychological Control and Preschool Children's Behavioral Outcomes in China, Russia, and the United States. In B. K. Barber (Ed.), *Intrusive Parenting: How Psychological Control Affects Children and Adolescents* (pp. 235-262). Washington D.C.: American Psychological Association.
- Ostrov, J. M. (2010). Prospective associations between peer victimization and aggression. *Child Development*, *81*(6), 1670-1677.
- Parke, R. D. (1992). Epilogue: Remaining issues and future trends in the study of family-peer relationships. In R. D. Parke & G. W. Ladd (Eds.), *Family-peer relationships: Modes of linkage* (pp. 425-438). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Parke, R. D., & Ladd, G. W. (Eds.). (1992). *Family-peer relationships: Modes of linkage*. Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.
- Parke, R. D., Simpkins, S. D., McDowell, D. J., Kim, M., Killian, C., Dennis, J., . . . Rah, Y. (2002). Relative contributions of families and peers to children's social development. In P. K. Smith & C. H. Hart (Eds.), *Handbook of childhood social development* (pp. 156-177). Oxford: Blackwell.
- Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology*, *29*(4), 611-621. doi:10.1037/0012-1649.29.4.611
- Parker, J. G., Kruse, S. A., & Aikins, J. W. (2010). When friends have other friends: Friendship jealousy in childhood and early adolescence. In S. L. Hart & M. Legerstee (Eds.), *Handbook of Jealousy: Theory, Research, and Multidisciplinary Approaches* (pp. 516-546). Malden, MA: Wiley-Blackwell.
- Parker, J. G., Low, C. M., Walker, A. R., & Gamm, B. K. (2005). Friendship jealousy in young adolescents: Individual differences and links to sex, self-esteem, aggression, and social adjustment. *Developmental Psychology*, *41*(1), 235-250. doi:10.1037/0012-1649.41.1.235

- Parker, J. G., Nielsen, B. L., & McDonald, K. L. (2015). Sources and implications of maternal accuracy about young adolescents' vulnerability to friendship jealousy. *Journal of Research on Adolescence*, 1-16. doi:10.1111/jora.12196
- Pettit, G. S., Bates, J. E., & Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development*, 68(5), 908-923.
- Pettit, G. S., & Mize, J. (1993). Substance and style: Understanding the ways in which parents teach children about social relationships. In S. Duck (Ed.), *Learning about relationships* (Vol. 2). Newbury Park, CA: Sage.
- Piaget, J. (1932). *The moral judgment of the child*. Glencoe, IL: Free Press.
- Putallaz, M., Costanzo, P. R., & Klein, T. (1993). Parental childhood social experiences and their effects on children's relationships. In S. Duck (Ed.), *Learning about relationships* (pp. 63-97). Thousand Oaks, CA: Sage Publications, Inc.
- Putallaz, M., Costanzo, P. R., & Smith, R. B. (1991). Maternal recollections of childhood peer relationships: Implications for their children's social competence. *Journal of Social and Personal Relationships*, 8(3), 403-422. doi:10.1177/0265407591083006
- Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research*, 69(4), 419-432.
- Rholes, W. S., Simpson, J. A., & Blakely, B. S. (1995). Adult attachment styles and mothers' relationships with their young children. *Personal Relationships*, 2(1), 35-54. doi:10.1111/j.1475-6811.1995.tb00076.x
- Rholes, W. S., Simpson, J. A., & Friedman, M. (2006). Avoidant Attachment and the Experience of Parenting. *Personality and Social Psychology Bulletin*, 32(3), 275-285. doi:10.1177/0146167205280910
- Ross, H. S., & Howe, N. (2009). Family influences on children's peer relationships. In K. H. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 508-527). New York, NY US: Guilford Press.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer Interactions, Relationships, and Groups. *Handbook of child psychology: Vol. 3, Social, emotional, and personality development (6th ed.)*. (pp. 571-645). Hoboken, NJ US: John Wiley & Sons Inc.
- Russell, A., & Finnie, V. (1990). Preschool Children's Social Status and Maternal Instructions to Assist Group Entry. *Developmental Psychology*, 26(4), 603-611.
- Scheel, M. J., & Rieckmann, T. (1998). An empirically derived description of self-efficacy and empowerment for parents of children identified as psychologically disordered. *American Journal of Family Therapy*, 26(1), 15-27. doi:10.1080/01926189808251083

- Scher, A., & Dror, E. (2003). Attachment, caregiving, and sleep: The tie that keeps infants and mothers awake. *Sleep and Hypnosis*, 5(1), 27-37.
- Schultz, L. H., & Selman, R. L. (1998). Ego development and interpersonal development in young adulthood: A between-model comparison. In P. M. Westenberg, A. Blasi, & L. D. Cohn (Eds.), *Personality development: Theoretical, empirical, and clinical investigations of Loevinger's conception of ego development*. (pp. 181-202). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Schultz, L. H., Yeates, K. O., & Selman, R. L. (1989). *The interpersonal negotiation strategies interview manual*. Harvard University. Cambridge, MA.
- Selcuk, E., Günaydin, G., Sumer, N., Harma, M., Salman, S., Hazan, C., . . . Ozturk, A. (2010). Self-reported romantic attachment style predicts everyday maternal caregiving behavior at home. *Journal of Research in Personality*, 44(4), 544-549. doi:10.1016/j.jrp.2010.05.007
- Selman, R. L. (1971). Taking another's perspective: Role-taking development in early childhood. *Child Development*, 42(6), 1721-1734. doi:10.2307/1127580
- Selman, R. L. (1980). *The growth of interpersonal understanding*. New York: Academic Press.
- Selman, R. L. (1981). The development of interpersonal competence: The role of understanding in conduct. *Developmental Review*, 1(4), 401-422. doi:10.1016/0273-2297(81)90034-4
- Selman, R. L., Beardslee, W., Schultz, L. H., Krupa, M., & Podorefsky, D. (1986). Assessing adolescent interpersonal negotiation strategies: Toward the integration of structural and functional models. *Developmental Psychology*, 22(4), 450-459. doi:10.1037/0012-1649.22.4.450
- Selman, R. L., & Demorest, A. P. (1984). Observing troubled children's interpersonal negotiation strategies: Implications of and for a developmental model. *Child Development*, 55(1), 288-304. doi:10.2307/1129853
- Selman, R. L., & Demorest, A. P. (1986). Putting thoughts and feelings into perspective: A developmental view on how children deal with interpersonal disequilibrium. In D. J. Bearison & H. Zimiles (Eds.), *Thought and Emotion: Developmental Perspectives* (pp. 93-128). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Selman, R. L., Schorin, M. Z., Stone, C. R., & Phelps, E. (1983). A naturalistic study of children's social understanding. *Developmental Psychology*, 19(1), 82-102.
- Selman, R. L., & Schultz, L. H. (1990). *Making a friend in youth: Developmental theory and pair therapy*. Chicago: University of Chicago Press.
- Shumow, L., & Lomax, R. (2002). Parental efficacy: Predictor of parenting behavior and adolescent outcomes. *Parenting: Science and Practice*, 2(2), 127-150. doi:10.1207/S15327922PAR0202\_03

- Smetana, J. G. (2008). "It's 10 O'Clock: Do you know where your children are?" Recent advances in understanding parental monitoring and adolescents' information management. *Child Development Perspectives*, 2(1), 19-25. doi:10.1111/j.1750-8606.2008.00036.x
- Smetana, J. G., & Asquith, P. (1994). Adolescents' and parents' conceptions of parental authority and personal autonomy. *Child Development*, 65(4), 1147-1162.
- Soenens, B., Vansteenkiste, M., Smits, I., Lowet, K., & Goossens, L. (2007). The role of intrusive parenting in the relationship between peer management strategies and peer affiliation. *Journal of Applied Developmental Psychology*, 28(3), 239-249. doi:10.1016/j.appdev.2007.02.003
- Stattin, H., & Kerr, M. (2000). Parental Monitoring: A Reinterpretation. *Child Development*, 71(4), 1072-1085.
- Steinberg, L., Fletcher, A. C., & Darling, N. (1994). Parental monitoring and peer influences on adolescent substance use. *PEDIATRICS*, 93(6), 1060-1064.
- Swick, K. J., & Hassell, T. (1990). Parental efficacy and the development of social competence in young children. *Journal of Instructional Psychology*, 17(1), 24-32.
- Tilton-Weaver, L. C., & Galambos, N. L. (2003). Adolescents' characteristics and parents' beliefs as predictors of parents' peer management behaviors. *Journal of Research on Adolescence*, 13(3), 269-300. doi:10.1111/1532-7795.1303002
- Updegraff, K. A., McHale, S. M., Crouter, A. C., & Kupanoff, K. (2001). Parents' involvement in adolescents' peer relationships: A comparison of mothers' and fathers' roles. *Journal of Marriage and Family*, 63(3), 655-668. doi:10.1111/j.1741-3737.2001.00655.x
- Vasquez, K., Durik, A. M., & Hyde, J. S. (2002). Family and work: Implications of adult attachment styles. *Personality and Social Psychology Bulletin*, 28(7), 874-886.
- Vernberg, E. M., Beery, S. H., Ewell, K. K., & Abwender, D. A. (1993). Parents' use of friendship facilitation strategies and the formation of friendships in early adolescence: A prospective study. *Journal of Family Psychology*, 7(3), 356-369. doi:10.1037/0893-3200.7.3.356
- Vernberg, E. M., Greenhoot, A. F., & Biggs, B. K. (2006). Intercommunity relocation and adolescent friendships: Who struggles and why? *Journal of Consulting and Clinical Psychology*, 74(3), 511-523. doi:10.1037/0022-006X.74.3.511
- Weitzman, E. A., & Weitzman, P. F. (2014). The PSDM model: Integrating problem solving and decision making in conflict resolution. In P. C. E. M. M. Deutsch (Ed.), *The handbook of conflict resolution: Theory and practice* (pp. 203-229). San Francisco: Jossey-Bass.
- Weitzman, P. F. (2001). Young adult women resolving interpersonal conflicts. *Journal of Adult Development*, 8(1), 61-67. doi:10.1023/A:1026402022035

- Weitzman, P. F., Chee, Y. K., & Levkoff, S. E. (1999). A social cognitive examination of responses to family conflicts by African-American and Chinese-American caregivers. *American Journal of Alzheimer's Disease*, *14*(6), 343-350.
- Weitzman, P. F., & Weitzman, E. A. (2000). Interpersonal negotiation strategies in a sample of older women. *Journal of Clinical Geropsychology*, *6*(1), 41-51.
- Weitzman, P. F., & Weitzman, E. A. (2001). Everyday interpersonal conflicts of middle-aged women: An examination of strategies and their contextual correlates. *The International Journal of Aging & Human Development*, *52*(4), 281-295. doi:10.2190/H3LH-59KQ-8WJP-ULM5
- Werner, N. E., Eaton, A. D., Lyle, K. A., Tseng, H., & Holst, B. (2014). Maternal social coaching quality interrupts the development of relational aggression during early childhood. *Social Development*, *23*(3), 470-486. doi:10.1111/sode.12048
- Werner, N. E., & Grant, S. (2009). Mothers' cognitions about relational aggression: Associations with discipline responses, children's normative beliefs, and peer competence. *Social Development*, *18*(1), 77-98. doi:10.1111/j.1467-9507.2008.00482.x
- Werner, N. E., Senich, S., & Przepyszny, K. A. (2006). Mothers' responses to preschoolers' relational and physical aggression. *Applied Developmental Psychology*, *27*(3), 193-208. doi:10.1016/j.appdev.2006.02.002
- White, G. L., & Mullen, P. E. (1989). *Jealousy: Theory, research, and clinical strategies*. New York: Guilford Press.
- Wilson, B. J., & Gottman, J. M. (2002). Marital conflict, repair, and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 4. Social conditions and applied parenting* (pp. 227-258). Mahwah, NJ: Erlbaum.
- Wouters, S., Doumen, S., Germeijs, V., Colpin, H., & Verschueren, K. (2013). Contingencies of Self-worth in Early Adolescence: The Antecedent Role of Perceived Parenting. *Social Development*, *22*(2), 242-258. doi:10.1111/sode.12010
- Yeates, K. O., Schultz, L. H., & Selman, R. L. (1991). The development of interpersonal negotiation strategies in thought and action: A social-cognitive link to behavioral adjustment and social status. *Merrill-Palmer Quarterly*, *37*(3), 369-405.

APPENDIX A: Interpersonal Reasoning Vignettes (Adapted from Schultz, Yates, & Selman's Interpersonal Negotiation Strategy Vignettes)

### **The Ski Trip**

Imagine that your son, \_\_\_(child)\_\_\_, has a best friend named Jamie. \_\_\_(child)\_\_\_ and Jamie have gone on a weekend skiing trip with Jamie's family every winter for the last five years. The two of them are both becoming good skiers and have always looked forward to this trip as a way to relax before going back to school after the Holiday Break. The best part, is that all the expenses are paid by Jamie's family. Last year, Jamie and \_\_\_(child)\_\_\_ had a lot of fun and \_\_\_(child)\_\_\_ can't wait to go again this year. However, one night Jamie calls \_\_\_(child)\_\_\_ and says that he is really sorry but he can't take \_\_\_(child)\_\_\_ skiing this year because his parents have invited his cousin instead. \_\_\_(child)\_\_\_ is disappointed, but he understands why Jamie can't bring him this year.

A few days later, \_\_\_(child)\_\_\_ hears that that the cousin broke his leg and can't go. \_\_\_(child)\_\_\_ calls Jamie but Jamie doesn't say anything about the trip and when \_\_\_(child)\_\_\_ asks, Jamie just shrugs it off and says his parents won't tell him anything.

One day just before Holiday Break, \_\_\_(child)\_\_\_ is out shopping. He walks into a sports store, and spots another boy from school named Kelly trying on a ski jacket and goggles. Kelly and Jamie's fathers work together. \_\_\_(child)\_\_\_ goes over to him to be friendly and asks about the ski equipment he is buying. Kelly says he needs new stuff because he is going on a ski trip with Jamie. He says "Jamie's cousin was supposed to go, but he broke his leg. So I guess Jamie thought it'd be great if I went instead. Didn't he tell you?"

The next day you receive a call from \_\_\_(child)\_\_\_'s homeroom teacher. He tells you that another student saw \_\_\_(child)\_\_\_ go into Jamie's book bag when everyone else was in the library and dump almost everything in it in the trash.

### **The Birthday Surprise**

Imagine that your son, \_\_\_(child)\_\_\_, has a best friend named Cory. Cory's birthday is just a few weeks away and he talks about it all the time! For a long time, Cory has been saying that he wants to do something really different for his birthday this year. He doesn't just want to do the same old thing he always does, with his family. He keeps joking with \_\_\_(child)\_\_\_ that \_\_\_(child)\_\_\_ is his friend and should help him come up with something cool to do. He says he doesn't know what, but he wants something special. \_\_\_(child)\_\_\_ mentions to you that this is getting him upset because Cory is so excited to do something new but no one has any ideas.

It worries you a bit that \_\_\_(child)\_\_\_ is spending so much time try to think of something usual that Cory and he could do for Cory's birthday.

One day, \_\_\_(child)\_\_\_ asks your advice about this. He says Cory came into school that day telling everyone that he wants to go up in hot air balloon for a ride on his birthday. He has been telling some of the students that he and \_\_\_(child)\_\_\_ are really going to do it! Some of the other students say that's crazy, but \_\_\_(child)\_\_\_ wants to know if it really possible. \_\_\_(child)\_\_\_ says that if he and Cory really did go up in a hot air balloon everyone would think that was amazing and would be talking about it. He would be really popular.

You explain to \_\_\_(child)\_\_\_ that hot air balloon rides are really expensive and not something one best friend can do for another. Plus, \_\_\_(child)\_\_\_ would have to know someone who has a balloon and likes to take people on rides, and \_\_\_(child)\_\_\_ doesn't know anyone like that. You explain that he is going to have to tell Cory this is crazy and the two of them have to think of something more realistic to do.

The next day, \_\_\_(child)\_\_\_ gets a call from another boy at school named Casey. You can hear \_\_\_(child)\_\_\_ talking on the phone to Casey. Casey is asking if \_\_\_(child)\_\_\_ and Cory are going up in the hot air balloon. You can hear \_\_\_(child)\_\_\_ telling Casey how much he wanted to and how much Cory wants to, but that it is too expensive and won't work. But the next day, Cory calls \_\_\_(child)\_\_\_ . Cory is really excited, you can hear what he is saying to your son on the phone. He tells \_\_\_(child)\_\_\_ "Guess what? I'm going for a hot air balloon ride for my birthday! The whole afternoon! Casey had the idea to ask his Dad. His Dad knew someone who has a balloon and who could take Cory and Casey for a ride. It won't even cost them, because the guy was planning to take a trip anyway, and he thought it was a cool birthday gift. Casey is even having a cake made that has a picture of them on it, and they're going to eat it when they are up in the air." \_\_\_(child)\_\_\_ hangs up on Cory and won't talk to you.

The next day you receive a call from \_\_\_(child)\_\_\_'s homeroom teacher. He tells you that \_\_\_(child)\_\_\_ came up to Cory during homeroom and without saying anything threw a cup of water on him.

### **The Big Move**

Imagine that your son, \_\_\_(child)\_\_\_, has a classmate named Dakota. Dakota lives a couple of houses away and he and \_\_\_(child)\_\_\_ walk to school together. Dakota is one of the most popular boys in \_\_\_(child)\_\_\_'s grade. \_\_\_(child)\_\_\_ and Dakota are not really friends,

but—like everyone else \_\_\_(*child*)\_\_\_ likes Dakota and is always glad when Dakota pays attention to him.

\_\_\_(*Child*)\_\_\_'s best friend is Taylor. Taylor is new to school and doesn't have many other close friends or people he can confide in. He took to \_\_\_(*child*)\_\_\_ right away and they seem to really share things together and talk a lot. Taylor never does anything without \_\_\_(*child*)\_\_\_ and the two tell each other everything.

One day, \_\_\_(*child*)\_\_\_ tells you that he found out that Dakota is moving away. This is going to be a big deal in the peer group because Dakota is so popular. Dakota told \_\_\_(*child*)\_\_\_ about this but asked \_\_\_(*child*)\_\_\_ not to tell anyone else at school. Dakota was really upset and didn't want anyone else at school to know for a while.

It surprised \_\_\_(*child*)\_\_\_ that Dakota told him because Dakota has never told him something personal before or asked him to keep a secret. \_\_\_(*child*)\_\_\_ says he is really pleased that he is the only one who knows because Dakota now talks to him about things, like how worried he is about moving away. Also \_\_\_(*child*)\_\_\_ seems pleased with himself because he feels like the advice he has given Dakota has been helpful. \_\_\_(*Child*)\_\_\_ also seems really pleased that Dakota now treats him like a best friend and has included him in things. You notice that \_\_\_(*child*)\_\_\_ doesn't talk as much about Taylor as he used to, but you are pleased he has someone he can support at a difficult time.

A few weeks later, however, word gets out around school that Dakota is moving. Everyone is talking about it! Even parents are talking about it and mentioning that it is really going to shake up the peer group when Dakota leaves. But when Taylor learns that Dakota is moving he is really upset with \_\_\_(*child*)\_\_\_. He doesn't say why, but he starts making sarcastic remarks to \_\_\_(*child*)\_\_\_ and calling him names. \_\_\_(*child*)\_\_\_ just ignores it. This goes on for two days until, one day, in the cafeteria, \_\_\_(*child*)\_\_\_ is walking past where Taylor and some of the boys are sitting, and Taylor sticks his leg out and tries to trip \_\_\_(*child*)\_\_\_. \_\_\_(*Child*)\_\_\_ stumbles and his tray falls against him, spilling food all over his clothes. Everyone in the cafeteria turns to look and some start laughing.

The next day you receive a call from \_\_\_(*child*)\_\_\_'s principal. \_\_\_(*child*)\_\_\_'s homeroom teacher reported that \_\_\_(*child*)\_\_\_ pried open Taylor's locker and used a felt tip pen to make a large black patch on the sleeve of Taylor's jacket. He also put glue between some of the pages of the books in the locker.

APPENDIX B: Interpersonal Reasoning, Perceptions of Self-Efficacy, and Coaching Questions  
Adapted from Schultz, et al.'s INS Manual

Question	Construct
1. What's the problem here? Any why are these/is this a problem(s)?	Interpersonal Reasoning
2. What is [ <i>child</i> ] feeling? Some people might think that is a little out of line or unnecessary. Do you feel s/he has the right to feel that way? Has s/he overreacted? Why? Is there anything else s/he could be feeling? Are there any other reasons you can think of why s/he would feel that way?	Interpersonal Reasoning
3. [ <i>Friend</i> ]'s behavior is very puzzling here. Is there any way to understand it? Do you feel [ <i>friend</i> ] has the right to feel/act that way? Why? Is there anything else [ <i>friend</i> ] could be feeling? Are there any other reasons you could think of why s/he would feel that way?	Interpersonal Reasoning
4. How about [ <i>interloper</i> ]? How can you explain their behavior here? Do you feel [ <i>interloper</i> ] has the right to feel/act that way? Why? Is there anything else [ <i>interloper</i> ] could be feeling? Are there any other reasons you could think of why he would feel that way?	Interpersonal Reasoning
5. If we were just brainstorming and you were faced with this problem with [ <i>child</i> ], what are all the things you can think of that [ <i>child</i> ] can do to solve this problem, if any? (after each) How would that solve the problem? Is there any way that could go wrong?	Interpersonal Reasoning
6. What would be the best thing to do? What would be the worst thing for [ <i>child</i> ] to do?	Interpersonal Reasoning
7. What do you think parents can do in these types of situations? Is this the type of situation that parents can help with or is it out of parents' control? What would you do if this happened to your child?	Perceptions of Self-Efficacy & Coaching Suggestions
8. What would you do if this really happened and you received a call from the principal telling you that ( <i>Child</i> ) destroyed Taylor's jacket and books? What would your immediate reaction be? Is there any more information you need to determine how you would react? What would you do and say, if anything, about the situation when you saw ( <i>Child</i> ) next? Why do you think you would react like that? How could that be helpful? How could it hurt? What else would you do? What kind of punishment does ( <i>Child</i> ) deserve? Why?	Coaching Suggestions

## APPENDIX C: Interpersonal Reasoning Coding Manual Adapted from Schultz, et al.'s INS Interview Manual

### **General Coding Procedures**

1. Overview of the interview
  - a. First, read and listen to the entire dilemma to get a sense of the mother's general level of reasoning. The goal of this step is to get a general understanding of the mothers' reasoning, to familiarize yourself with their vantage points, and to prepare yourself to code the mother's speech correctly.
  - b. Read and code only one transcript at a time.
2. Code the interview
  - a. See the scoring sheet in the hanging folder and read the steps below to review how to code this interaction.
    - Generate each individual score by matching the mother's response to the examples in the appropriate level. If you are scoring a dilemma for which there are no examples available, read the existing examples below to get a concrete sense of responses at each level for each question.
    - Also, review dilemma #9 in the hanging folder for more examples
  - b. Continue coding until all assigned maternal speech has been coded.

### **Coding Rules**

1. Be careful that you are not inferring the mother's speech too far beyond the content of the words, tone, context for which it appears, and the definition in the coding manual. (Some inferring may be required).
2. During the strategy generation questions, each individual strategy in the mother's speech should be coded as a separate code. For example, if the mother lists three separate strategies for her child to resolve the situation, there should be three different codes underneath Q5, not one code.
  - a. If a solution that was already given is given as the "best solution" but with more sophisticated reasoning in either Q5 (Generating Alternatives) or Q6 (Best Thing to Do), list the strategy once in Q5 and give it the higher code in both Q5 and Q6.
3. If you think a response is definitely in between two levels, round down.
4. If two answers are given (except question 3, generating alternative strategies), code the answer that is elaborated on the most. If the answers are given equal weight, code the highest level demonstrated.
5. If there is blatant leading (i.e., suggesting an answer) by the interviewer that could change the level, ignore the part of the answer directly after the leading when you are determining the code. If the mother did not seem to have an answer before the leading, code as if no answer were given.
6. On Q5: Generating Alternative Strategies, if two strategies are given at once (often as a step-wise strategy, "first this, then that"), code them as one strategy unless the interviewer breaks them down. If the two strategies are at different levels, code the higher level.
7. If the mother takes into consideration that the best friend's or interloper's parents were also involved in the situation, code the parents' presence using the overall context as your guide.

## Coding Definitions

### STEP 1: PROBLEM DEFINITION

#### **Question 1: What's the problem here? And why are these/is this a problem(s)?**

- 0** No understanding of the question or no reference to the problem except to state what the *child* will do. The problem is not differentiated from its solution.
- The mother gives a solution, such as “My *child* should make the *interloper* go find their own best friend.”
  - The mother does not recognize that there is a problem.
    - “Well I don’t quite get what you are asking me...to find the problem...I don’t see a problem here.”
    - “Ok, well first of all we don’t quite know why [*best friend*] is upset with my *child* so that’s a little baffling and then of course the story is so far off from my *child*’s true personality is that it is difficult to put my *child* in that situation.”
    - “It’s just childish rivalry right there. Kids just do that. Children are spiteful.”
    - “Well I mean I can’t relate to it. That’s my problem I mean cause that’s not my [*child*], that’s not his friends.”
- 1** The problem is stated in terms of only one person’s wants or needs, often those of the *child*. **The description of the problem from one perspective can be Level 2, however, in the case in which the mother’s perspective consists of simultaneous conflicting needs or perspectives (e.g., Mother says the *child* sees that *best friend* as having rejected him/her or chosen someone over him/her).**
- The mom says *child* is upset or mad because he/she couldn’t do activity with *best friend*.
    - “Well we see that [*child*] is jealous and she’s taking it out on his friend. The problem is that she’s not handling it appropriately. She’s not acting the right way.”

#### **NOTES:**

In distinguishing between 1 and 2, give a 2 if the mother sees that the *best friend* has chosen another person over the child. If this is not the case and the problem seems to lie in not being able to do the activity or do the activity with the best friend, give a 1.

- 2** Each person’s needs are identified, but separately. The relationship is seen as reciprocal but, although both person’s needs are granted validity, one person’s needs (often that of the *child*) are given priority. The mere mentioning of every person’s needs and/or perspectives is not sufficient in defining a Level 2 response: **if the problem is seen as “either/or” (either one’s needs or the other’s needs can be met, but not both) response should be scored Level 1.**
- The mother says the *child* feels left out, jealous, or upset because the *best friend* has chosen to do something with the *interloper*.

- The mother says the *child* is upset and the *best friend* or *interloper* should have considered his/her feelings (e.g., *best friend* should have told *child* that *interloper* was coming along or going instead).
- Mother says the *best friend* chose to be with the *interloper* instead of *child* or might like *interloper* more than *child*.
  - “[*My child*] is jealous because [*best friend*] has invited [*interloper*] on the ski trip. So I think [*child*] would have been fine if it was the cousin, because that’s family and all the obligations and everything. But [*child*] is probably extremely jealous that [*best friend*] has invited [*interloper*], especially without telling [*child*] about it. The [*interloper*] hasn’t done any wrong here, they got invited to a getaway.”

3 The problem is seen as shared or collaborative problem with consideration of everyone’s needs.

- Mother says that there is a misunderstanding that is causing problems for the friendship or in how well the three people are getting along.
- Mother recognized that the friendship is at risk because her child and the best friend all want something different.
  - “[*Best friend*] wants the [*interloper*] to come, but [*my child*] doesn’t want the [*interloper*] to come because she probably doesn’t feel that she know her very well and doesn’t know if she is really friends with the [*Best friend*]. This might be a problem because my *child* wants to go on the trip and her *best friend* wants to bring a *new friend* so she can get to know her better. This can be a problem because they are friends and seem to be disagreeing at the moment, but they probably all think that their friendship is more important than a ski trip so they will want to work out a solution that they can all live with.”

**Question 2: What is [child] feeling? Some people might think that is a little out of line or unnecessary. Do you feel s/he has the right to feel that way? Has s/he overreacted? Why? Is there anything else s/he could be feeling? Are there any other reasons you can think of why s/he would feel that way?**

0 The mother does not give any expression of feelings, or feelings of only one person (the child’s) are inappropriate (including emotional overreaction) to the situation. The mother does not appropriately respond to the question; restates or ignores the posed question. The mother shows lack of perspective taking and is unable to understand what the child is feeling.

- The mother does not know how anyone feels.
  - “I’m not really sure what my child is feeling in this situation because she hasn’t really acted this way before.”
- The mother says that one person is upset (usually the child) or happy (usually the best friend or interloper) and the mother doesn’t know how the others feel or says they don’t feel anything.
  - “My child is upset about missing out on the birthday party.”

- 1 Mother response reflects only one person's perspective (usually that of the child). **If other people's feelings are mentioned the concern is pragmatic and concrete or simple.** That is, one can only feel one way and can't have two different feelings at once (includes similar, related feelings like anger, jealousy, sadness). **If both people's feelings are mentioned, no connection between them is expressed or both feel the same way for no reason** (e.g., my *child* and his *best friend* feel sad).
  - Mother says the *child* is upset or mad because they couldn't participate in an event (couldn't do the birthday event with his/her *best friend*, or couldn't go on the ski trip with his/her *best friend*) and the *best friend* (and/or *interloper*) is happy because he/she got to go (or got to bring another friend along).
  
- 2 Mother response reflects multiple people's points of view and at least one person's perspective involves complex, mixed feelings (e.g., happy but also concerned, angry but also understanding). There is (sympathetic) concern for the effects of one person's feelings on another, or conflicting feelings within one person are expressed. In some cases, feelings of one person are psychologically complex, whereas those of another have the same concrete, pragmatic basis as at previous levels. This level also includes situations in which one person has empathic feelings (my child's lonely; the interloper is shy) but not understood by another.
  - Saying the *child* feels rejected or left out by the *best friend* qualifies as complex, 2<sup>nd</sup>-person thought and should be scored at Level 2.
  - Acknowledgment that there should have been concern also qualifies as complex, 2<sup>nd</sup>-person thought and should be scored at Level 2. For example, the mother saying the *best friend* doesn't care but *should* have seen how his/her actions affected her *child*.
    - "I think my child feels lonely that they can't go on the balloon ride with their *best friend*, but the best friend probably feels happy that she gets to go on a balloon ride with the other friend.
  
- 3 Mothers give a response that involves complex feelings that her child is experiencing from the others. These are often expressed with long-term consequences mentioned. Empathic concern for shared feelings; feelings FOR each other (versus AT each other); concern for the friendship; feelings her *child* is expressing (and other) are psychologically rather than practically based. This level also includes situations in which the mother states that the friends are aware that they do not want the same thing or feel differently about the situation, as long as both people's feelings are psychologically based (if practically based, score as level 1 or 2, depending on how complex the feelings are).
  - Mother says both the *child* & *best friend* are concerned about the friendship
  - Mother gives a Level 2 2<sup>nd</sup>-person thought and the *interloper* (or maybe *child* or *best friend*) gives a level 3 and is concerned for the friendship or see how the relationship is being affected.

**NOTES:**

In dealing with answers that involve some sort of concern for the friendship/relationship, look at the degree of perspective-taking the mother gives about the *child* and *best friend*. If both

are able to take a 2<sup>nd</sup>-person perspective (step into another's shoes), there is at least some connection between their feelings, and one of them or the *interloper* are concerned about the relationship or see how the relationship is affected, score as 3. If neither or only one of them (*child & best friend*) is at a 2<sup>nd</sup>-person perspective, score as a 2 if only one of them has complex, 2<sup>nd</sup>-person thought or score as a 1 or 0 if neither of them have complex thought.

**Question 3: [Friend]'s behavior is very puzzling here. Is there any way to understand it? Do you feel [friend] has the right to feel/act that way? Why? Is there anything else [friend] could be feeling? Are there any other reasons you could think of why s/he would feel that way?**

- 0** The mother does not give any expression of feelings, or feelings of only one person (the *best friend*) are inappropriate (including emotional overreaction) to the situation. The mother does not appropriately respond to the question, either restating or ignoring the posed question. The mother shows a lack of perspective taking; unable to understand what the friend is feeling.
- The mother does not know how anyone feels.
    - “I’m not really sure what my child’s best friend is feeling in this situation because she hasn’t really acted this way before.”
  - The mother says that one person is upset (usually the *best friend*) or happy (usually the *child* or *interloper*) and the mother doesn’t know how the others feel or says they don’t feel anything.
    - “My child’s best friend is upset that they had water thrown on them.”
- 1** Mother response reflects only one person’s perspective (usually that of the *best friend*). **If both people’s feelings are mentioned the concern is pragmatic and concrete or simple.** That is, one can only feel one way and can’t have two different feelings at once (includes similar, related feelings like angry and jealous, sad and angry). **If both people’s feelings are mentioned, no connection between them is expressed or both feel the same way for no reason** (e.g., my *child* and *best friend* feel sad).
- Mother says the best friend is upset or mad because of episode with her child (water in face or book bag contents dumped) and the *child* is jealousy and *interloper* is confused because they didn’t do anything wrong.
- 2** Mother response reflects multiple people’s points of view and at least one person’s perspective involves complex, mixed feelings (e.g., happy but also concerned, angry but also understanding). There is (sympathetic) concern for the effects of one person’s feelings on another, or conflicting feelings within one person are expressed. In some cases, the feelings of one person are psychologically complex, whereas those of the other have the same concrete, pragmatic basis as at previous levels. This level also includes situations in which one person has empathic feelings (my child is lonely; the interloper is shy) but these are not understood by another.
- Saying the *best friend* feels conflicted about telling her child about the trip qualifies as complex, 2<sup>nd</sup>-person thought and should be scored at Level 2.

- Acknowledgment that there should have been concern also qualifies as complex, 2<sup>nd</sup>-person thought and should be scored at Level 2. For example, the mother saying the *best friend* doesn't care but *should* have seen how his/her actions affected her *child*.
  - "I think my the best friend probably feels happy that she gets to go on a balloon ride with the other friend, but my child feels lonely that they can't go on the balloon ride with their *best friend*."

- 3 Mothers give a response that involves complex feelings that her child is experiencing from the others. These are often expressed with long-term consequences mentioned. Empathic concern for shared feelings; feelings FOR each other (versus AT each other); concern for the friendship; feelings her *child's best friend* is expressing (and other) are psychologically rather than practically based. This level also includes situations in which the mother states that the friends are aware that they do not want the same thing or feel differently about the situation, as long as both people's feelings are psychologically based (if practically based, score as level 1 or 2, depending on how complex the feelings are).
- Mother says both the *child & best friend* are concerned about the friendship
  - Mother gives a Level 2 2<sup>nd</sup>-person thought and the *interloper* (or maybe *child* or *best friend*) gives a level 3 and is concerned for the friendship or see how the relationship is being affected.

**Question 4: How about [interloper]? How can you explain their behavior here? Do you feel [interloper] has the right to feel/act that way? Why? Is there anything else [interloper] could be feeling? Are there any other reasons you could think of why he would feel that way?**

- 0 The mother does not give any expression of feelings, or feelings of only one person (the *interloper's*) are inappropriate (including emotional overreaction) to the situation. The mother does not appropriately respond to the question; restates or ignores the posed question. The mother shows a lack of perspective taking; unable to understand what interloper is feeling.
- The mother does not know how anyone feels.
    - "I'm not really sure what the other child is feeling in this situation because the situation doesn't really give me much to go on."
  - The mother says that one person is upset (usually the child) or happy (usually the best friend or interloper) and the mother doesn't know how the others feel or says they don't feel anything.
    - "The other child is probably just happy that they get to go on the ski trip this year because the cousin broke their leg."
- 1 Mother response reflects only one person's perspective (usually that of the *interloper*). **If more than one person's feelings are mentioned, the concern is pragmatic and concrete or simple.** That is, one can only feel one way and can't have two different feelings at once (includes similar, related feelings like angry and jealous, sad and angry). **If more than one person's feelings are mentioned, no**

**connection between them is expressed or both feel the same way for no reason** (e.g., my *child* is sad and *interloper* is happy).

- Mother says the *child's best friend* (and/or *interloper*) is happy because he/she got to go (or got to bring another friend along).

- 2 Mother response reflects multiple people's points of view and at least one person's perspective involves complex, mixed feelings (e.g., happy but also concerned, angry but also understanding). There is (sympathetic) concern for the effects of one person's feelings on another, or conflicting feelings within one person are expressed. In some cases, the feelings of one person are psychologically complex, whereas those of the other have the same concrete, pragmatic basis as at previous levels. This level also includes situations in which one person has empathic feelings (my *child* is lonely; the *interloper* is shy) but these are not understood by another.
- Saying the *child* feels rejected or left out by the *best friend* qualifies as complex, 2<sup>nd</sup>-person thought and should be scored at Level 2.
  - Acknowledgment that there should have been concern also qualifies as complex, 2<sup>nd</sup>-person thought and should be scored at Level 2. For example, the mother saying the *best friend* doesn't care but *should* have seen how his/her actions affected her *child*.
    - "I think my *child's* feels lonely that they can't go on the balloon ride with their *best friend*, but the best friend probably feels happy that she gets to go on a balloon ride with the other friend.
- 3 Mothers give a response that involves complex feelings that the *interloper* is experiencing from the others. These are often expressed with long-term consequences mentioned. Empathic concern for shared feelings; feelings FOR each other (versus AT each other); concern for the friendship; feelings the *interloper* is expressing (and others) are psychologically rather than practically based. This level also includes situations in which the mother states that the friends are aware that they do not want the same thing or feel differently about the situation, as long as both people's feelings are psychologically based (if practically based, score as level 1 or 2, depending on how complex the feelings are).
- Mother says both the *child* & *best friend* are concerned about the friendship
  - Mother gives a Level 2 2<sup>nd</sup>-person thought and the *interloper* (or *child* or *best friend*) gives a level 3 and is concerned for friendship or see how relationship is being affected.

### **STEP 2: GENERATING ALTERNATE STRATEGIES**

**Question 5: If we were just brainstorming and you were faced with this problem with [child], what are all the things you can think of that [child] can do to solve this problem, if any? (After each) How could that solve the problem? Is there any way that could go wrong?**

Each alternative action is scored independently and the total number of alternatives listed is noted. If two strategies are given at once (often as a step-wise strategy), code them as one strategy UNLESS the interviewer breaks them down. If a solution that has already been given is

given as the best solution but with more sophisticated reasoning in either Step 2 or Step 3, code it only once in Step 2 and give it the higher code in both steps.

- 0 Physical, impulsive, non-communicative methods.
  - Mother says her child couldn't do anything because they are too upset or mad. SEE OTHER LEVELS FOR "DOING NOTHING"
  - Mother says her child could yell at the *best friend* and the *interloper*
  - Mother says her *child* could give *best friend* and/or *interloper* the cold-shoulder, nasty looks, spread rumors, or hit their friend/interloper because of feeling mad
  
- 1 One-way directives, threats, simple requests, or submission to the others.
  - Mother says that the *child* could do nothing to avoid a fight or to avoid losing the *best friend*.
  - Mother says that the *child* could give in to what the *best friend* wants to avoid a fight or to avoid losing the friend.
  - Mother says that the *child* could ignore and monitor to see what the *best friend* and/or *interloper* does.
  - Says the *child* could find a new partner or friend to avoid a fight, losing a friend, or simply to have a friend or someone to do the activity with.
  - Mother says that the *child* could get in touch with the *best friend* and/or *interloper* to say how he/she feels so the *best friend* and/or *interloper* will do something to please the *child* (for example, the child would say "I'm mad and here's what I want you to do about it.")—**if the child tells the best friend and interloper how they are feeling and why (meant to promote their understanding child's feelings), score as Level 2.**
    - Level 2: Mother suggests the *child* could tell *interloper* or *best friend* what to do (for example, to find a new partner or not to hang out with the *interloper* anymore).
  
- 2 Reciprocal communication reflecting an orientation toward FAIRNESS (top answers: turn-taking and compromise such that each person gets something).
  - Mother says the *child* could find a new partner so that everyone can do the activity or so both *child* and *best friend* can do some of what they want.
  - Mother says the *child* could meet the *best friend* and *interloper* at the birthday party so that they can do their own thing but *child* can still hang out with them later.
  - Mother says the *child* could suggest that the best friend and interloper can all go along on the ski trip or birthday activity so that no one feels left out.
  - Mother says the *child* could do nothing because *child* can see *best friend's* point of view or has sympathy for the *interloper*.
  - Mother says the *child* could pretend there's not a problem so that no one feels badly.
  - Mother says the *child* could ask the *best friend* for information (why the best friend invited *interloper*, why the best friend did the activity with *interloper*)—asking the other for information suggests 2<sup>nd</sup>-person perspective-taking and reciprocal communication.

- Mother says the *child* could get in touch with *best friend* and/or *interloper* to tell how he/she feels and states why he/she was upset.
  - Mother says that all three individuals could do the activity together so that no one feels left out or for another reason that sounds like fairness.
  - Mother says that her *child* could go with *best friend* next time (turn-taking, *interloper* goes first).
- 3 Collaboration with others for mutual interests, reflecting an orientation toward the RELATIONSHIP.
- Mother says that the child could want everyone to do the activity together so that they could all be friends.
  - Mother says that child could want everyone to talk it out so that they can still be friends.
  - Mother says that her *child* could let it go because he/she can see the *best friend's* and/or the *interloper's* point of view and can see that letting it go would be best for the relationship (the situation is not something to get too upset about or can see how all three can be friends).
  - Mother says that her *child* could talk it out so that *child* and *best friend* come to understand each other better.

**Question 6: What would be the best thing to do?**

Give this strategy the same score as it was given in the question above. If it was not given as a response to the question above, add it to that list.

- 0 Physical, impulsive, non-communicative methods.
- Mother says her child shouldn't do anything because they are too upset or mad. SEE BELOW FOR HIGHER LEVELS OF "DOING NOTHING"
  - Mother says her child should yell at the *best friend* and the *interloper*
  - Mother says her *child* should give *best friend* and/or *interloper* the cold-shoulder, nasty looks, spread rumors, or hit their friend/interloper because of feeling mad
- 1 One-way directives, threats, simple requests, or submission to the others.
- Mother says *child* should do nothing to avoid a fight or to avoid losing the *best friend*.
  - Mother says *child* should give in to *best friend's* wants to avoid a fight and losing friend.
  - Mother says *child* should ignore/monitor to see what *best friend* and/or *interloper* does.
  - Says the *child* should find a new partner or friend to avoid a fight, losing a friend, or simply to have a friend or someone to do the activity with.
  - Mother says that the *child* should get in touch with the *best friend* and/or *interloper* to say how he/she feels so the *best friend* and/or *interloper* will do something to please the *child* (for example, the child would say "I'm mad and here's what I want you to do about it.")—**if the child tells the best friend and**

**interloper how they are feeling and why (meant to promote their understanding child's feelings), score as Level 2.**

- Level 2: Mother suggests the *child* should tell *interloper* or *best friend* what to do (for example, to find a new partner or not to hang out with the *interloper* anymore).

- 2 Reciprocal communication in the service of the self's perspective, reflecting an orientation toward FAIRNESS (top answers: turn-taking and compromise such that each person gets something).
- Mother says the *child* should find a new partner so that everyone can do the activity or so both *child* and *best friend* can do some of what they want.
  - Mother says the *child* should meet the *best friend* and *interloper* at the birthday party so that they can do their own thing but *child* can still hang out with them later.
  - Mother says the *child* should suggest that the best friend and interloper can all go along on the ski trip or birthday activity so that no one feels left out.
  - Mother says the *child* should do nothing because *child* can see *best friend's* point of view or has sympathy for the *interloper*.
  - Mother says the *child* should pretend there's not a problem so that no one feels badly.
  - Mother says the *child* should ask the *best friend* for information (why the best friend invited *interloper*, why the best friend did the activity with *interloper*)—asking the other for information suggests 2<sup>nd</sup>-person perspective-taking and reciprocal communication.
  - Mother says the *child* should get in touch with *best friend* and/or *interloper* to tell how he/she feels and states why he/she was upset.
  - Mother says that all three individuals should do the activity together so that no one feels left out or for another reason that sounds like fairness.
  - Mother says that her *child* should go with *best friend* next time (turn-taking, *interloper* goes first).
- 3 Collaboration with others for mutual interests, reflecting an orientation toward the RELATIONSHIP.
- Mother says that the child should want everyone to do the activity together so that they should all be friends.
  - Mother says that the child should want everyone to talk it out so that they can still be friends.
  - Mother says that her *child* should let it go because he/she can see the *best friend's* and/or the *interloper's* point of view and can see that letting it go would be best for the relationship (the situation is not something to get too upset about or can see how all three can be friends).
  - Mother says that her *child* should talk it out so that *child* and *best friend* come to understand each other better.

### Question 7: What would be the worst thing for [child] to do?

- 0 The mother cannot think of any obstacle or gives another solution instead of an obstacle, even after an explicit probe; the response provided does not make sense (reflecting a misunderstanding of the question or describing an obstacle to a different solution); or the mother says the child would become emotionally overwhelmed while trying to solve the problem.
  - Mother says that the *child* would get too upset while trying to deal with the problem and can't perform the solution.
  - The mother gives another solution instead of an obstacle.
  - The mother can't think of an obstacle.
- 1 The obstacle is a negative response related to restating a physical action toward the best friend or interloper (with little or no explanation or communication).
  - Throw water, dump contents of book bag, etc.
  - Child doesn't get to go on the ski trip, hot air balloon, etc. (situationally based not bringing in relationship or friendship just the concrete problem).
  - *Child* is mad.
  - The mother saying her *child* does not like her *best friend* anymore—no explanation.
  - The mother says that the child and best friend may get into a fight without an explanation.
- 2 The obstacle is reasonably communicated and well-explained or an unexpected and reasonable (probable) set of outside circumstances that causes understandable bad feelings, disappointment, or impacts the short-term relationship. This level includes situations in which the mother says her *child* acknowledges that the *best friend* might disagree with the “proposed solution to handle this problem.”
  - The friendship ends (with no explanation).
  - *Child* stays mad.
  - Mother says the *child* and the *best friend* disagrees with the solution from above.
  - Mother says *child* and *best friend* disagree about the solution and fight about it/get mad at each other—this doesn't happen “magically” or for no reason but rather usually occurs with some sort of communication.
    - “The worst thing would be for my child and their best friend to get mad at each other and disagree about how to repair the damaged property.”
  - Mother says the *child* and *best friend* may drift apart and are no longer friends.
- 3 The obstacle is a circumstance that is a problem because it has an impact on the long-term relationship. Saying that the friendship will end is not enough to qualify for this level. The reason for relationship difficulties must be psychologically based and reasonable (probable). This level includes recognition that a personality conflict could serve as an impediment to a long-term relationship.
  - Child stays mad because of anger issues that may create a rift in the relationship.

- Mother says that that there was some kind of misunderstanding or miscommunication that occurred that causes harm to the friendship (e.g., someone takes something the wrong way).
- Mother says that her *child* will not want to remain friends with the *best friend*, because the *best friend* lies to him/her or somehow violated their trust.

### INS Individual Scores

The Relations between the Interview Questions, the Functional Steps, and Individual Scores

<b>Step 1 - Defining the Problem Score</b>	<b><u>Score</u></b>
1. What's the problem here? Any why are these/is this a problem(s)?	<b>Level</b>
2. What is [child] feeling? Some people might think that is a little out of line or unnecessary. Do you feel s/he has the right to feel that way? Has s/he overreacted? Why? Is there anything else s/he could be feeling? Are there any other reasons you can think of why s/he would feel that way?	<b>Level</b>
3. [Friend]'s behavior is very puzzling here. Is there any way to understand it? Do you feel [friend] has the right to feel/act that way? Why? Is there anything else [friend] could be feeling? Are there any other reasons you could think of why s/he would feel that way?	<b>Level</b>
4. How about [interloper]? How can you explain their behavior here? Do you feel [interloper] has the right to feel/act that way? Why? Is there anything else [interloper] could be feeling? Are there any other reasons you could think of why he would feel that way?	<b>Level</b>
<b>Step 2 - Generating Alternative Strategies</b>	
5. If we were just brainstorming and you were faced with this problem with [child], what are all the things you can think of that [child] can do to solve this problem, if any? (after each) How would that solve the problem? Is there any way that could go wrong?	<b>Level</b>
6. What would be the best thing to do?	<b>Level</b>
7. What would be the worst thing for [child] to do?	<b>Level</b>

## INS Interview Scoring Sheet

<b>Subject ID:</b> _____		<b>Coder:</b> _____	
		<b>Date:</b> _____	
<b>Dilemma:</b> _____		<b>Dilemma:</b> _____	
	<b>Level</b>	<b>Notes</b>	<b>Level</b>
<b>Step 1:</b>			
<b>Q1:</b> Problem Definition	_____		_____
<b>Q2:</b> Child's Feelings	_____		_____
<b>Q3:</b> Best Friend's Feelings	_____		_____
<b>Q4:</b> Interloper's Feelings	_____		_____
<b>Step 2:</b>			
<b>Q5:</b> Alternative Strategies	_____		_____
<b>a.</b>	_____		_____
<b>b.</b>	_____		_____
<b>c.</b>	_____		_____
<b>d.</b>	_____		_____
<b>e.</b>	_____		_____
<b>Q6:</b> Best Thing to Do	_____		_____
<b>Q7:</b> Worst Thing to Do	_____		_____

### INS Coding Examples

#### STEP 1: Problem Definition

**Question 1: What is the problem here? Why is that a problem?**

	<b>Example</b>	<b>Definition</b>
<b>0</b>	-I don't see a problem -My child needs to do X (make the interloper go find another friend)	-No problem is seen, even after probing. -Or problem is confused with the solution.
<b>1</b>	-It's their annual ski trip and the best friend invited someone else to go with. -Child is unable to go on a ski trip with their friend	-Answers reflect mostly one person's perspective. -Not scored as a level 2 because both people's perspectives are not given.
<b>2</b>	-My child wanted to go on the ski trip with the best friend, but the best friend decided to take someone else.	-Multiple perspectives identified, but separately

<b>3</b>	-My child wanted to do something with the best friend, but sees that the best friend decided to go with someone else. At the same time, even though the best friend decided to go skiing with someone else, they did not want to hurt my child.	-The friends have differing perspectives/wants but the mother indicates that each recognizes the other's perspective. -The mother says that they recognize the problem as affecting their friendship and/or as one that they need to work out together.
----------	---	--

**Question 2-4: What is [child/best friend/interloper] feeling? Some people might think that is a little out of line or unnecessary. Do you feel s/he has the right to feel that way? Has s/he overreacted? Why? Is there anything else s/he could be feeling? Are there any other reasons you can think of why s/he would feel that way?**

	<b>Example</b>	<b>Definition</b>
<b>0</b>	-The mother doesn't know how anyone feels. -Mother says one person is upset (usually the child) or happy (usually the best friend or interloper) and the mother doesn't know how the others feel or says they don't feel anything.	-Either no emotions are recognized or (more likely), the mother recognizes only one person's feelings and that person has those feelings for a practical reason (e.g., can't go skiing or to on the air balloon ride)
<b>1</b>	-The mother says her child is upset and the best friend doesn't care. -Mother indicates her child is jealous/upset and the best friend/interloper is happy.	-Answers reflect one person's perspective almost exclusively -If both perspectives given, no complex feelings and no connection between the feelings of the child, best friend, or interloper are expressed or feelings result from a practical concern (can or can't go to the birthday surprise or ski trip)
<b>2</b>	-Mother says the child is upset and the best friend feels awkward. -Mother suggests the child is upset/betrayed & the best friend might feel both happy and guilty	-The mother understands how one person's actions/feelings impact the other or one person's feelings are complex while the other person's feelings remain simple and practically based. -Complex feeling may also involve sympathy for the interloper.
<b>3</b>	-Mother says the best friend is concerned that her child would be hurt or disappointed and says her child sees the best friend as wanting to start a friendship with the interloper. -Both want to keep the friendship.	-The mother suggests that her child and the best friend are concerned about what the other is thinking or feeling and/or both are concerned about the problems and how it impacts the friendship.

STEP 2: Strategy Generation

**Question 5: If we were just brainstorming and you were faced with this problem with [child], what are all the things you can think of that [child] can do to solve this problem, if any? (After each) How would that solve the problem? Is there any way that could go wrong?**

	<b>Example</b>	<b>Definition</b>
<b>0</b>	<ul style="list-style-type: none"> <li>-The mother says that her child wouldn't do anything because they would be too upset.</li> <li>-Mother says her child would yell at the best friend/interloper, give them dirty looks, or the cold shoulder.</li> </ul>	<ul style="list-style-type: none"> <li>-No action taken because the child is emotionally overwhelmed</li> <li>-Action taken against or to influence another because emotionally overwhelmed or out of vengeance</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>-Says the child would find a new partner or friend to avoid a fight, losing a friend, or simply to have a friend or someone to do the activity with.</li> <li>-Mother suggests the child would get in touch with the best friend and/or interloper to say how he/she feels so the best friend and/or interloper will do something to please the child (for example, best friend doesn't take interloper next time or invites the child)</li> </ul>	<ul style="list-style-type: none"> <li>-Gets around problem without dealing with it.</li> <li>-Doing something (or nothing) to avoid a fight also level 1.</li> <li>-Finding a new friend/partner is similar to doing something to avoid losing a friend (Selman scored as level 1).</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>-Mother says the child would get in touch with best friend and/or interloper to tell how he/she feels so that they understand why he/she was upset.</li> <li>- Mother says the <i>child</i> would pretend there's not a problem so that no one feels badly.</li> </ul>	<ul style="list-style-type: none"> <li>-Trying to influence another to get one's way.</li> <li>-Answers here reflect a sense of fairness, all parties get something). At level 2, there is still a sense of doing things to get one's way or to give into the other's wishes, at level 3, there is a sense of mutuality and concern for the relationship.</li> <li>-If the purpose of talking to the best friend (and interloper) is to come to a compromise where everyone gets something out of fairness (e.g., alternate skit trips), score level 2.</li> <li>-Talking to the best friend about how each feels (as long as not solely to get one's way) reflects an understanding of reciprocal perspective-taking.</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>-Mother says her child would talk to the best friend and the</li> </ul>	<ul style="list-style-type: none"> <li>-If the purpose of the child talking to their best friend and interloper is to work things out</li> </ul>

	<p>interloper to discuss how everyone feels so maybe they can all be friends.</p> <p>–Mother says her child would go along with what the best friend and interloper wants because the children could both see how her child and the best friend could be friend with the interloper.</p>	<p>together so that they can come to a mutual agreement or understanding or so that all three become friends, score as a level 3.</p> <p>–At level 3, there is recognition that everyone shares the problem and must work on it together.</p>
--	--	---

**Question 6: What would be the best thing to do?**

See table above for coding this question.

**Question 7: What would be the worst thing for [child] to do?**

	<b>Example</b>	<b>Definition</b>
<b>0</b>	<p>–Worst thing not given.</p> <p>–Mother saying child becomes emotionally overwhelmed and acts impulsively.</p>	<p>–Level 0 because it includes impulsive actions and a lack of understanding of the question, or an inability to see any potential worst things the child would do.</p>
<b>1</b>	<p>–The mother says the child would express that they do not like the best friend anymore.</p> <p>–Mother says worst thing is that her child gets the best friend and interloper mad at the child.</p>	<p>–Negative response or flat rejection from best friend, simple and not well-explained (see notes for levels 2 and 3 for more complex and better-explained obstacles below). Level 1 also includes unlikely outcomes.</p>
<b>2</b>	<p>–Mother says the worst thing would be that her child behaves in a way that causes the best friend and interloper to become better (best) friends.</p> <p>–Mother says that the child is unable to solve the problem with the best friend and gives a reason.</p>	<p>–Probable outcome leading to disappointment and/or impacting the short-term relationship.</p> <p>–Reason behind break-up is practically based (can't be good friends with both), not psychologically based (personality conflict, level 3).</p>
<b>3</b>	<p>–Mother says there is a personality conflict that keeps all 3 teens from being friends or getting along.</p> <p>–Mother says best friend and child agree that they no longer fit together as friends.</p> <p>–Mother says something else happens that child and best friend have to work out.</p>	<p>–Personality conflict or something happening that is a mutual problem between the child and the best friend and poses threat to the long-term relationship.</p>

## APPENDIX D: Perception of Parenting Self-Efficacy Coding

Mothers' beliefs about their parental self-efficacy in their children's relationships will be captured using interview items assessing the degree to which mothers believe they have the right to control their children's peer relationships. The interview questions included "What do you think parents can do in these types of situations?", "Is this the type of situation that parents can help with or is it out of parents' control?", and "What would YOU do if this happened to your child?". These items were structured to be similar to those presented in previous studies that identified parental efficacy as a precursor to direct parenting behaviors related to their children's peer experiences.

**Definition:** Parental self-efficacy is an estimation of the degree to which mothers perceive themselves as capable of helping their child in a specific domain. In the case of the present study, this relates to mothers' ability to effectively help out in the peer domain as their children are depicted as having experienced a challenging setback with their best friend.

After reading mothers' responses to each prompt underneath this set of questions, you will code the level of parental self-efficacy using a 5-point scale ranging from -2 (none) to 2 (a great deal).

<b>0</b> <b>None</b>	<b>1</b> <b>Very Little</b>	<b>2</b> <b>Some</b>	<b>3</b> <b>Quite a Bit</b>	<b>4</b> <b>A Great Deal</b>
-------------------------	--------------------------------	-------------------------	--------------------------------	---------------------------------

**Q: "What do you think parents can do in these types of situations?", "Is this the type of situation that parents can help with or is it out of parents' control?", and "What would YOU do if this happened to your child?"**

- 0 (None)** Mother says there is nothing parents can do in these types of situations.
- Mothers do not want to be involved with their children's friendships. She lets them handle their own friendship dilemmas. Whatever happens between the child and the friend is beyond her control.
  - The mother doesn't want to get involved with the friend or the friend's parents. Expresses no interest in finding out anything about the friendship dilemma.
  - The mothers' responses indicate extreme pessimism that mothers can help. For this score, mothers may say that they do not spend time worrying about their children's friendship difficulties because it is out of their control.
    - "Parents can't do anything here. This is out of their control."
  - Mothers suggest they are incapable to manage their children's problems.
    - "...relationship issues are up to the kids to deal with on their own."
  - Moms don't have any control over who their children associate with in friendships.
    - "Oh wow, these types of situations are really meant for my child to work through. You know, parents can't really be there all the time to tell children who they can and cannot hang out with. Children have to handle these scenarios."

- 1 (Very Little)** The mother suggests that there is very little that she can do in these types of situations. (This code falls between the *Nothing* code and the *Some* code)
- The mother says she would not have much of an impact on helping her child in this situation; it's something the child should work through.
    - "I mean, I might talk to my child, but parents really don't have anything to do with it. Kids, have to work that out on their own."
  - If this really happened they would remove their child from the situation, but would not attempt to help the child with this situation.
    - "I can't really help in these types of situations. If I knew my child was having a problem with their friend I would probably just show up to school and take my child out of the situation. But I would tell my child to deal with the situation. You know, make it right with their friend."
    - "I would tell the child to move on and let it go. To be done with the situation."
- 2 (Some)** The mother suggests that it depends on if she can or cannot help in these types of situations. She can have some influence, but she also states that the child needs to have some control of their own experiences with peers.
- Mother suggests that sometimes she can provide influence on the situations involving peers, but this depends on if the child will listen.
    - "I can give my child tons of guidance, but they may not always listen. It just depends if I actually need to help in this situation."
  - Mom indicates that this situation may not be one that she can always help with, but she might try to help her child through the situation.
  - The mother would be there for the child but not help her. The mother would let the child figure out the situation and how to handle it.
    - "I think I could help. I mean, I might be able to help by talking to my child, but I also feel that this can only go so far. My daughter needs to do the leg work and handle this situation on her own."
    - "I think, sometimes, a lot of times, parents get involved in situations when they shouldn't. That this is between those two children or three, and parents really should stay out of it; unless it gets really out of hand. If this really happened, I would encourage my child to talk to Jamie and work it out. But that would be only advice to her."
- 3 (Quite a Bit)** The mother indicates that she can help out her child quite a bit in these types of situations. (This response fall in-between the *Some* code and the *A Great Deal* code).
- Mother suggests that she can listen to her child in these types of situations.
    - "moms can serve as a good sound board and help them evaluate their behavior"
  - Mother may talk to child to understand motivations and actions in the situation.
    - "I would talk to them and let them tell me how they feel and listen to them and try to give advice on ways to solve it without having to play a more direct role in helping my child solve the situation with their friend."
  - Mother would figure out what is going on and give her advice.

- 4 (A Great Deal) The mother says she is highly involved in these types of situations and collaborates with her child. She does a great deal helping her child through this scenario.
- Mother suggests she can do a great deal in helping who her child associates with.
    - “I mean I would try to talk to Corey’s parents and not Casey’s, because he’s not really friends with [*my child*]. But I would talk to Corey’s parents and say that the boys have had difficulties and that I can’t keep having Casey come over if they are going to be mean to each other. I mean, I don’t want them to be forced to be together, I would just want to talk to the parents and get them behind both of the boys and have them work it out or stop hanging out with each other.”
  - Mother’s response indicates that she frequently discusses these types of situations with her children and how they need to behave.
  - Mother states that she can always help in these types of situations with her child.
    - “My daughter has faced these experiences before. I always make sure to talk through the situation with my daughter to get her to start thinking about how she could resolve the situation. You know, I kind of work through the situation with my daughter so we both can come up with how to deal with the problem she’s having with her friend.”
  - Mother indicated she can do a lot to manage and control children’s peer experiences.
    - “My child and I would work through the situation together”

## APPENDIX E: Maternal Strategies Coding

Dimensions of mothers' coaching ideas will be captured using interview items assessing the content of mothers' conversations of how they would respond to their children's peer difficulty using coaching. The interview questions included: "What do you think parents can do in these types of situations? Is this the type of situation that parents can help with or is it out of parents' control? What would YOU do if this happened to (Child)? Why?", "What would you do if this really happened and you received a call from the principal telling you that (Child) destroyed Taylor's jacket and books? What would your immediate reaction be? Is there any more information you need to determine how you would react?", "What would you do and say, if anything, about the situation when you saw (Child) next? Why do you think you would react like that? How could that be helpful? How could it hurt? What else would you do? What kind of punishment does (Child) deserve? Why?" These items were structured to be similar to those presented in previous coaching studies and allowed an opportunity for mothers to coach their children through a peer difficulty.

**Definition:** The term coaching is often used to express the more active and proactive modes of influence that parents can have in the lives of their children. It involves parental practice of giving advice, providing assistance, and clarifying emotions to a child about peer relationships. In the case of the present study, this relates to mothers' ability to effectively help their children in the birthday surprise and the ski trip vignettes.

Examples of mother's strategies that you should watch out for include: Mothers' general advice to their children about key issues in their social conflict. Advice can take the form of identifying the information that their child needed to attend to in the situation, clarifying the intent, motives, and attributions of their child or child's peers in the social setting, clarifying the goals their child should possess, help the child devise possible actions to take, refer to how they would help their child and evaluate those actions, and suggestions for behaving more effectively in peer conflict. You should also mark down when mothers highlight the emotions of the actors in the story by saying she would encourage her child to think about how the best friend or interloper in the vignette feel (e.g., labeling how her child would feel if s/he were the best friend in story) and make emotional statements (labeling) or ask questions and clarify emotions.

High tallies will be given to mothers' who highlight the emotions of all the characters in the vignette by clarifying and encouraging their children to think about their emotions and say they would help their child attend to relevant cues and details in the story by providing advice.

Low tallies will be assigned when mothers do not appeal to emotions or feelings of those characters in the story, do not clarify their child's emotions and how they should feel in their peer conflict, do not mention that they would offer advice to their children.

Subject ID: \_\_\_\_\_

Coder: \_\_\_\_\_

Date: \_\_\_\_\_

Dilemma:

Dilemma:

	<u>Frequency</u>	<u>Total</u>		<u>Frequency</u>	<u>Total</u>
<b>Coaching Ideas:</b> <b>Examples include:</b> <ul style="list-style-type: none"><li>• Clarifying the goals the child should possess</li><li>• Clarifying the intent, motives, and attributions of child's, best friend's, and interloper's behavior</li><li>• Helping the child devise possible action in the social situation</li><li>• Providing suggestions for what they child should say to peers</li><li>• Clarifying the child's emotions and how they should feel</li><li>• Labeling the child's, best friend's, or interloper's emotions</li></ul>					

Notes:

## My Relationship Style...

Please rate the following relationship style according to the extent to which you think the description fits your general relationship style.

If something is absolutely not at all like me not, **circle 1**

If something is maybe a tiny bit like you, **circle 2**

If something is a bit like you, **circle 3**

If something seems in the middle, **circle 4**

If something is quite a bit like you, **circle 5**

If something is a great deal like you, **circle 6**

If something is absolutely like you, **circle 7**

1. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

APPENDIX G: Mother-Child Relationship Warmth

Maternal Warmth Scale (Lamborn, Mounts, Steinberg, & Dornbusch, 1991)

*More about my parents and me...*

We would like to learn a couple things about how you get along with your mother (stepmother, etc.) and father (stepfather, etc.). Be honest and remember your answers will not be shown to others and there are no right and wrong answers. Everyone is different.

If something is absolutely not true, **circle 1**

If it is somewhat true, **circle 2**

If it is really true, **circle 3**

**What is usually true about your mother?**

1. I can count on her to help me out if I have some kind of problem.
2. She keeps pushing me to do my best in whatever I do.
3. She spends time just talking with me.
4. She helps me if there is something I don't understand.
5. When she wants me to do something, she explains the reasons why.

APPENDIX H: Social Adjustment Outcome Questionnaires

Friendship Jealousy

*How are you feeling right now?*

**How often do you actually have the following thoughts about your best friend?**

If you say you never have the following thoughts, **circle 1**

If you say every once in a while you have the following thoughts, **circle 2**

If you say you sometimes have the following thoughts, **circle 3**

If you say pretty often you have the following thoughts, **circle 4**

If you say all the time you have the following thoughts, **circle 5**

1. I'm worried that my best friend is becoming better friends with someone else.
2. I am worried that someone else is trying to become his or her best friend.
3. I think my best friend may like other friends better than me.
4. I think that my best friend hangs out with other kids behind my back.
5. I'm worried that my best friend hangs out with other people and doesn't tell me or invite me.
6. I'm worried that people call or IM my best friend and invite him or her to go places without me.

## *My best friend and me...*

**Help us understand what you and your best friend are like together. Think about your friendship with your very best friend and answer the questions below. How well do these things describe your relationship with your best friend?**

If something is not at true of your friendship, **circle 1**  
If something is a little true of your friendship, **circle 2**  
If something is somewhat true of your friendship, **circle 3**  
If something is mostly true of your friendship, **circle 4**  
If something is really true of your friendship, **circle 5**

1. We help each other with schoolwork.
2. We make each other feel important and special.
3. We care about each other's feelings.
4. We tell each other about our problems.
5. We pick each other as partners for things.
6. We help each other with things so we can get done quicker.
7. We talk about the things that make us sad
8. We ask each other for help and advice when we have trouble figuring out something.
9. We tell each other that we're good at things.
10. We tell each other secrets.

## What I am and what I am not...

Read each sentence below carefully and circle the number that tell us is this describes you. Be honest. Your answers are always private.

If, honestly, the statement is **Not at all like you, circle 1**

If, honestly, the statement is **A little like you, circle 2**

If, honestly, the statement **Describes you pretty well, circle 3**

If, honestly, the statement is **Really like you, circle 4**

1. I find it hard to make friends
2. I am able to make really close friends
3. I have a lot of friends
4. I am kind of hard to like
5. I have a close friend I can share a secret with
6. I find it hard to make friends that I can really trust
7. I feel I am socially accepted
8. I DO NOT have a friend who is close enough to share really personal thoughts with
9. I am popular with other people my age

APPENDIX I: Means and Intercorrelations of Mother, Adolescent, and Mother-Child Relationship Variables

Variables	1	2	3	4	5	6	7	8
1. Maternal Strategies	-	.41*	.15	.29	-.02	.17	-.27	-.02
2. Interpersonal Reasoning	.29 <sup>†</sup>	-	.12	.22	.10	.12	-.16	.21
3. Parenting Self-Efficacy	-.10	.08	-	-.16	.24	.30	-.10	.18
4. Maternal Relationship Security	-.09	.23	.10	-	.03	.08	.19	-.16
5. Mother-Child Relationship Warmth	.02	-.04	-.07	.21	-	-.07	.51**	.50**
6. Friendship Jealousy	.05	-.01	.39*	-.21	-.23	-	-.27	.19
7. Social Self-Esteem	-.08	-.12	-.01	.46**	.41*	-.44**	-	.35*
8. Friendship Closeness	.07	.09	.18	.10	.27	-.08	.35*	-
<i>M (S.D.)</i>	2.00 (1.17)	1.36 (.32)	2.70 (.63)	4.06 (1.97)	2.51 (.38)	1.92 (.81)	3.39 (.48)	3.75 (.87)
Boys	2.09 (1.15)	1.35 (.34)	2.74 (.66)	3.19 (1.80)	2.47 (.37)	1.75 (.62)	3.24 (.48)	3.20 (.78)
Girls	1.94 (1.20)	1.37 (.30)	2.66 (.61)	4.77 (1.83)	2.53 (.39)	2.05 (.93)	3.50 (.44)	4.21 (.63)
<i>t</i> (1, 69)	-5.3	.20	-.54	3.65***	.66	1.58	2.37*	6.05***

*Note.* Correlations for boys ( $n=32$ ) are presented above the diagonal, and correlations for girls ( $n=39$ ) are presented below the diagonal. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ ; <sup>†</sup> $p < .10$ ;  $N = 71$

## APPENDIX J: Institutional Review Board Certification

October 14, 2009

Office for Research  
Institutional Review Board for the  
Protection of Human Subjects

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

Jeffrey Parker, Ph.D.  
Department of Psychology  
College of Arts and Sciences  
The University of Alabama

Re: IRB # 09-OR-291 "Parent-adolescent Communication: Links with Adolescent Jealousy and Social Behavior"

Dear Dr. Parker:

The University of Alabama Institutional Review Board has granted approval for your proposed research

Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on October 13, 2010. If your research will continue beyond this date, complete the relevant portions of Continuing Review and Closure Form. If you wish to modify the application, complete the Modification of an Approved Protocol Form. When the study closes, complete the appropriate portions of FORM: Continuing Review and Closure.

Please use reproductions of the IRB approved informed consent form to obtain consent from your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,