

ABSTRACT

Title of Document: PARENTAL ATTACHMENT STYLE: LINKS WITH PARENT AND ADOLESCENT PERCEPTIONS OF PARENTING AND OBSERVED SECURE BASE BEHAVIORS

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The first goal of the present study was to examine how mothers' and fathers' self-reported attachment styles relate to how they perceive themselves as parents and to their ability to serve as secure base for their adolescent children. The second goal was to examine how parents' attachment styles relate to adolescents' perceptions of their parents and to observed adolescent secure base use with each parent. Path analyses revealed that greater parental insecurity predicted parents' negative perceptions of themselves as parents. Further, maternal avoidance and paternal anxiety were significantly indirectly related to observed secure base provision through parents' perceptions of hostility toward their adolescent. In addition, parental attachment styles significantly predicted adolescents' perceptions of mothers, but not fathers. Further, maternal avoidance was significantly indirectly related to adolescent secure base use through adolescent perceptions of their mothers. These results advance the growing body of literature demonstrating an important link between parents' self-reported attachment styles and various facets of parenting.

PARENTAL ATTACHMENT STYLE: LINKS WITH PARENT AND
ADOLESCENT PERCEPTIONS OF PARENTING AND OBSERVED SECURE
BASE BEHAVIORS

By

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Chapter 1: Introduction

Bowlby (1969/1982, 1973, 1980) developed attachment theory as a comprehensive theoretical framework within which to understand the close social and emotional bond that develops between infants and caregivers. Despite some discussion of caregiving in his writings, Bowlby primarily focused on the attachment (i.e., child) side of what he referred to as the “attachment-caregiving” bond (Bowlby, 1969/1982, p. 377). However, his use of the ethological concept of inter-related behavioral systems, and his ideas about attachment system functioning across the lifespan, provided a solid theoretical basis for attachment researchers to advance understanding of the caregiving (i.e., parent) side of this relationship (see George & Solomon, 1999, 2008, for reviews).

In this thesis, I begin by discussing Bowlby’s theory about the links between attachment and caregiving. Second, I discuss individual differences in adult attachment and review research on how these differences relate to caregiving behaviors. Third, I discuss child perceptions of and behavior towards parents, and present an argument for why these should be related to parental attachment styles. Fourth, I provide an overview of the present study and outline study hypotheses. Fifth, I describe the methods used in the present study. Sixth, I present study results. Finally, I discuss study results, outline study limitations, and suggest future directions for this area of research.

The Attachment Behavioral System and the Caregiving Behavioral System

Bowlby adopted the ethological concept of behavioral systems to explain human behavior and development. A behavioral system refers to a species universal set of behaviors that is activated by specific internal and external stimuli and that leads to a specific predictable outcome. When this outcome is achieved, system activation decreases. Such behavioral systems evolved because they organize an individual’s behavior in ways that increase the likelihood of survival and enhance reproductive fitness (Bowlby, 1969/1982; Stevenson-Hinde, 1994). Importantly, although these behavioral systems are thought to be innate, Bowlby (1969/1982) argued that the functioning of behavioral systems is influenced by experiential factors and current context.

In an attempt to account for his observations of infant behavior in response to separations from primary caregivers (Robertson & Bowlby, 1952), Bowlby (1969/1982)

proposed a biologically based and evolutionarily adapted *attachment behavioral system* that guides social behavior “from the cradle to the grave” (Bowlby, 1979, p. 129). This behavioral system organizes an infant’s behavior around the set-goal of seeking and maintaining proximity to an attachment figure (usually the child’s primary caregiver). The principal function of the attachment behavioral system is to protect young, vulnerable infants from danger (e.g., predation), which promotes survival, and, ultimately, enhances reproductive fitness. Although the attachment system most strongly influences behavior early in life, when children are most vulnerable and dependent on others, Bowlby argued that this system continues to operate and influence behavior across the lifespan. Thus, *both* child and parent possess attachment behavioral systems that influence thoughts and behaviors in the parent-child relationship.

Bowlby also described the ways in which several other behavioral systems (e.g., sex, affiliative, exploratory, caregiving) dynamically interact with the attachment behavioral system (see Cassidy, 2008, for review). Of particular relevance to the present study is the *caregiving behavioral system*. According to Bowlby (1969/1982), the caregiving behavioral system evolved in humans to organize behavior around the goal of protecting and supporting dependent others – particularly one’s offspring. Specifically, the behaviors organized by the caregiving system serve to protect offspring from danger, reduce a dependent others’ distress, and promote offspring exploration and growth. Ultimately, these caregiving behaviors promote the survival of one’s offspring and, therefore, one’s genes (see George & Solomon, 2008, for a review of the caregiving behavioral system).

In the context of well-functioning parent-child relationships, the child’s attachment system and the parent’s caregiving system work in synchrony (Bowlby, 1969/1982). These two systems share a common goal – proximity between infant and attachment figure – and serve a common function – protection and survival of offspring. For example, when there is physical distance between a child and an attachment figure and a threat arises, the child’s attachment system motivates the child to seek proximity to the attachment figure, and the parent’s caregiving system motivates the parent to seek proximity to the child (Cassidy, 2008). However, the functioning of a parent’s *own* attachment system can bolster or hinder the functioning of the caregiving system and the

quality of care a parent is able to provide. Bowlby (1969/1982) argued that activation of the attachment system can inhibit the activation of certain other behavioral systems, such as the caregiving system, and interfere with the effective functioning of those systems. Thus, if a mother's attachment system is activated, her focus will be on herself and on her own needs, and she will be less able to focus on the needs of her child. Further, individual differences in parental attachment system functioning may predict specific patterns of caregiving behavior. Indeed, substantial empirical support has emerged for attachment-related individual differences in parental caregiving behavior (e.g., Adam, Gunnar, & Tanaka, 2004; Cohn, Cowan, Cowan, & Pearson, 1992; Edelstein et al., 2004; Mills-Koonce et al., 2011; Rholes, Simpson, & Blakely, 1995; Ward & Carlson, 1995). In the next two sections, I discuss individual differences in adult attachment and their relation to caregiving.

Individual Differences in Adult Attachment

A central tenet of attachment theory is that there are individual differences in the quality of attachment stemming from early experiences with caregivers (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969/1982). Although Bowlby mainly focused on attachment in infancy, he viewed attachment as a lifespan construct. Working from Bowlby's solid theoretical foundation, researchers eventually began studying attachment in adulthood. Two seminal investigations in the 1980s (Hazan & Shaver, 1987; Main, Kaplan, & Cassidy, 1985) spawned the formal study of individual differences in adult attachment. Interestingly, over the past 25 years, adult attachment research has progressed within two relatively distinct research traditions, despite both being grounded in Bowlby and Ainsworth's attachment theory. Developmental and clinical psychologists have been mainly interested in *state of mind with respect to attachment* measured using interview-based assessments such as the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1984, 1985, 1996). State of mind with respect to attachment is thought to reflect experience-based mental representations (or *internal working models*) of the self, attachment figures, and close relationships (Main et al., 1985, see also Bretherton & Munholland, 2008). Individual differences in state of mind (i.e., secure-autonomous, dismissing, preoccupied, unresolved) are largely determined based on the linguistic properties (e.g., coherence), rather than the content, of the participant's answers to

questions about their childhood attachment experiences (see Hesse, 2008, and Main, Goldwyn, & Hesse, 2002, for descriptions of AAI attachment categories).

Social and personality psychologists, on the other hand, have been mainly interested in *adult attachment styles* assessed with self-report measures such as the Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998). Attachment styles are thought to reflect relatively stable “patterns of expectations, needs, emotions, emotion-regulation strategies, and social behavior” in close relationships (Shaver & Mikulincer, 2002, p. 134). Individual differences in attachment styles reflect differences on two dimensions: avoidance and anxiety (Brennan et al., 1998). High scores on either avoidance or anxiety indicate greater attachment insecurity whereas low scores on both avoidance and anxiety indicate greater security. Attachment-related avoidance reflects the tendency to deactivate the attachment system and is characterized by a preference for physical and psychological distance in relationships as well as discomfort with depending on others or having others depend on you. Attachment anxiety, on the other hand, reflects the tendency to hyperactivate the attachment system and is characterized by a persistent need for intimacy and closeness in relationships as well as strong fears of being rejected or abandoned (Shaver & Mikulincer, 2002).

Interestingly, there has been considerable debate among attachment researchers about whether these two types of adult attachment measures assess the same underlying construct or different, but perhaps related, constructs (see the special issue of *Attachment & Human Development*; Fraley, 2002). In a recent meta-analysis, Roisman, Holland, Fortuna, Fraley, Clausell, and Clark (2007) concluded that the relation between attachment state of mind measured with the AAI and self-reported attachment style is “trivial to small” (p. 682; yet see Shaver, Belsky, & Brennan, 2000, for evidence of stronger links between the two types of measures). Perhaps most perplexing given the apparent lack of association between AAI and self-reported attachment is the constellation of findings showing that both types of measures are similarly related to a host of attachment-relevant constructs, such as social information-processing (e.g., memory for and attention to attachment-relevant social information; Dykas & Cassidy, 2011) and emotion regulation (Mikulincer & Shaver, 2007, 2008, for reviews) in theoretically expected ways.

Adult Attachment and Parenting

Traditionally, investigations of the links between adult attachment and parenting have been the focus of researchers within the AAI camp (e.g., Adam et al., 2004; Cohn et al., 1992; Crowell & Feldman, 1988; Grossmann, Fremmer-Bombik, Rudolph, & Grossmann, 1988; Ward & Carlson, 1995). Meta-analytic data support the link between parental attachment assessed with the AAI and caregiving behavior (e.g., parental responsiveness; van IJzendoorn, 1995). Despite an abundance of empirical support for the link between self-reported attachment styles and caregiving in the context of adult *romantic relationships* (see Mikulincer & Goodman, 2006, for review), researchers within the attachment styles camp have focused less on how parents' self-reported attachment relates to caregiving in the context of the parent-child relationship. However, the larger body of literature on adult attachment styles suggests that parents with insecure attachment styles might struggle with caregiving tasks.

A substantial body of empirical work suggests that the deactivating and hyperactivating strategies of avoidant and anxious individuals, respectively, pervade many different aspects of adult functioning (see Mikulincer & Shaver, 2007, and Shaver & Mikulincer, 2002, for reviews). Perhaps most relevant to the challenges and stresses of childrearing is the evidence for insecure individuals' maladaptive responses to stress and difficulties responding to the needs of others. Individuals higher in attachment-related avoidance tend to suppress distressing information and create physical and psychological distance from the source of distress as a means of coping (e.g., Edelstein & Gillath, 2008; Fraley & Shaver, 1997, 1998; Mikulincer & Florian, 1995, 1998). Further, when responding to the needs of others, avoidant individuals tend to be less supportive, less helpful, and tend to maintain physical distance from romantic relationship partners (Fraley & Shaver, 1998; Kuncle & Shaver, 1994; Mikulincer & Reizer, 2007; Simpson, Rholes, & Nelligan, 1992). On the other hand, individuals higher in attachment anxiety tend to ruminate on their own distress, view themselves as less able to deal with stress, and utilize coping strategies that intensify, rather than alleviate, their distress (e.g., Birnbaum, Orr, Mikulincer, & Florian, 1997; Mikulincer & Florian, 1995, 1998). In relation to responding to the needs of others, anxious individuals have demonstrated a pattern of responding that is intrusive and out-of-synch with the needs of romantic

relationship partners and tend to report egoistic motives for helping others (B. Feeney & Collins, 2001; Mikulincer & Reizer, 2007; Kuncze & Shaver, 1994).

Given these features of attachment-related avoidance and anxiety, researchers have proposed that parents with self-reported insecure attachment styles may lack the ability and/or motivation to provide care to children in a sensitive, responsive, and flexible manner (e.g., Edelstein et al., 2004; Mills-Koonce et al., 2011; Rholes et al., 1995). Further, there may be differences in parental caregiving as a function of the type of attachment insecurity (i.e., avoidance versus anxiety). A growing body of literature supports a link between self-reported attachment styles and various facets of parenting (e.g., Abaied & Rudolph, 2010; Edelstein et al., 2004; J. Feeney, 2006; Mills-Koonce et al., 2011; Rholes et al., 1995; Scher & Mayseless, 1994; Selcuk et al., 2010).

Whereas researchers within the AAI tradition have mainly focused on relations between adult attachment and *observed parental behavior*, researchers within the self-reported attachment styles tradition have mostly focused on relations between adult attachment and *self-reported parental behaviors* and *cognitions* (e.g., attitudes, perceptions, expectations). One of the main goals of the present study is to advance this area of research by examining the relations between parents' self-reported attachment styles and *observed* parental behavior directed toward their adolescent children. In the next two sections, I review the empirical literature on the links between parents' self-reported attachment styles and caregiving behaviors, attitudes, and cognitions.

Self-reported parental attachment styles and observed caregiving. To the best of my knowledge, only five studies have investigated the links between parents' self-reported attachment styles and observed caregiving behaviors (Berlin et al., 2011; Edelstein et al., 2004; Mills-Koonce et al., 2011; Rholes et al., 1995, Study 1; Selcuk et al., 2010). Overall, these studies support an association between parents' self-reported attachment styles and observed parenting behaviors in a variety of contexts and across a range of child ages (6 months to 7 years). However, the link between attachment styles and observed parenting behavior appears to be stronger for avoidance than for anxiety. In fact, only one study (Selcuk et al., 2010) reported significant associations between maternal attachment-related anxiety and observed parenting behavior. It is important to note, however, that fathers were almost completely excluded from these five studies.

Edelstein et al. (2004) included 4 fathers in their study; none of the other studies included fathers. Therefore, the results of these studies and the apparent dominance of avoidance over anxiety in predicting parenting behavior should be interpreted with caution until more research is conducted with fathers.

In the first study to examine the relation between parental attachment styles and observed caregiving behavior, Rholes et al. (1995, Study 1) observed mothers and young children (mean age = 36 months) participating in a laboratory teaching task. The results revealed a main effect of avoidance on maternal supportiveness as well as a significant avoidance X child behavior interaction. When children behaved more positively, the negative relation between avoidance and supportiveness was stronger. However, when children behaved more negatively avoidance was unrelated to supportiveness. Further, a significant avoidance X child behavior interaction emerged in predicting the quality of maternal teaching: the tendency to engage in positive teaching behavior was stronger for less avoidant mothers when the child's behavior was more positive. Attachment anxiety was unrelated to maternal supportiveness or quality of teaching behavior.

In a second study, Edelstein et al. (2004) observed how parents (35 mothers, 4 fathers) responded to their child's (mean age = 5.23 years) distress after receiving an inoculation at an immunization clinic. The authors coded several domains of parental behavior, including: parental sensitivity, parental structuring, parental non-intrusiveness, and parental non-hostility. These scales were combined to form a composite parental responsiveness variable. As predicted, the results revealed a significant interaction between parental avoidance and child distress in predicting parental responsiveness. The negative relation between avoidance and parental responsiveness was stronger when children were more distressed. Parental attachment anxiety was unrelated to parental responsiveness.

Two studies (Mills-Koonce et al., 2011; Selcuk et al., 2010) examined the relation between maternal attachment styles and observed maternal sensitivity during a free play session. Selcuk et al. found that maternal avoidance, but not anxiety, was significantly negatively related to overall maternal sensitivity (child age ranged from 10 to 50 months). These authors also grouped together specific caregiving behaviors associated with avoidance and anxiety into caregiving "themes." Maternal avoidance was positively

correlated with non-synchronicity in interactions, discomfort with contact, inaccessibility, missing the child's signals, and failing to meet the child's needs. Attachment anxiety was positively correlated with conflict in interactions, missing the child's signals, and interfering with exploration. Similarly, Mills-Koonce et al. found that avoidant, but not anxious, mothers demonstrated less sensitive maternal behavior; this was particularly true for avoidant mothers who reported higher levels of psychological distress (parenting behavior was observed when children were 6 and 12 months).

Finally, in the context of a parenting intervention study, Berlin et al. (2011) found that maternal baseline avoidance, but not anxiety, was negatively related to observed maternal supportiveness in the intervention group approximately three years later. Further, baseline avoidance moderated the intervention effects on maternal supportiveness such that the program was more effective for mothers with lower baseline avoidance (see Duggan, Berlin, Cassidy, Burrell, & Tandon, 2009, and Robinson & Emde, 2004, for similar moderational results).

Self-reported parental attachment styles and self-reported caregiving behaviors, attitudes, and cognitions. In addition to the five observational studies of parental behavior reported above, several studies have examined individual differences in self-reported caregiving perceptions, cognitions, and behaviors as a function of attachment styles. An extensive review of the literature revealed almost 50 studies of parental attachment styles and self-reported parenting variables (see Jones, Cassidy, & Shaver, 2013, for a review). Specific information about each of these studies, including sample characteristics, attachment style measure used, caregiving outcome variables, and main findings, is presented in Table 1 in Appendix A. Overall, the results of these studies consistently showed that insecure parental attachment styles were related to more negative parenting behaviors and cognitions. However, the relations between the subtypes of insecurity (avoidance and anxiety) and parenting outcomes have been much less consistent. Both avoidance and anxiety (not necessarily in the same study) have been shown to be related to: (a) greater parenting stress (Fernandes, Muller, & Rodin, 2012; Kor, Mikulincer, & Pirutinsky, 2012), (b) lower perceived ability to cope with the stresses of parenting or to parent effectively (Rholes et al., 1995, Study 2; Rholes, Simpson, Blakely, & Lanigan, 1997, Study 2), (c) more negative perceptions of actual

and prospective children (Pesonen, Raïikkoïnen, Keltikangas-Jaïrvinen, Strandberg, & Jaïrvenpïa, 2003; Priel & Besser, 2000; Rholes et al., 1997, Study 2), (d) lower perceived closeness to children both pre- and postnatally (Mikulincer & Florian, 1999b, Studies 1 and 2; Rholes et al., 1995, Study 1); and (e) less sensitive and adaptive self-reported parental behaviors (Abaied & Rudolph, 2010; Goodman et al., 1997; J. Feeney, 2006). However, some parenting domains seem to be specific to the subtype of attachment insecurity. For example, avoidance, but not anxiety, has been consistently related to less desire to have children (Rholes et al., 1995, Study 2; Rholes et al., 1997, Studies 1 and 2) and to less actual and expected satisfaction from parenting (Cohen & Finzi-Dottan, 2005; Rholes et al., 1997, Study 1). Anxiety, but not avoidance, on the other hand, has been shown to be related to hostility (Scher & Dror, 2003) and feelings of jealousy towards children (Wilson, Rholes, Simpson, & Tran, 2007).

Parental Attachment Style, Child Behavior Toward Parents, and Child Perceptions of Parents

Noticeably lacking in the attachment styles literature is examination of the relations between parental attachment styles and (a) children's attachment behaviors directed towards parents and (b) children's perceptions of parents. Two of the observational studies (Edelstein et al., 2004; Rholes et al., 1995) did assess child behavior during parent-child interactions (e.g., child distress in response to an injection, positivity/negativity during a teaching task), but neither study examined child behaviors specific to the attachment behavioral system, such as child secure base use. Secure base use refers to a child's ability to use the attachment figure as a base from which to confidently explore the environment and as a haven of safety to return to in times of need or distress (Ainsworth et al., 1978; Bowlby, 1988). To my knowledge, only two studies (Mayseless, Sharabany, & Sagi, 1997; Volling, Notaro, & Larsen, 1998) have examined the link between parental attachment styles and child secure base behaviors. Both studies examined child secure base behaviors in the context of the Ainsworth Strange Situation (Ainsworth et al., 1978), but the two studies yielded inconsistent results. Mayseless et al. found a significant association between mothers' self-reported attachment styles and children's secure base behavior. Specifically, maternal avoidance was positively related to child avoidant behavior and maternal anxiety was positively related to child resistant

and avoidant behavior. Contrary to these results, Volling et al. did not find any significant links between parental attachment styles and child secure base behavior.

The lack of focus on child secure base use in the attachment styles literature is rather surprising given the central importance of this construct to attachment theory and its primary role in classifying a child's attachment (Ainsworth, 1967; Ainsworth et al., 1978; Bowlby, 1988). The link between parent AAI attachment and infant secure base use is well-established (see van IJzendoorn, 1995, for meta-analysis). Children of secure parents (on the AAI) have been shown to effectively use their caregiver as a secure base and, thus, are also more likely to be classified as secure. By contrast, children of insecurely attached parents demonstrate difficulties relying on their caregiver as a secure base and, thus, are more likely to be classified as insecure. Further, evidence suggests that child secure base use and parental secure base provision persist at least through adolescence (Allen et al., 2003). Yet attachment researchers know virtually nothing about how self-reported parental attachment styles relate to child/adolescent secure base use or parental secure base provision. Clearly, this area of attachment research warrants further investigation.

The lack of research focusing on how parents' attachment styles relate to child perceptions of parents is understandable given the young age of child participants included in many of the prior studies. However, in the broader parenting literature, assessments of older children and adolescents' perceptions of their parents have been common (e.g., Bosco, Renk, Dinger, Epstein, & Phares, 2003; Michaels, Meese, Stollak, 1983; Neiderhiser, Pike, Hetherington, & Reiss, 1998; Phares & Renk, 1998; Rapee, 2009). These studies have revealed some important findings related to adolescents' perceptions of parents. First, teen and parent reports of parental behavior are often discrepant, suggesting that it is important to collect ratings from each reporter separately (Latendresse et al., 2009; Maurizi, Gershoff, & Aber, 2012; Michaels et al., 1983). Second, perceptions of parents are linked to child/adolescent functioning and adjustment in a variety of domains (e.g., psychopathology symptoms, school achievement, antisocial behavior, substance use; Bosco et al., 2003; Bolkan, Sano, De Costa, Acock, & 2010; Lumley, Dozois, Hennig, & Marsh, 2012; Phares & Renk, 1998, Spera, 2006). In fact, there is some evidence that adolescents' *perceptions* of parents may have a greater impact

on adolescent adjustment and behavior than *actual* parenting behaviors (Yahav, 2007). Finally, both theoretical arguments and empirical evidence suggest that adolescents' perceptions of parents mediate the link between parenting variables and adolescent behavior and adjustment (Neiderhiser et al., 1998; Powers, Welsh, & Wright, 1994).

To date, only four studies (J. Feeney, 2006; Jones, Ehrlich, Cassidy, & Lejuez, 2013; Kilmann, Vendemia, Parnell, & Urbaniak, 2009; La Valley & Guerrero, 2010) have examined how parents' attachment styles relate to children's perceptions of their parents. As predicted, these studies revealed that insecure parental attachment styles were related to more negative adolescent perceptions of parents (e.g., lower acceptance, greater psychological control, less adaptive conflict resolution behaviors, less parental knowledge of adolescents' whereabouts and activities, less satisfaction with parent-child relationship).

Given theory and these preliminary empirical findings, it is reasonable to assume that parents' orientations toward close relationships (i.e., their attachment styles) will shape children's perceptions and behaviors to some degree. This may be particularly true for adolescent children who are better able to think abstractly about their relationships with their parents and evaluate their parents' personalities than younger children. A 16-year history of repeated daily interactions with a caregiver who is either uncomfortable with relationship closeness and intimacy (i.e., avoidant) or who is clingy and hypersensitive to rejection (i.e., anxious) may lead to differences in how parents are perceived by their adolescents and in how adolescents behave toward parents. In addition, it is possible that adolescents' perceptions of and behaviors toward their parents are indirectly influenced by adolescents' observations of how parents interact with each other in their romantic relationship.

The Present Study

The first goal of the present study was to contribute to the literature on the links between parents' self-reported attachment styles and parental caregiving. In particular, I endeavored to contribute to the sparse literature on how self-reported parental attachment styles relate to *observed* parental behavior. Specifically, I examined how parental attachment styles relate to parents' perceptions of themselves as parents as well as to their observed behavior toward their adolescent children during a 10-minute laboratory

conflict discussion task. I focused on parental secure base provision: being sensitive and responsive to the adolescent's needs while at the same time appropriately encouraging physical and psychological autonomy (Ainsworth, 1967; Allen & Land, 1999; Allen et al., 2003; Bowlby, 1988). Parental secure base provision is a central construct in attachment theory (Ainsworth, 1967; Ainsworth et al., 1978; Bowlby, 1973, 1988) that has yet to be studied in relation to parents' self-reported attachment styles. I hypothesized that parents with more insecure attachment styles (i.e., higher avoidance or anxiety) would report more negative perceptions of themselves as parents and would receive lower scores on observed secure base provision.

In addition to examining direct effects from parental attachment styles to parent perceptions and secure base provision, I also tested a mediational model in which parental attachment styles are indirectly related to parental behavior through parent perceptions. I hypothesized that greater parental insecurity would predict more negative perceptions of oneself as a parent, which in turn would predict less secure base provision. This mediational model is in line with prior research showing that the influence of parental characteristics on observed parental behavior is mediated by parents' perceptions of themselves as parents (Teti & Gelfand, 1991).

The second goal of the present study was to examine whether parental attachment styles predict adolescents' perceptions of their parents as well as their observed secure base use during a conflict discussion task with each parent. I predicted that greater parental attachment insecurity would be related to more negative perceptions of parents and to less adolescent secure base use. In addition to examining direct effects from parental attachment style to teen perceptions of parents and secure base use, I also tested a mediational model in which parental attachment style was indirectly related to teen behavior through teen perceptions of parents. I hypothesized that greater parental insecurity would predict more negative perceptions of parents, which in turn would predict less adolescent secure base use. This mediational model is consistent with prior research demonstrating that adolescents' perceptions of parents mediate the link between parenting variables and adolescent behavior (Neiderhiser et al., 1998).

This study fills important gaps in the attachment literature. As noted above, to the best of my knowledge, only five studies have examined links between parents' self-

reported attachment styles and observed caregiving behaviors, and all of these studies were conducted with parents of children under the age of 7. No study has examined links between parents' self-reported attachment and caregiving behavior directed toward adolescent children. In addition, fathers were conspicuously absent from the previous observational studies. The current sample consisted of only two-parent families, which enabled me to examine attachment style-caregiving links in fathers as well as mothers. Finally, this study further explored how parental attachment styles relate to (non-undergraduate) adolescents' perceptions of their parents and the degree to which they use their parent as a secure base during a potentially distressing situation.

Chapter 2: Methods

Participants

Participants were drawn from a sample of 189 adolescents and their parents who participated in a larger study about family and peer relationships in adolescence. The present analyses were restricted to 99 adolescents for whom parental attachment style data were available. Importantly, this sub-sample did not differ from the larger sample in terms of demographics, parental attachment styles, or scores on any of the behavioral outcome variables. Adolescents (57 female, mean age = 16.6 years, $SD = .59$) were recruited from 11th grade classrooms of seven public suburban high schools in the Washington, DC area. All adolescents included in the study lived in two-parent households. The racial/ethnic distribution of the sample was 68% White/Caucasian, 21% Black/African-American, 7% Asian, and 4% Hispanic. Annual household incomes ranged from \$20,000 to greater than \$61,000 with the majority of the sample (79%) reporting an income in excess of \$61,000.

Procedure

During the spring or summer of the adolescents' junior year of high school, adolescents and both their parents came to the university laboratory to participate in a data collection session. During this visit, participants completed a packet of questionnaires and participated in an observational conflict discussion task (one questionnaire included in the present study, the Parental Understanding Inventory, was completed by adolescents at school prior to visiting the laboratory). Adolescents participated in the conflict discussion task separately with each parent in a counterbalanced order. During this task, each adolescent-parent dyad was instructed to discuss and try to resolve up to three self-identified topics about which the adolescent and parent frequently disagree. The conflict discussions lasted 10 minutes and were video recorded for later coding. Families received \$125 for participating in the larger study.

Measures

Parent Questionnaires. Because parents with multiple children may think and behave differently with each child, parents were instructed to respond to the parenting measures as they apply to their relationship with the adolescent participating in the study.

Experiences in Close Relationships Scale (ECR; Brennan et al, 1998; see Appendix B). This widely used 36-item measure assesses two continuous dimensions of adult attachment styles: attachment-related avoidance (18 items) and anxiety (18 items). Attachment-related avoidance reflects the degree to which individuals are uncomfortable with intimacy and dependency and suppress the experience and expression of emotions. Sample items from the avoidance subscale include “I prefer not to show others how I feel deep down” and “I try to avoid getting too close to others.” Attachment-related anxiety reflects the degree to which individuals fear abandonment and rejection and are preoccupied with intimacy and closeness with relationship partners. Sample items from the anxiety subscale include “I worry about being alone” and “I want to get very close to others, and this sometimes scares them away.” Parents indicated on a 7-point Likert-type scale ranging from 1 (*disagree strongly*) to 7 (*strongly agree*) the extent to which they agree with each statement. Scores on both dimensions ranged from 18 to 126. The ECR has been used in hundreds of studies and has demonstrated very strong psychometric properties (Brennan et al., 1998; see Mikulincer & Shaver, 2007). In the present study, both subscales demonstrated high internal consistency (maternal avoidance, $\alpha = .85$; maternal anxiety, $\alpha = .88$; paternal avoidance, $\alpha = .83$; paternal anxiety, $\alpha = .89$).

Parental Self-Efficacy Questionnaire (Cassidy & Woodhouse, 1998; see Appendix C). Each parent completed a 40-item scale that assesses perceived parental self-efficacy. Parental self-efficacy refers to the degree to which parents feel they can effectively perform parental duties (Teti & Gelfand, 1991). Sample items include “How confident are you that you can deal with your teen when he/she is upset with you?” and “How confident are you that you can find ways to work out ‘everyday’ problems with your teen?” Parents indicated on a 7-point Likert-type scale ranging from 1 (*I’m not sure at all*) to 7 (*I’m completely sure*) the degree to which they feel confident in their abilities to perform each of the parental tasks. Possible scores ranged from 40 to 280. Evidence for the validity of this measure comes from studies showing that higher parental self-efficacy scores are associated with positive parenting behaviors, such as supporting adolescent autonomy, and with adolescents’ positive representations of parents (Dykas & AlBanna, 2003; Dykas, Ramos-Marcuse, & AlBanna, 2003). In the present study, this scale demonstrated high internal consistency (maternal self-efficacy, $\alpha = .96$; paternal

self-efficacy, $\alpha = .97$).

Parental Hostility Toward the Adolescent. Each parent completed Harold & Conger's (1997; see Appendix D) 4-item measure that assesses the degree to which the parent behaved in a hostile manner toward his/her adolescent in the past month. The four items include (1) "During the past month I got angry at my teen," (2) "During the past month I criticized my teen for his or her ideas," (3) "During the past month I shouted or yelled at my teen because I was mad at him or her," and (4) "During the past month I argued with my teen whenever we disagreed about something." Parents responded on a 7-point Likert-type scale ranging from 1 (*always*) to 7 (*never*). Items were reverse coded so that higher scores reflect greater hostility. Possible scores ranged from 4 to 28. This scale has demonstrated good reliability and scores on this 4-item measure are highly correlated with observer ratings of parental hostility (Harold & Conger, 1997). In the present study, this scale demonstrated high internal consistency (maternal hostility, $\alpha = .83$; paternal hostility, $\alpha = .85$).

Demographic Questionnaire. Fathers provided information on family demographics (e.g., race, family income, education level, adolescent gender).

Adolescent Questionnaires. Adolescents completed each measure separately for mothers and fathers.

Parent as a Secure Base Scale – Revised (Cassidy & Woodhouse, 2003; see Appendix E). This 13-item scale assesses adolescents' perceptions of their parents as sensitive, available, and as someone they can depend on in times of need. Sample items include "My mother is there for me in times of trouble" and "My father is someone I can count on when I need help." Adolescents indicated on a 5-point Likert-type scale ranging from 1 (*not at all true*) to 5 (*definitely true*) how accurately each item describes his/her parent. Possible scores ranged from 13 to 65. This scale has been linked to adolescent attachment security on the AAI and to adolescents' perceptions of parental understanding (Cassidy, Ziv, Rodenberg, & Woodhouse, 2003). In the present study, this measure demonstrated high internal consistency ($\alpha = .92$ for mother; $\alpha = .92$ for father).

Parental Understanding Inventory (Cassidy & Woodhouse, 1997; see Appendix F). This 6-item scale assesses adolescents' perceptions of their parents' ability to understand what they are feeling and to recognize when it is necessary to provide comfort

and support. Adolescents indicated on a 7-point Likert-type scale ranging from 1 (*I'm not sure at all*) to 7 (*I'm completely sure*) the degree to which they are confident in their parents' ability to understand their feelings and needs. Sample items include "How confident are you in your mother's ability to know when you are upset and need her comfort?" and "How confident are you in your father's ability to understand how you are truly feeling about things?" Possible scores ranged from 6 to 42. Evidence for the validity of this measure comes from a study showing that adolescents classified as secure on the AAI reported higher levels of maternal and paternal understanding (Cassidy et al., 2003). In the present study, this measure demonstrated high internal consistency ($\alpha = .91$ for mother; $\alpha = .94$ for father).

Behavioral Affect Rating Scale (BARS; Conger, 1989; see Appendix G).

Adolescents completed the 12-item hostility subscale and the 8-item warmth subscale of the BARS. For both subscales, adolescents indicated on a Likert-type scale ranging from 1 (*always*) to 7 (*never*) how often each parent acted in a warm or hostile manner toward the adolescent in the past month. Sample items from the hostility subscale include "How often did your mother criticize you or your ideas?" and "How often did your father get angry at you?" Sample items from the warmth subscale include "How often did your mother act loving and affectionate towards you?" and "How often did your father let you know he really cares about you?" Participants' responses on the warmth subscale were reverse coded so that higher scores reflected more warmth. Responses to the hostility subscale were not recoded; higher scores indicated lower hostility. Possible scores for hostility ranged from 12 to 84. Possible scores for warmth ranged from 8 to 56. This measure has demonstrated good psychometric properties (e.g., Conger, Ebert-Wallace, Sun, Simons, McLoyd, & Brody, 2002). In the present study, both subscales demonstrated high internal consistency (maternal warmth, $\alpha = .92$; maternal hostility, $\alpha = .89$; paternal warmth, $\alpha = .93$; paternal hostility, $\alpha = .90$).

Conflict Discussion Task. Adolescents participated in a 10-minute conflict discussion task with each parent separately. During this task, each adolescent-parent dyad discusses one to three topics about which they frequently disagree. The experimenter selected three topics of disagreement for the dyad to discuss based on adolescent and parent ratings of nineteen common contentious issues in adolescent-parent relationships

(e.g., homework, fighting with siblings, talking back to parents, dating). The experimenter chose the three topics that were rated as most contentious based on the combined parent-adolescent ratings. The experimenter then instructed the dyad to discuss and try to resolve the first topic of disagreement and to continue on to the second and third topic if time permitted. The order in which parents participated in the conflict discussions was counterbalanced: half of the adolescent completed the task with their fathers first, and half completed the task with their mothers first.

Coders used the *Adolescent-Parent Conflict Interaction Coding System* (Ziv, Cassidy, & Ramos-Marcuse, 2002; see Appendix H) to code both the verbal and non-verbal behavior of adolescents and parents during the conflict discussions. This coding system is based on earlier work by Kobak and colleagues (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993). Adolescents received a score ranging from 1 (*low*) to 7 (*high*) on four individual scales based on coders' assessments of their overall behavior during the 10-minute task: (a) secure base use/maintaining secure relatedness, (b) avoidance of discussing the disagreement, (c) autonomy assertiveness and clarity of position, and (d) hostility. Adolescents received separate scores for discussions with their mothers and fathers. Both parents received scores on four scales that are the counterparts of the adolescent scales: (a) secure base provision/maintaining secure relatedness, (b) avoidance of discussing the disagreement, (c) autonomy assertiveness and clarity of position, (d) hostility. Finally, each adolescent-parent dyad received a dyadic open communication score. Given the centrality of the secure base construct to attachment theory (Ainsworth, 1967; Ainsworth et al., 1978; Bowlby, 1988), the present study will focus specifically on the secure base use/provision scales.

Adolescent Secure Base Use/Maintaining Secure Relatedness Scale. This scale measures adolescents' ability to maintain a positive relationship (i.e., "secure relatedness") with the parent even while discussing contentious issues. It also reflects adolescents' comfort emotionally and cognitively exploring these potentially upsetting areas of conflict and using the parent as a resource when necessary to problem-solve. Non-verbal cues of secure base use include maintenance of eye contact, relaxed body language, and apparent comfort level during the interaction. Verbal indicators of secure base use include: asking parent for help, valuing or understanding of parent's opinion,

and a warm, respectful tone.

Parent Secure Base Provision/Maintaining Secure Relatedness Scale. This scale measures parents' ability to encourage their adolescent's exploration of the conflict topics and to serve as a support resource when necessary. It also reflects the parents' ability to convey to their adolescent that even though they disagree about these topics, there is no threat to their relationship. Non-verbal cues of secure base provision include: body and attention oriented toward adolescent, comfort level during the interaction, and relaxed body language. Verbal indicators of secure base provision include: expressing warmth and concern, acknowledging and accepting the adolescents' position, and providing constructive suggestions for resolving areas of disagreement.

Six trained coders who were blind to all other information about the adolescents and parents coded the conflict discussions from videotapes. At least two coders individually coded a randomly selected 15% ($n = 15$) of adolescent-father discussions and 10% ($n = 10$) of adolescent-mother discussions. Inter-coder reliability for the four behavior scales (mother and father secure base provision and teen secure base use with each parent) was assessed using intraclass correlations (ICCs). The coders demonstrated good to excellent agreement on all the behavioral scales based on the frequently cited criteria of Fleiss (1981; see also Landis & Koch, 1977). ICCs ranged from .65 on mother secure base provision to .93 on adolescents' use of mother as a secure base (mean ICC = .81).

Chapter 3: Results

Data Analysis Overview

First, I examined descriptive statistics and bivariate correlations among the key study variables. Second, I used data reduction techniques to consolidate the multiple measures of teen perceptions of parents into one total perception score in relation to each parent. Third, I performed preliminary analyses to identify potential demographic covariates to include in the models and examined parental differences in attachment styles. Finally, I tested each of the hypothesized mediational path models using Mplus statistical software Version 5.2 (Muthén & Muthén, 1998-2011). To test the proposed mediated effects, I used resampling methods (i.e., bootstrapping) to generate bias-corrected confidence intervals and then used those confidence intervals to determine the significance of the indirect effects. The bias-corrected bootstrapping approach has been shown to be the best overall method for generating accurate confidence intervals and testing indirect effects (MacKinnon, Lockwood, & Williams, 2004). The bootstrapping method has also been recommended for testing mediation with small to moderate sample sizes (Shrout & Bolger, 2002). In the preliminary analyses, sample sizes vary due to missing data. When testing the path models, I used maximum likelihood estimation to handle missing data (Graham, 2009; Schafer & Graham, 2002).

Descriptive Statistics, Correlations, and Data Reduction

Means and standard deviations of key study variables are presented in Table 2. The correlation matrices for mother and father variables are presented in Tables 3 and 4, respectively. Examination of the zero-order correlations revealed that maternal avoidance was significantly correlated with all mother- and teen-reported parenting perception variables. In addition, maternal avoidance was significantly negatively correlated with teen secure base use, but not maternal secure base provision. Maternal anxiety, on the other hand, was only significantly correlated with maternal parenting self-efficacy. Paternal avoidance was negatively correlated with parental self-efficacy, whereas paternal anxiety was significantly correlated with both father- and teen-reported paternal hostility. No other significant correlations emerged for fathers.

As indicated in Tables 3 and 4, the four measures of teens' perceptions of each parent were highly and significantly correlated with each other. For teen perceptions of

mother, correlations ranged from .53 to .81 (all $ps < .001$); for teen perceptions of father, correlations ranged from .31 to .79 (all $ps < .01$). The results of separate principal components analyses (PCAs) for teen perceptions of mothers and fathers revealed that the four perception variables all loaded onto a single factor that accounted for a large proportion of the variance among the variables. For mothers, one factor was extracted with an eigenvalue of 3.1 that accounted for 77% of variance among the variables. All factor loadings exceeded .80. For fathers, one factor was extracted with an eigenvalue of 2.1 that accounted for 71% of the variance among the variables. All factor loadings exceeded .70. Based on these results, I combined the four individual perception variables to create composite perception scores for mothers and fathers. Higher composite scores reflect more positive perceptions of parents.

Preliminary Analyses

Examination of potential demographic covariates (i.e., adolescent gender, ethnicity, and family income) revealed significant associations with the behavioral outcome variables. Adolescent gender was significantly related to father secure base provision, $t(90) = -2.88, p < .01$, but was unrelated to mother secure base provision or to adolescent secure base use with either parent. Fathers, on average, received higher secure base provision scores when interacting with daughters ($M = 5.45, SD = 1.31$) compared to sons ($M = 4.64, SD = 1.37$). Ethnicity was marginally related to mother secure base provision, ($F[3,91] = 2.55, p = .06$) and significantly related to adolescent secure base use with father ($F[3,88] = 3.03, p < .05$), but was unrelated to father secure base provision or to adolescent secure base use with mother. Post-hoc comparisons using the Tukey HSD test indicated that Caucasian mothers ($M = 5.43, SD = 1.10$), on average, received marginally ($p = .09$) higher scores on the secure base provision scale compared to African-American mothers ($M = 4.71, SD = 1.38$), and adolescents of Caucasian fathers ($M = 5.30, SD = 1.26$), on average, received significantly higher secure base use scores with father compared to adolescents of African-American fathers ($M = 4.28, SD = 1.64$). Finally, family income was significantly related only to teen secure base use with father ($F[2,85] = 3.30, p < .05$). Post-hoc comparisons using the Tukey HSD test indicated that, on average, adolescents in families earning less than \$40,000 per year ($M = 3.92, SD = 1.86$) received significantly lower secure base use with father scores compared to

adolescents in families earning between \$41,000 and \$60,000 per year ($M = 5.75$, $SD = 1.18$). Based on these results, significant demographic covariates were included as predictors in the appropriate path models.

I performed paired samples t -tests to examine mother and father differences in parental attachment styles. The results revealed that fathers, on average, reported significantly more attachment-related avoidance compared to mothers, $t(87) = 2.66$, $p < .05$. Mothers and fathers did not differ in their reports of attachment-related anxiety.

Principal Analyses

The path diagrams for all four models are presented in Figures 1 through 4 in Appendix B. For clarity, I only included the unstandardized path coefficients for significant and marginally significant paths in the path diagrams. All unstandardized path coefficients and corresponding standard errors for each model are presented in Tables 5 and 6.

Mother Secure Base Provision. Results of the path analysis showed that the model was a good fit to the data ($\chi^2[4] = 3.55$, $p > .05$; $CFI = 1.00$; $RMSEA = .00$; $SRMR = .04$) based on the widely used criteria of Hu and Bentler (1999). The model accounted for 6% of the variance in mothers' perceptions of hostility toward their adolescent, 12% of the variance in mothers' perceived parental self-efficacy, and 20% of the variance in maternal secure base provision. Maternal avoidance, but not anxiety, was significantly related to mothers' perceived hostility ($b = .24$, $SE = .12$, $p < .05$). Both avoidance ($b = -.15$, $SE = .08$, $p = .07$) and anxiety ($b = -.14$, $SE = .08$, $p = .07$) were marginally related to perceived parental self-efficacy. Neither avoidance nor anxiety was directly related to maternal secure base provision. Mothers' perceived hostility, but not parental self-efficacy, significantly predicted mother secure base provision ($b = -.45$, $SE = .12$, $p < .001$).

Despite the absence of a significant direct effect of maternal attachment style on secure base provision, I proceeded with the mediation analysis (Rucker, Preacher, Tormala, & Petty, 2011; Shrout & Bolger, 2002). Examination of the bias-corrected confidence intervals revealed a significant indirect effect of maternal avoidance on secure base provision. Mothers' perceived hostility toward their adolescents mediated the link between maternal avoidance and secure base provision (99% CI = [-.32, -.01]).

Father Secure Base Provision. The results indicated that the model fit the data well ($\chi^2[4] = 6.66, p > .05; CFI = .97; RMSEA = .08; SRMR = .06$). The model accounted for 12% of the variance in fathers' perceptions of hostility toward their adolescent, 18% of the variance in fathers' perceived parental self-efficacy, and 21% of the variance in paternal secure base provision. Paternal anxiety, but not avoidance, was significantly related to fathers' perceived hostility ($b = .36, SE = .15, p < .05$). Paternal avoidance, but not anxiety, was significantly related to perceived parental self-efficacy ($b = -.40, SE = .11, p < .001$). Neither avoidance nor anxiety was directly related to paternal secure base provision. Perceived hostility ($b = -.43, SE = .15, p < .01$) significantly predicted paternal secure base provision. Paternal reports of parental self-efficacy were unexpectedly negatively related to paternal secure base provision ($b = -.54, SE = .22, p < .05$). Examination of the bias-corrected confidence intervals revealed two significant indirect effects. Fathers' perceived hostility toward their adolescent mediated the link between paternal anxiety and secure base provision (99% CI = [-.47, -.01]). Also, father's parental self-efficacy mediated the relation between avoidance and secure base provision (99% CI = [.01, .55]), but the direction of the indirect effect was unexpected.

To ensure that the good model fit for this model was not due to the unexpected finding that paternal parental self-efficacy was significantly *negatively* related to father secure base provision, I removed parental self-efficacy from the model and re-examined model fit with paternal hostility as the sole mediator. This reduced model adequately fit the data ($\chi^2[3] = 5.77, p > .05; CFI = .85; RMSEA = .10; SRMR = .06$) and explained 11% of the variance in paternal hostility and 14% of the variance in paternal secure base provision. The indirect effect of paternal anxiety on paternal secure base provision through paternal hostility remained significant (95% CI = [-.25, -.01]).

Teen Secure Base Use with Mother. Since none of the examined covariates were significantly related to teen secure base use with mother, the initial model tested was just-identified; thus, there are no fit statistics to report. The just-identified model accounted for 23% of the variance in teen perceptions of mother and 11% of the variance in teen secure base use with mother. Maternal avoidance, but not anxiety, significantly predicted teen perceptions of mother ($b = -2.12, SE = .44, p < .001$). Neither avoidance nor anxiety was directly related to teen secure base use with mother. Teen perceptions of

mother were significantly related to teen secure base use ($b = .10, SE = .05, p < .05$).

Examination of the bias-corrected confidence intervals revealed a significant indirect effect of maternal avoidance on teen secure base use (99% CI [-.48, -.02]). Teen perceptions of mother significantly mediated the link between maternal avoidance and teen secure base use.

Since testing the just-identified model does not yield fit statistics, I removed the insignificant paths from the initial model and tested this over-identified model to determine whether this model is a reasonable representation of the data. The results indicated that this reduced model was a good fit to the data ($\chi^2[3] = 1.12, p > .05; CFI = 1.00; RMSEA = .00; SRMR = .03$) that accounted for 22% of the variance in adolescent perceptions of mothers and 10% of the variance in adolescent secure base use. Again, the bias-corrected confidence intervals indicated that maternal avoidance was indirectly related to teen secure base use through teen perceptions of mother (99% CI [-.46, -.06]).

Teen Secure Base Use with Father. This model was not a good fit to the data ($\chi^2[6] = 18.27, p < .05; CFI = .28; RMSEA = .14; SRMR = .09$) and did not yield any significant path coefficients.

Chapter 4: Discussion

In light of growing evidence that parents' self-reported attachment styles are linked to parental cognitions and behaviors, the present investigation sought to advance this literature by (a) adding to the small number of studies that have examined links between parents' attachment styles and *observed* parental behavior, (b) investigating a core parenting construct in attachment theory – secure base provision – that has yet to be examined in relation to self-reported attachment styles, (c) examining these links in fathers as well as mothers, and (d) testing a mediational model in which parents' perceptions of themselves as parents mediate the relation between attachment styles and parenting behavior. In addition, this study advances the literature by examining how parents' attachment styles relate to adolescents' perceptions of their parents and to secure base behavior directed toward each parent. I also tested a mediational model in which adolescents' perceptions of their parents mediate the link between parents' attachment styles and adolescent secure base use. I hypothesized that greater parental insecurity (i.e., higher scores on anxiety or avoidance dimensions) would predict more negative perceptions of parenting in both parents and adolescents and less secure base use and provision. Further, I hypothesized that parental attachment styles would be indirectly related to observed secure base use and provision through perceptions of parenting. Specifically, I hypothesized that greater parental insecurity would predict more negative perceptions which in turn would predict less secure base use and provision.

Overall, these hypotheses were largely supported: three of the four proposed models fit the data well. The results revealed that parental attachment styles were significantly related to parents' perceptions of themselves as parents as well as to adolescents' perceptions of their mothers, but not fathers. The path models did not yield any significant direct effects of parental attachment styles on parent secure base provision or adolescent secure base use. However, significant *indirect* effects, through perceptions of parenting, did emerge for both parent secure base provision and adolescent secure base use with mother, but not father. These results indicate that parents' self-reported general orientations toward close relationships do spill over into the parent-child relationship to influence the cognitions and behaviors of both parents and children. Below, the results are discussed in more detail. I conclude this section with a discussion of study limitations

and important directions for future research.

Parental Attachment Styles and Parents' Perceptions of Parenting

The pattern of findings that emerged was somewhat different for mothers and fathers. In mothers, attachment-related avoidance, but not anxiety, was related to greater perceived hostility. In fathers, however, attachment-related anxiety, but not avoidance, was related to greater perceived hostility. Both maternal avoidance and anxiety were marginally significant predictors of maternal parental self-efficacy, whereas only paternal avoidance was negatively related to paternal parental self-efficacy.

As described in the introduction, several prior studies have demonstrated that insecure attachment styles are related to more negative perceptions and cognitions related to parenting. However, the literature is much less consistent, and at times contradictory, regarding how the *subtypes* of insecurity relate to parenting cognitions. Given this state of the literature, the present findings are both consistent and inconsistent with prior research: consistent in the sense that the findings further demonstrate a link between insecure attachment styles and negative parental cognitions and inconsistent in the sense that the relations between the subtypes of insecurity and parenting cognitions differ somewhat from those found in previous studies. Related to parental self-efficacy, for example, Rholes et al. (1995, 1997) found that *both* avoidance and anxiety were negatively related to confidence in ability to parent effectively in mothers. Similarly, Kilmann et al. (2009) found that insecure parents rated themselves as having less parental competence compared to secure parents, but the authors did not differentiate by subtype of insecurity or report separate analyses for mothers and fathers. However, using a sample of only fathers, Howard (2010) did differentiate between the subtypes of insecurity and, contrary to the results of the present study, found that anxious, but not avoidant fathers, rated themselves as significantly lower in parenting self-efficacy compared to secure fathers. To my knowledge only one prior study has examined the links between parental attachment styles and parent-reported hostility. The study (Scher & Dror, 2003) found the opposite pattern of findings in their sample of mothers compared to the findings obtained in the present study: maternal anxiety, but not avoidance, was positively related to self-reported hostility toward children. Other studies, however, have found that both avoidance and anxiety are associated with greater self-

reported dispositional (i.e., not specific to a particular relationship or context) anger and hostility (Meesters & Muris, 2002; Muris, Meesters, Morren, & Moorman, 2004).

In sum, the present results related to parental perceptions of parenting (as well as the results of the other studies reported above) suggest that insecure attachment styles are related to lower perceived parenting self-efficacy and greater parental hostility, but the exact nature of the relations between the subtypes of insecure attachment and these parenting cognitions remains unclear. Further, the links between attachment styles and these parenting cognitions appear to differ somewhat for mothers and fathers.

Parental Attachment Styles and Observed Secure Base Provision

Contrary to expectations, neither maternal nor paternal attachment styles were directly related to observed secure base provision during the conflict discussion task. However, both maternal and paternal attachment styles were significantly indirectly related to secure base provision through perceived hostility toward their adolescent, but the subtype of insecurity predicting this indirect effect differed for mothers and fathers. Specifically, maternal hostility mediated the relation between maternal avoidance and maternal secure base provision, whereas paternal hostility mediated the link between paternal anxiety and paternal secure base provision. For both mothers and fathers, greater insecurity predicted greater perceptions of hostility toward their adolescent, which in turn predicted less secure base provision.

An additional indirect effect emerged for fathers in which perceived parental self-efficacy mediated the relation between paternal avoidance and secure base provision. However, the direction of this indirect effect was contrary to my prediction. It is unclear why paternal parental self-efficacy was *negatively* related to paternal secure base provision. This finding is particularly surprising in light of prior research showing that higher scores on this measure were related to positive parenting behaviors and to adolescents' positive representations of parents (Dykas & AlBanna, 2003; Dykas, Ramos-Marcuse, & AlBanna, 2003). To ensure that the good model fit of the father secure base provision model was not due to this counterintuitive finding, I tested a respecified model in which paternal hostility was the sole mediator. This reduced model, without paternal parenting self-efficacy, fit the data well and the indirect effect of anxiety on secure base provision through paternal hostility remained significant.

The present findings provide new insight into how parental hostility impacts the parent-child relationship. A great deal of research has focused on how parental hostility relates to child adjustment (e.g., Harold & Conger, 1997; see Maughan, Pickles, & Quinton, 1995, for a review). Much less research has examined how parents' *perceptions* of hostility toward their children relate to other aspects of parenting. However, the limited empirical data on this topic suggest that parents' perceptions of hostility have important implications for parental behavior. Studies have found that parent reports of hostility toward their children are related to less self-reported and observed parental involvement (Melby & Conger, 1996), less warmth and physical affection during an unstructured home observation (Russell & Russell, 1989), and greater self-reported overreactive responses to child misbehavior (i.e., harsher and more emotionally dysregulated discipline responses; Rhoades et al., 2012). The findings of the present study contribute to this small body of literature by demonstrating that parents who report greater parenting hostility are less able to provide a secure base for their adolescents.

The absence of significant direct effects of parental attachment styles on parenting behavior is perhaps not that surprising given that some researchers have argued against relying solely on linear main effects models when testing links between attachment and socioemotional, cognitive, and behavioral outcomes (e.g., Belsky & Fearon, 2002; Sroufe, 1988; Sroufe, Carlson, Levy, & Egeland, 1999). As Sroufe et al. (1999) aptly stated, attachment theory is "not just a theory of outcome, but a theory of process" (p. 1). Perhaps the nature of the relation between parental attachment styles and parenting behavior is better captured by mediational and interactional models rather than main effects models. This notion is partially supported by the findings from three of the five previous studies that have examined this link: each of these three studies found significant interactions between parental attachment styles and characteristics of the child, the parent, or the situation (e.g., child negative behavior, maternal psychological distress, and child distress in response to medical procedure) in predicting parenting behavior (Edelstein et al., 2004; Mills-Koonce et al., 2011; Rhoades et al., 1995). None of the five prior studies examined mediating mechanisms. Importantly, I am not suggesting that researchers abandon the examination of direct effects of attachment styles on parenting behavior (indeed, several main effects have emerged in the literature);

however, we may get a more complete picture of how attachment styles relate to parenting by also examining mediating mechanisms and interactions.

The present results suggest that the links between attachment styles and parenting behavior may differ for mothers and fathers. As this is the first study to examine links between attachment styles and observed parenting behaviors in fathers as well as mothers, these findings represent an important contribution to the attachment styles literature. For mothers, attachment-related avoidance was indirectly related to secure base provision, whereas fathers' attachment-related anxiety was indirectly related to secure base provision. As described elsewhere (Jones, Ehrlich, et al., 2013), this mother-father difference may reflect gender stereotypes related to parental behavior. Traditional gender roles for women have been characterized by warmth, nurturance, and greater emotional expressiveness, whereas masculinity has traditionally been characterized by independence, assertiveness, and less involvement in nurturing roles (e.g., Bem, 1974; Brody, 1997; Craig, 2006). Despite drastic cultural changes in family dynamics over the past half century, including a greater emphasis on paternal involvement in childcare, the manner in which mothers and fathers parent remains very different. Mothers still provide the majority of childcare and typically handle the most demanding aspects of care (e.g., physical care such as bathing and feeding; Craig, 2006). These gender norms related to parenting suggest that attachment-related anxiety may be associated with parenting difficulties for fathers, and avoidance may be associated with parenting difficulties for mothers. In other words, an avoidant mother who is uncomfortable with closeness and intimacy violates the traditional stereotype of a warm and nurturing mother. As a result, she may perceive herself negatively as a parent and behave less supportively toward her child. The opposite pattern may occur in anxious fathers whose preoccupation with relationship needs and intrusive approach to relationships violates the traditional view of masculinity. (As discussed below, gender norms of parenting may also play a role in how parents' attachment styles shape adolescents' perceptions of and behavior towards mothers and fathers).

The fact that all prior studies on attachment styles and observed parenting behavior were conducted with mothers (Edelstein et al., 2004 included 4 fathers) could partially explain why attachment-related avoidance, rather than anxiety, has emerged as

the dominant predictor of parental behavior. The present study highlights the importance of including fathers as well as mothers when examining links between attachment styles and parenting behavior and calls into question the apparent dominance of avoidance over anxiety in predicting parental behavior.

Parental Attachment Styles and Adolescents' Perceptions of Parenting

Mothers', but not fathers', attachment styles significantly predicted teens perceptions of parenting. Specifically, maternal avoidance, but not anxiety, predicted less positive adolescent perceptions of mothers. Mothers who are uncomfortable with relationship closeness and dependency and who tend to minimize the experience and expression of emotion are viewed by their adolescents as less of a secure base, as less warm and understanding, and as more hostile. The finding that avoidance, but not anxiety, predicted negative perceptions of mothers is consistent with the gender norms hypothesis described in the section above. Prior research has shown that adolescents tend to perceive mothers as more caring, as well as more intrusive, than fathers, and as someone they can confide in (Cubis, Lewin, & Dawes, 1989; Youniss & Smollar, 1985). The discomfort with intimacy and decreased involvement of avoidant mothers, therefore, violates parenting gender norms and may lead to more negative adolescent perceptions of mothers relative to the strong desire for closeness and intrusiveness characteristic of anxious mothers that is more consistent with stereotypical maternal behavior.

These findings are also largely consistent with the three prior studies that have examined links between parents' attachment styles and adolescents' perceptions of their parents. Consistent with the present findings, using a different sample of adolescents, Jones, Ehrlich, et al. (2013) found that maternal avoidance, but not anxiety, was negatively related to adolescents' perceptions of parental knowledge of their whereabouts and activities. Kilmann et al. (2009) found that college-aged children of insecure parents had more negative perceptions of their parents (e.g., felt less accepted by parents and reported lower parental competency and greater psychological control by parents) compared to children of secure parents. However, these authors did not investigate the subtypes of insecure attachment or report separate analyses for mothers and fathers. Finally, J. Feeney (2006) found that both maternal avoidance and anxiety were related to undergraduates' negative perceptions of maternal behavior during mother-adolescent

conflict. However, consistent with the present findings, the results of Feeney's study were much less robust for fathers than mothers (i.e., one significant correlation for fathers compared to four significant correlations for mothers).

Parental Attachment Styles and Observed Adolescent Secure Base Use

As noted above, the present study is the first to examine how parental attachment styles relate to observed adolescent secure base use. Consistent with the findings related to parental secure base provision, neither parental avoidance nor anxiety was directly related to adolescent secure base. However, a significant indirect effect of maternal avoidance on adolescent secure base use via adolescent perceptions of maternal parenting emerged. Specifically, greater maternal avoidance predicted more negative perceptions of maternal parenting, which in turn predicted less secure base use. This suggests that adolescents who perceive their mother as lower on warmth and understanding and higher on hostility are less willing or able to rely on her as a resource for comfort and security, particularly in a potentially distressing situation such as a conflict discussion. Consistent with the results related to adolescents' perceptions of fathers, no significant findings emerged in relation to adolescent secure base use with father.

Several studies have provided compelling evidence that adolescents' perceptions of parents have important implications for various domains of adolescent adjustment (e.g., problem behaviors, psychopathology symptoms, school achievement; Rapee, 2009; Sperra, 2006; Yahav, 2007). However, an extensive literature search revealed virtually no research on how adolescents' perceptions of parents shape how adolescents behave toward parents. Paley, Conger, and Harold (2000) found that negative perceptions of parents were related to more negative behaviors in social interactions, but this was not specific to interactions with parents. The results of the present study advance this area of research by showing that adolescents who possess negative perceptions of their mothers are less likely to utilize their mother as a secure base during emotionally-salient interactions.

Given the dearth of research conducted with fathers in this area of attachment research, it is difficult to explain why paternal attachment styles were unrelated to adolescents' perceptions or behaviors. However, results from other areas of attachment research might be informative. Researchers examining the relations between parental

attachment assessed with the AAI and child secure base behavior (observed in the Strange Situation) have typically found that paternal attachment is less strongly related to child secure base behavior than is maternal attachment (see van IJzendoorn, 1995, for meta-analysis). It is possible that this same phenomenon occurs in relation to fathers' self-reported attachment styles, but there is very little empirical evidence to inform this issue. Volling et al. (1998) did not find any direct links between parental attachment styles and child secure base behaviors with mothers or fathers (yet see Mayseless et al., 1997, for evidence of a link between mothers' attachment styles and infant secure base behavior).

The present findings with fathers could also be due to the possibility that fathers are simply less likely to be the targets of secure base behavior than are mothers during adolescence. Bowlby's (1969/1982) hierarchical model of attachment suggests that individuals can form and maintain multiple attachments, but not all these attachments are created equal. That is, when an individual's attachment system is activated, certain attachment figures are preferred over others. During adolescence, teenagers spend more time interacting with peers and romantic partners and navigate the process of integrating these new relationships into their attachment hierarchies (Hazan & Zeifman, 1994; Rosenthal & Kobak, 2010). Recent evidence suggest that during this process of change, mothers continue to maintain the status of adolescents' primary attachment figures while fathers drop below friends and romantic partners (53% of adolescents nominated mother as their primary attachment figure whereas only 11% nominated father as their primary attachment figure; Rosenthal & Kobak, 2010). Similarly, Paterson, Field, and Pryor (1994) found that adolescents reported being more likely to seek support from mothers or friends rather than fathers in a variety of situations. Though still speculative, the present results provide some initial evidence for the notion that adolescents are simply less likely to direct secure base behaviors toward their fathers compared to their mothers.

Limitations

Although this study yielded important insights into how parental attachment styles relate to parents' and adolescents' perceptions of parenting and secure base behaviors, the results should be interpreted in the context of several study limitations. First, all adolescents included in the present study lived in maritally intact, two-parent households.

This may limit the generalizability of the findings to parents and adolescents living in alternative family structures (e.g., single-parent households, households with step-parents). Studies examining the intergenerational transmission of attachment in single-parent families compared to maritally intact families provide some initial evidence for the influence of alternative family structures on parent-child attachment relationships. Two studies have revealed that father attachment (measured with the AAI) significantly predicts child attachment when the father is the sole care provider, but not in two-parent families (Bernier & Miljkovitch, 2009; Miljkovitch, Danet, & Bernier, 2012). Thus, although caution is warranted when extrapolating the results of AAI research to self-reported attachment styles, these studies suggest that the ability of paternal attachment styles to predict the quality of the father-adolescent relationship may be stronger in single-father households. Relatedly, the present sample was relatively homogeneous in terms of socioeconomic and demographic variables. It is unclear whether the results would generalize to more diverse and higher-risk samples.

Second, the moderate sample size prevented me from testing larger and more complex models of parent and adolescent behavior. A larger model including both parent and child perceptions as well as parent and child behavior could help elucidate the transactional and dyadic processes involved in parent-child interactions. Future research using larger samples and more sophisticated data analytic techniques (e.g., dyadic data analysis) to test more complex models is warranted.

Finally, although mediational path models make strong assumptions about causality, and the present findings are consistent with theory, the causal relations tested in this study should be interpreted cautiously given the correlational and cross-sectional nature of the data. Prospective studies examining longitudinal links among parental attachment styles, parenting perceptions, and parent-adolescent interactions would allow for stronger causal inferences. In addition, applying the more tightly controlled experimental and quasi-experimental methods used by social psychologists to study attachment processes in romantic relationships (e.g., Monin, Schulz, Feeney, & Cook, 2010; Rholes et al., 1992) to the study of attachment style-parenting links would allow for stronger inferences about causal relations between attachment styles and parenting cognitions and behaviors.

Future Directions

In addition to addressing the limitations of the present study, there are several important avenues that future research should explore. First, given the sparse literature on relations between parental attachment styles and *observed* parenting behavior, additional studies should examine these links in different samples, at various child ages, and in varying contexts. Second, given the limited research examining attachment styles to parenting links in fathers and the observed differences between mothers and fathers in the present study, more research with fathers is clearly warranted. Future studies should test the proposed gender norms of parenting hypothesis in relation to parents' attachment styles which posits that attachment-related anxiety may be more problematic for fathers' parenting and attachment-related avoidance may be more problematic for mothers' parenting.

Third, future studies should consider the role of context and child distress in greater detail when examining relations between parental attachment styles and parenting behavior (Cassidy et al., 2013). Theory and empirical evidence suggest that attachment-related individual differences in caregiving are more pronounced when a child or romantic partner is distressed or when caregiving behavior is observed in an attachment-relevant context (Edelstein et al., 2004; B. Feeney & Collins, 2001; Goodman et al., 1997; Simpson et al., 1992). For example, Edelstein et al. found that greater avoidance predicted lower parental responsiveness only when the child became highly distressed after receiving an inoculation. In the present study, discussing areas of conflict in the parent-child relationship was likely to be both attachment-relevant and, at times, distressing. However, other studies have found links between parental attachment styles and parenting behavior in non-distress contexts (e.g., free play or laboratory teaching task; Mills-Koonce et al., 2011; Rholes et al., 1995; Selcuk et al., 2010). The role of child distress or some type of strain on the parent-child relationship in eliciting attachment-related individual differences in caregiving behaviors remains unclear.

Fourth, future studies should consider additional mediators and moderators of the relation between parental attachment styles and parenting behavior. In addition to parents' perceptions of themselves as parents, other tenable mechanisms include parental attributions for child behavior and parental emotion regulation capacities. Researchers

should continue to examine characteristics of the parent (e.g., psychopathology), child (e.g., temperament), and current context (e.g., social support, SES) as moderators of the attachment style to parenting link. These types of studies could inform whether the relation between attachment styles and parenting are better conceptualized as main effects models or as mediational and interactional models.

Finally, as others have stated (e.g., Fraley, 2002), the field would benefit from a greater integration of the social and developmental attachment research traditions. Future studies examining links between adult attachment and parenting should measure parental attachment with *both* the AAI and self-report attachment style measures. Meta-analytic work has demonstrated that the empirical relation between these two types of measures is modest (Roisman et al., 2007), and some initial evidence suggests that the two types of measures predict both unique and overlapping aspects of parenting cognitions (Scharf & Mayseless, 2011). To my knowledge, no study has examined how parental AAI and self-report attachment style measures relate to observed parenting behaviors in the same sample.

Appendix A: Tables

Table 1

Self-reported Attachment Styles and Parenting Studies

Authors	Sample	Attachment Style Measure	Caregiving Outcome Variable(s)	Main Findings
Abaied & Rudolph (2010)	US mothers and adolescents (m = 12.42 years) assessed twice one year apart.	Hazan & Shaver (1987): Created continuous latent variable reflecting security-insecurity.	Maternal socialization of coping	Greater insecurity related to socialization of less adaptive coping strategies (less engagement coping and more disengagement coping) concurrently and over time.
Alexander et al. (2001)	Australian married couples having their first child assessed prenatally and 6 weeks after birth of child	The Attachment Style Questionnaire (ASQ; Feeney, Noller & Hanrahan, 1994)	Perceived parenting strain	Avoidance: Unrelated to parenting strain Anxiety: Higher anxiety positively related to parenting strain in husbands but not wives.
			Coping strategies related to transition to parenthood	Avoidance: Unrelated to coping strategies Anxiety: Higher anxiety was related to more emotion-focused coping and support-seeking in wives but not husbands. Higher anxiety predicted less problem-focused coping in husbands but not wives.
Berant et al. (2001)	Israeli mothers and infants (m = 3 months) with congenital heart disease. Assessed 2 weeks after	Adult Attachment Style Scale (Mikulincer, Florian, Tomacz, 1990)	Appraisal of motherhood (Time 1, Time 2)	Avoidance: Avoidance was unrelated to Time 1 appraisals of motherhood. However, higher avoidance was related to a decrease in mothers' perceived ability to cope with the stresses of parenthood from Time 1 to Time 2. Anxiety: At Time 1, higher anxiety was related to appraising motherhood as more difficult and feeling less able to cope with the stresses of parenthood. However, anxiety did not predict changes in appraisals of motherhood from Time 1 to Time 2.

	diagnosis and again 1 year later.		Ways of coping with motherhood tasks (Time 1, Time 2)	<p>Avoidance: At Time 1, avoidance was related to less reliance on distancing coping and support seeking. Avoidance was related to increased reliance on emotion focused coping from Time 1 to Time 2.</p> <p>Anxiety: At Time 1, higher anxiety was related to greater reliance on emotion-focused coping and less reliance on distancing coping and support seeking. Anxiety was related to increased reliance on distancing coping and support seeking from Time 1 to Time 2.</p>
Berlin et al. (2011)	US mothers and their children participating in EHS intervention.	Adult Attachment Questionnaire (AAQ; Simpson, 1990)	Negative perceptions of parent-child relationship	<p>Avoidance: In both intervention and control groups, baseline avoidance positively correlated with negative perceptions of the parent-child relationship at age 3.</p> <p>Anxiety: In both intervention and control groups, baseline anxiety positively correlated with negative perceptions of the parent-child relationship.</p>
			Maternal behavior	<p>Avoidance: In the intervention group only, baseline avoidance was negatively related to observed maternal supportiveness at age 3.</p> <p>Anxiety: In the control group only, baseline anxiety marginally predicted less self-reported spanking.</p>
			Effectiveness of parenting intervention	<p>Avoidance: Baseline avoidance moderated intervention effects on maternal supportiveness: program was more effective for mothers with low baseline avoidance.</p> <p>Anxiety: Baseline anxiety moderated intervention effects on spanking: program was more effective for mothers with low baseline anxiety.</p>
Caltabiano & Thorpe (2007)	Australian foster parents	Attachment Style Questionnaire (ASQ; Feeney, Noller & Hanrahan, 1994)	Interview-reported quality of care to child who has been abused or neglected	Attachment styles were unrelated to interview-reported quality of care to foster children.
Ceglian & Gardner (2000)	US step-mothers	Adult Attachment Scale (Collins & Read, 1990): Used cluster analysis to create secure, anxious, and avoidant groups.	Perceived relationship with step-children	<p>Avoidance: Avoidant group reported lower levels of inadequacy and insecurity in relationship with step-child than secure and anxious groups.</p> <p>Anxiety: Compared to avoidant group (but not secure group) anxious group felt more unappreciated and disrespected, but reported less resentment toward and unfair treatment of step-child.</p>

Cohen & Finzi-Dottan (2005)	Divorced Israeli parents with children (m = 12 years)	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Parental satisfaction in the year after divorce	Dismissing attachment style was negatively related to parental satisfaction in mothers, but not fathers.
Cohen et al. (2011)	Israeli male combat veterans with children	Experiences in Close Relationships Scale (Brenna, Clark, & Shaver, 1998)	Parental satisfaction	Avoidance: Negatively correlated with parental satisfaction Anxiety: Negatively correlated with parental satisfaction
			Self-reported parenting quality	Avoidance: Negatively correlated with self-reported parenting quality Anxiety: Negatively correlated with self-reported parenting quality
			Concern for child during child's military service	Avoidance: Unrelated to concern for child during military service Anxiety: Positively correlated with concern for child during military service
Coyl et al. (2010)	US parents of pre-school aged children	Adult Attachment Scale (AAS; Simpson, Rholes, & Nelligan, 1992)	Parental involvement	Attachment security was positively correlated with parental involvement
			Consistency of parenting behavior	Greater security related to more consistent parental behavior
			Consistency of co-parenting	Greater security related to more consistent co-parenting
			Use of spanking	Attachment security was positively correlated with rare spanking.
Cramer & Kelly (2010)	US parents cited for abusing or maltreating their children	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Distribution of attachment styles in abusive sample	41% Secure, 14% Preoccupied, 21% Dismissing, and 24% Fearful. Compared to non-abusive samples, this abusive sample had significantly more Dismissing and Fearful individuals and fewer Secure individuals.
Duggan et al. (2009)	US mothers participating in the Healthy Families Alaska Program (HFAK)	Attachment Style Questionnaire (ASQ; Feeney, Noller & Hanrahan, 1994)	Parental stress	Avoidance: Intervention group X maternal depression X avoidance interaction: the effect of the intervention on parental stress did not vary by avoidance. Anxiety: Unrelated to parental stress
			Quality of home environment	Avoidance: Intervention group X maternal depression X avoidance interaction: Anxiety: Unrelated to quality of home environment
			Observed maternal sensitivity in teaching task	Avoidance: Unrelated to observed maternal sensitivity Anxiety: Intervention group X maternal depression X anxiety interaction:
			Child maltreatment	Avoidance: Intervention group X maternal depression X avoidance interaction (trend)

				Avoidance/Anxiety: Intervention group X avoidance X anxiety interaction
Edelstein et al. (2004)	US parents (35 mothers, 4 fathers) and their children (m = 5.23 years)	Relationship Scales Questionnaire (Griffin & Bartholomew, 1994)	Observed parental responsiveness to child distress following inoculation	Avoidance: Avoidance X child distress interaction: avoidance was negatively related to parental responsiveness when child distress was high. Anxiety: Unrelated to parental responsiveness
J.A. Feeney (2002)	Australian parents of undergraduates (m = 24.42 years)	Attachment Style Questionnaire (Feeney, 1994).	Retrospective reports of caring and overprotective behavior	Avoidance: High comfort with closeness (i.e, low avoidance) was positively related to mothers' (but not fathers') reports of caring behavior and negatively related to overprotective behavior. Anxiety: High relationship anxiety was positive related to mothers' (but not fathers') reports of overprotective behavior, but was unrelated to caring behavior.
J.A. Feeney (2006)	Australian parents of undergraduates (m = 25.53 years)	Attachment Style Questionnaire (Feeney, 1994).	Self-reported conflict behavior	Avoidance: Negatively correlated with mother- and child-reported maternal problem-solving behavior. Positively correlated with mother-reported maternal attack behavior. Anxiety: Positively correlated with mother- and child-reported maternal attack behavior. Negatively correlated with father-reported attack behavior Negatively correlated with father- and child-reported paternal problem-solving behavior. Negatively correlated with child-reported maternal problem-solving behavior Positively correlated with child-reported maternal avoidance behavior
Fernandes et al. (2012)	Canadian parents diagnosed with cancer with children under age 18	Experiences in Close Relationships Scale (Brenna, Clark, & Shaver, 1998).	Parental Stress	Avoidance: Higher avoidance related to greater parental stress Anxiety: Higher anxiety related to greater parental stress
Fernandes et al. (2012)	Parents with cancer	Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998).	Parental stress	Avoidance: Higher avoidance related to greater parental stress Anxiety: Higher anxiety related to greater parental stress

Finzi-Dottan et al. (2006)	Israeli married couples in which the husband was in the first stage of recovery from drug abuse. Mean age of child was 10.86 years	Adult Attachment Style Classification Questionnaire (Mikulincer, Florian, & Tolmacz, 1990)	Distributions of attachment styles among drug using fathers and their wives	Drug Using Fathers: 60.7% Avoidant, 26.8% Secure, and 12.5% Anxious. Compared to non-clinical Israeli samples, this sample of drug using fathers had significantly fewer Secure individuals and significantly more Avoidant individuals. Wives of drug users: 53.6% Secure, 42.9% avoidant, and 3.6% Anxious. Compared to non-clinical Israeli samples, the wives had significantly fewer Anxious individuals and significantly more Avoidant individuals.
			Perceptions of family cohesion	Security was positively correlated with family cohesion in fathers and mothers. Anxiety was negatively correlated with family cohesion in fathers and mothers.
			Perceptions of family adaptability	Security was positively correlated with family adaptability in fathers, but not mothers.
Goodman et al. (1997)	US parents and children (m = 5.6 years)	Hazan & Shaver (1987)	Maternal self-report response to child's reaction to a painful medical procedure	More avoidant and anxious mothers were less likely to explain the procedure to the child or to physically comfort the child and more likely to report not having time to attend to the child's needs. More secure mothers were more likely to discuss, explain, and ask questions about the procedure and more likely to physically comfort their child.
Green et al. (2007)	US parents (1 father) and toddlers assessed when toddlers were 14 months and again at 36 months	Adult Attachment Questionnaire (AAQ; Simpson, 1990)	Engagement in activities thought to promote positive child development	Avoidance: Unrelated to engagement in parent-child activities at either time point. Anxiety: Negatively correlated with engagement in positive parent-child activities at Time 2, but not Time 1. Anxiety mediated link between social support and changes in parent-child activities.
Howard (2010)	US fathers of young children (6 mo – 12 mo)	Hazan & Shaver (1987)	Knowledge of infant development	Secure fathers reported significantly more knowledge of infant development compared to avoidant fathers
			Parenting stress	Secure fathers reported significantly less parenting stress compared to anxious fathers.
			Child abuse risk	Secure fathers reported significantly lower abuse risk compared to anxious fathers.
			Parenting efficacy	Secure fathers reported significantly more parenting efficacy compared to anxious fathers.
Jones et al. (in prep.)	US parents of adolescents (m = 14.02 years)	Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998)	Mother, father, and adolescent reports of parental knowledge	Avoidance: Maternal avoidance predicted lower levels of teen reported parental knowledge, but not mother reported knowledge. Father avoidance unrelated to father or teen reported knowledge Anxiety: Maternal anxiety predicted lower levels of mother reported knowledge, but not teen reported knowledge. Paternal anxiety predicted lower levels of father and teen reported

				knowledge.
Kilmann et al. (2009)	US parents of undergraduate females (m = 20.3 years)	Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994)	Parental acceptance/rejection	Secure parents reported higher parental acceptance compared to insecure parents.
			Parental firm/lax control	Parental attachment styles unrelated to firm/lax control.
			Parental psychological control	Secure parents reported less psychological control compared to insecure parents.
			Parental Competence	Secure parents reported higher parental competence compared to insecure parents.
			Parental Love Inconsistency	Secure parents reported less love inconsistency compared to insecure parents.
Kohn et al. (2012)	US couples studied during transition to parenthood	Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998)	Work-family conflict	Avoidance: Positively correlated with work-family conflict in men, but not women. Anxiety: Positively correlated with work-family conflict in men and women
			Family Demand	Avoidance: Positively correlated with perceiving family responsibilities as overwhelming in men, but not women. Anxiety: Positively correlated with perceiving family responsibilities as overwhelming in men and women.
Kor et al. (2012)	Israeli parents with children between the ages of 12-18 years	Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998)	Parental stress	Avoidance: Higher avoidance was related to greater parenting stress. Anxiety: Higher anxiety was related to greater parenting stress.
Lau & Peterson (2011)	Australian couples with children (4 groups of parents with varying constellations of Asperger's Syndrome in the family)	Hazan & Shaver (1987)	Parental satisfaction	Attachment styles were unrelated to parental satisfaction

La Valley & Guerrero (2010)	US parents and their college-aged children	4 scale measure used by Guerrero et al. (2009)	Self-reported conflict management styles in parent-child relationship.	Parent security related to more adaptive conflict management strategies (e.g., collaborating and compromising) Child security related to more adaptive conflict management strategies (e.g., collaborating and compromising)
			Child and parent – reported parent-child relationship satisfaction	Parent security related to higher relationship satisfaction. Child security related to higher relationship satisfaction.
Leerkes & Siepak (2006)	US undergraduates	Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994)	Accurate identification of emotion (fear and anger) in distressed infant	Avoidance: Avoidance was related to less accuracy at identifying an infant’s fear and mistaking fear for another emotion. Avoidance was unrelated to identifying anger. Anxiety: Anxiety was related to mistaking fear with another negative emotion. Anxiety was unrelated to identifying anger.
			Attributions for infant distress	Avoidance: Negatively correlated with making situational/emotion attributions about anger. Positively correlated with making negative/internal attributions about fear. Anxiety: Positive correlated with making temporary/physical attributions about anger and fear.
			Emotional reactions to recordings of distressed infants	Avoidance: More likely to respond with amusement. Anxiety: Unrelated to emotional reactions to infant distress.
Lench et al (2006)	US parents of 5-6 year old children	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Optimism that child will avoid negative outcomes and attain positive outcomes	Avoidance: Related to less optimism that child would attain positive outcomes and avoid negative outcomes. Anxiety: Unrelated to optimism about child outcomes
Mayseless & Scher (2000)	97 Israeli mothers of infants assessed when infants were 3 and 9 months	Attachment Concerns Questionnaire (Mayseless, 1995)	Maternal separation anxiety	Fear of being dependent X child adaptability interaction: fear of being dependent positively related to separation anxiety at 9 months. Relationship was stronger when mothers perceived infants as adaptable at 3 months. Fear of being abandoned X child adaptability interaction: fear of being dependent was positively related to separation anxiety at 9 months when mothers perceived infants as adaptable at 3 months. Secure mothers (low on fear of being dependent and fear of being abandoned) reported higher

				separation anxiety when they perceived infant as unadaptable.
Meredith & Noller (2003)	74 Australian mothers of infants	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Perception of infant difficulty	Attachment styles were unrelated to perceptions of infant difficulty.
			Mother-reported parenting behavior	Attachment styles were unrelated to mother-reported parenting quality.
Mikulincer & Florian (1999a)	Israeli undergraduates and their parents	Adult Attachment Style Scale (Mikulincer, Florian, & Tolmacz, 1990)	Parent perceptions of family cohesion and adaptability	Attachment styles were unrelated parent perceptions.
Mikulincer & Florian (1999b, Study 1)	Israeli women during their first pregnancy	Hazan & Shaver (1987) Prototype Measure	Bonding to fetus	Significant attachment style X trimester of pregnancy interaction: In the 1 st and 2 nd trimesters, secure women reported a closer bond to the fetus compared to anxious and avoidant women. In the 3 rd trimester, secure women scored higher than avoidant (but not anxious) women.
			Perceived similarity between self and fetus	Significant attachment style X trimester of pregnancy interaction: In the 1 st trimester, secure women reported more similarity between self and fetus compared to anxious and avoidant women. No differences in the 2 nd trimester. In the 3 rd trimester, secure and anxious women reported more similarity between self and fetus compared to avoidance women.
Mikulincer & Florian (1999b, Study 2)	Israeli women during their first pregnancy	Hazan & Shaver (1987) Prototype Measure	Bonding to fetus	Significant attachment style X trimester of pregnancy interaction: In the 1 st trimester, secure women reported a closer bond to the fetus compared to anxious or avoidant women. No differences in the 2 nd trimester. In the 3 rd trimester, secure and anxious women reported a stronger bond compared to avoidant women.
			Mental health during pregnancy	Significant attachment style X trimester of pregnancy interaction: In the 1 st and 3 rd trimesters, secure women reported more well-being and less distress compared to anxious or avoidant women. In the 2 nd trimester, secure and avoidant women reported better mental health compared to anxious women.
			Coping with pregnancy related problems	Anxious group reported more emotion-focused coping than secure or avoidant women. Avoidant group reported more distancing coping than secure group. Secure group reported highest support seeking than anxious or avoidant women.
Mills-Koonce et al. (2011)	US mothers of infants assessed at 6 and 12 months of age	Hazan & Shaver (1987)	Parental Stress	Consistently secure mothers reported the lowest parenting stress.
			Observed maternal sensitivity	Avoidance: Avoidance X psychological distress interaction: for consistently avoidant mothers, higher levels of psychological distress were related to less maternal sensitivity. Anxiety: Anxiety excluded from analyses due to low endorsement.

			Observed negative intrusiveness	Attachment styles unrelated to intrusiveness.
Moncher (1996)	Low SES single US mothers with a child between the ages of 2 and 6 years	Brennan & Shaver's (1995) measure	Child abuse risk composite score	Secure group lowest risk of abuse compared to avoidant and anxious groups which did not differ from each other.
Nathanson & Manohar (2012)	US undergraduates	Adult Attachment Scale (Collins & Read, 1990)	Desire to have children	Security related to greater desire to have children. Insecurity related to less desire to have children.
			Negative attitudes toward childrearing	Security negatively related to negative attitudes toward childrearing. Insecurity positively related to negative attitudes toward childrearing.
			Expected behavior toward children	Security unrelated to expected behavior. Insecurity related to advocating less warmth and more strict discipline toward children.
			Expected attitudes toward child TV watching	Security unrelated to attitudes toward child TV watching. Insecurity marginally positively related to endorsing that TV is helpful to parenting ($p < .10$).
Nygren et al. (2012)	8122 Swedish parents with 2-3 year old children	Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994)	Parenting Stress	Avoidance: Greater avoidance was associated with greater parenting stress. Anxiety: Greater anxiety was associated with greater parenting stress.
Pesonen et al. (2003)	180 Finnish married couples with infants (m = 6.3 months)	Adult Attachment Scale (Collins & Read, 1990) and Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Perceptions of infant temperament	Avoidance: Mother and father avoidance were related to more negative perceptions of infant temperament. Anxiety: Mother and father anxiety were related to more negative perceptions of infant temperament.
Pesonen et al. (2004)	492 Finnish parents (173 fathers) of 6 month old infants	Adult Attachment Scale (Collins & Read, 1990) and Relationship	Perceptions of infant temperament	Avoidance: Mother and father avoidance were related to more negative perceptions of infant temperament. After controlling for parental depression, only father avoidance was associated with negative perceptions of infant temperament. Anxiety: Mother and father anxiety were related to more negative perceptions of infant

		Questionnaire (Bartholomew & Horowitz, 1991)		temperament. After controlling for parental depression, anxiety was unrelated to perceptions of infant temperament.
Priel & Besser (2000)	115 Israeli first time mothers with 4 month old infants	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Perceptions of infant temperament	Compared to secure mothers, dismissing and preoccupied mothers reported more negative perceptions of infant temperament. Positive feelings and attitudes toward newborn mediated link between attachment style and perceptions of infant temperament.
Rholes et al. (1995), Study 1	US mothers and their children (m = 36 months)	Adult Attachment Questionnaire (AAQ; Simpson, 1990)	Observed maternal behavior in lab teaching task	Avoidance: Avoidance X child behavior interaction: avoidance negatively related to supportiveness when child behaved more positively. Avoidance X maternal distress interaction: avoidance negatively related to supportiveness when maternal distress was high. Avoidance X child behavior interaction: avoidance negatively related to positive teaching behavior when child behaved more negatively. Anxiety: Unrelated to maternal behavior
			Perceptions of closeness to child	Avoidance: Higher avoidance related to feeling less close to children. Anxiety: Anxiety X marital quality interaction: anxiety negatively related to closeness when marital quality is high. Anxiety by maternal distress interaction: the link between maternal distress and less closeness was weaker for mothers higher in anxiety.
			Perceptions of child difficulty	Avoidance: Unrelated to perceptions of child difficulty. Anxiety: Anxiety by distress interaction: the link between maternal distress and child difficulty was weaker for mothers high in anxiety.
Rholes et al. (1995), Study 2	US undergraduates without children	Adult Attachment Questionnaire (AAQ; Simpson, 1990)	Desire to have children	Avoidance: Higher avoidance related to less desire to have children Anxiety: Unrelated to desire to have children.
			Confidence in ability to parent effectively	Avoidance: Higher avoidance related to less confidence in ability to parent effectively Anxiety: Higher anxiety related to less confidence in ability to parent effectively
			Concerns about psychological cost of childrearing	Avoidance: Unrelated to cost of childrearing Anxiety: Unrelated to cost of childrearing

Rholes et al. (2006)	US married couples assessed 6 weeks prior to childbirth and again 6 months post-birth	Adult Attachment Questionnaire (AAQ; Simpson, Rholes, & Phillips, 1996)	Desire to have children (prenatal)	Avoidance: Higher avoidance related to less desire to have children Anxiety: Unrelated to desire to have children
			Parental meaning and satisfaction (postnatal)	Avoidance: Unrelated to parental meaning and satisfaction Anxiety: Unrelated to parental meaning and satisfaction
			Parental Stress (postnatal)	Avoidance: Higher avoidance related to greater parental stress Anxiety: Unrelated to parental stress
Rholes et al. (1997), Study 1	US undergraduates without children	Adult Attachment Questionnaire (AAQ; Simpson, Rholes, & Phillips, 1996)	Desire to have children	Avoidance: Higher avoidance related to less desire to have children Anxiety: Unrelated to desire to have children
			Perceived ability to relate well to children	Avoidance: Higher avoidance negatively related to ability to relate well to children Anxiety: Higher anxiety negatively related to ability to relate well to children
			Parental attitudes toward childrearing	Avoidance: Higher avoidance related to advocating less warmth and more strict/harsh behavior and expecting children to be aggravating. Anxiety: Higher anxiety related to advocating less warmth and more strict/harsh behavior and expecting children to be aggravating.
			Expected satisfaction derived from care of infants	Avoidance: Higher avoidance related to expecting less satisfaction from parenthood Anxiety: Unrelated to expectations of satisfaction
			Overall working model of parenting (summary score on above scales)	Avoidance: Higher avoidance related to more negative views of parenting and of self as parent Anxiety: Higher anxiety related to more negative views of parenting and of self as parent
Rholes et al. (1997), Study 2	US undergraduates without children	Adult Attachment Questionnaire (AAQ; Simpson, Rholes, & Phillips, 1996)	Desire to have children	Avoidance: Higher avoidance related to less desire to have children Anxiety: Unrelated to desire to have children
			Expectation of child attachment behaviors	Avoidance: Higher avoidance related to expectation of less secure, more avoidant, and less affectionate behavior. Unrelated to expectations of anxious-resistant behavior Anxiety: Unrelated to expectations of child attachment behaviors
			Overall expectations of prospective	Avoidance: Higher avoidance related to more negative views of prospective children Anxiety: Unrelated to overall view of prospective children

			children (summary score of above scales)	
Rholes et al. (2011)	US married couples assessed over a 2 year period during transition to parenthood	Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998)	Parental depression during transition to parenthood	<p>Avoidance: Avoidance X perception of baby's interference with outside activities: avoidance was associated with higher baseline depression and maintenance of depressive symptoms when participants viewed the baby as interfering with outside activities.</p> <p>Avoidance X perception of baby's interference with romantic relationship: avoidance was associated with higher baseline depression and an increase in depressive symptoms when participants viewed the baby as interfering with romantic relationship.</p> <p>Anxiety: No analyses on link between anxiety and perceptions of baby.</p>
Scharf & Mayseless (2011)	88 Israeli males assessed during senior year of high school and again 9 years later	Attachment Style Questionnaire (Hazan & Shaver, 1987)	Desire to have children	<p>Avoidance: Unrelated to desire to have children 9 years later</p> <p>Anxiety: Ambivalence negatively related to desire to have children 9 years later with current relationship with parents and AAI subscales included in model.</p>
			Ability to relate to children	<p>Avoidance: Marginally negatively related to ability to relate to children 9 years later with current relationship with parents and AAI subscales included in model.</p> <p>Anxiety: Marginally positively related to ability to relate to children 9 years later with current relationship with parents and AAI subscales included in model.</p>
			Expected satisfaction from parenting	<p>Avoidance: Unrelated to expected parental satisfaction 9 years later</p> <p>Anxiety: Unrelated to expected parental satisfaction 9 years later</p>
			Perceptions of self as future parent	<p>Avoidance: Unrelated to perceptions of self as future parent 9 years later</p> <p>Anxiety: Marginally negatively related to perception of self as parent 9 years later with current relationship with parents and AAI subscales included in model.</p>
			Perceptions of future child	<p>Avoidance: Unrelated to perceptions of future child 9 years later</p> <p>Anxiety: Unrelated to perceptions of future child 9 years later</p>
Scher & Dror (2003)	68 Israeli mothers of infants (m =12.2 months)	Experiences in Close Relationships Scale (ECR; Brennan, Clark, &	Self-reported hostility and pleasure in interaction	<p>Avoidance: Unrelated to hostility or pleasure in interaction with infant</p> <p>Anxiety: Significantly positively correlated with hostility toward infant, but unrelated to pleasure in interaction with infant.</p> <p>Secure mothers reported lower hostility and higher pleasure interaction compared to insecure mothers.</p>

		Shaver, 1998)	Self-reported nighttime soothing techniques	Attachment styles unrelated to nighttime soothing techniques
Scher & Mayseless (1994)	118 Israeli mothers assessed when infants were 9 and 12 months old	Attachment Dimensions Questionnaire (Mayseless, 1991)	Maternal separation anxiety	Fear of closeness and fear of being dependent were positively correlated with maternal separation anxiety.
			Mother-reported importance of behavioral and socialization skills of child	Fear of abandonment was negatively correlated with mother reported importance of the development of social skills, self-help skills, and independence.
			Mothers' decision to work outside the home	Employed mothers reported significantly lower fear of closeness compared to unemployed mothers.
Scher & Mayseless (1997)	118 Israeli mothers assessed when infants were 3 and 9 months old	Attachment Concerns Questionnaire (Mayseless, 1995)	Changes in perceptions of infant temperament from 3 to 9 months of age	Fear of being dependent was related to an increase in mother-reported child negative emotionality from 3 to 9 months.
Selcuk et al. (2010)	85 Turkish mothers and their children (age range: 10 – 50 months)	Experiences in Close Relationships Scale-Revised (Fraley, Waller, & Brennan, 2000)	Observed caregiving during home visit.	Avoidance: Negatively related to maternal sensitivity and positively related to non-synchronicity in interactions, discomfort with contact, inaccessibility, missing the child's signals, and failing to meet the child's needs. Anxiety: Unrelated to maternal sensitivity. Positively related to conflict in interactions, missing the child's signals, and interfering with exploration.
Snell, Overbey, & Brewer (2005)	644 US undergraduates and 960 web participants	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Parenting perfectionism	Fearful and preoccupied participants reported high and maladaptive parenting perfectionism Secure participants reported more adaptive and beneficial parenting perfectionism
Vasquez et al. (2002)	US pregnant women and spouses (when available) assessed at 1 year and 4.5	Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Maternal separation anxiety	Secure and Dismissing mothers reported less separation anxiety compared to Fearful mothers.
			Parenting salience	Attachment styles unrelated to parenting salience at either time point

	years post-partum.		Parental stress	Secure and Dismissing mothers reported less parental stress compared to Fearful mothers 1 year and 4.5 years post-partum. Secure fathers reported less parental stress compared to Fearful fathers 1 year and 4.5 years post-partum.
Vieira et al. (2012)	Portuguese parents in dual-earner relationships with children between the ages of 3-5	The Romantic Attachment Questionnaire (RAQ; Matos, Barbosa, & Costa, 2001)	Parental stress	Avoidance: Higher avoidance related to greater parental stress, but this effect was fully mediated by work-family conflict and work-family positive spillover. Anxiety: No direct link between anxiety and parental stress, but anxiety was indirectly related to parental stress through work-family conflict.
			Parental satisfaction	Avoidance: Higher avoidance related to less parental satisfaction, but this effect was fully mediated by work-family conflict. Anxiety: Higher anxiety was related to more parental satisfaction.
Wilson et al. (2007)	US married couples assessed 6 weeks prior to childbirth and again 2 weeks post-birth	Adult Attachment Questionnaire (AAQ; Simpson, Rholes, & Phillips, 1996)	Desire to have children (prenatal)	Avoidance: Higher avoidance related to less desire to have children Anxiety: Unrelated to desire to have children
			Jealousy of newborn (prenatal)	Avoidance: Unrelated to jealousy of newborn Anxiety: More anxious women reported more jealousy of newborn. The link was marginal for men ($p = .08$).
			Perceptions of closeness to newborn (postnatal)	Avoidance: More avoidant women, but not men, felt less close to the newborn Anxiety: Unrelated to perceptions of closeness to newborn

Table 2

Means and Standard Deviations of Key Study Variables

Variable	<i>M (SD)</i>
Parent Questionnaires	
Maternal Attachment-Related Avoidance	53.15 (16.64)
Maternal Attachment-Related Anxiety	43.32 (17.52)
Paternal Attachment-Related Avoidance	59.07 (15.17)
Paternal Attachment-Related Anxiety	44.84 (18.01)
Maternal Parental Self-Efficacy	237.23 (26.97)
Paternal Parental Self-Efficacy	220.93 (35.03)
Maternal Hostility Toward Adolescent	11.62 (4.02)
Paternal Hostility Toward Adolescent	11.74 (4.64)
Adolescent Questionnaires	
Perceptions of Mother as Secure Base	56.88 (7.99)
Perceptions of Father as Secure Base	53.16 (9.50)
Perceptions of Maternal Understanding	31.28 (8.32)
Perceptions of Paternal Understanding	25.72 (9.25)
Perceptions of Maternal Hostility	27.85 (10.63)
Perceptions of Paternal Hostility	27.07 (10.98)
Perceptions of Maternal Warmth	45.16 (9.17)
Perceptions of Paternal Warmth	40.79 (11.19)
Observational Measures	
Mother Secure Base Provision	5.22 (1.19)
Father Secure Base Provision	5.11 (1.39)
Teen Secure Base Use with Mother	5.17 (1.36)
Teen Secure Base Use with Father	5.03 (1.41)

Table 3

Correlation Matrix for Mother and Teen Variables

	1	2	3	4	5	6	7	8	9	10
1. Maternal Avoidance	-									
2. Maternal Anxiety	.33**	-								
3. Hostility (MR)	.22*	.10	-							
4. Parenting Self-Efficacy (MR)	-.26*	-.25*	-.33**	-						
5. Mother as Secure Base (AR)	-.45***	-.10	-.41***	.24*	-					
6. Maternal Understanding (AR)	-.29**	.03	-.35***	.32**	.71***	-				
7. Maternal Hostility (R) (AR)	-.41***	-.12	-.49***	.25*	.69***	.53***	-			
8. Maternal Warmth (AR)	-.42***	-.11	-.42***	.24*	.81***	.67***	.71***	-		
9. Maternal Secure Base Provision	-.17	-.06	-.39***	.11	.33**	.29**	.33**	.31**	-	
10. Teen Secure Base Use	-.21*	-.05	-.40***	.41***	.36***	.36**	.31**	.36***	.44***	-

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. MR = Mother Report. AR = Adolescent Report. Adolescent Reported maternal hostility is reverse scored (higher scores = less hostility).

Table 4

Correlation Matrix for Father and Teen Variables

	1	2	3	4	5	6	7	8	9	10
1. Paternal Avoidance	-									
2. Paternal Anxiety	.17	-								
3. Hostility (FR)	.19	.34**	-							
4. Parenting Self-Efficacy (FR)	-.41***	-.18	-.53***	-						
5. Father as Secure Base (AR)	-.15	-.18	-.33**	.24*	-					
6. Paternal Understanding (AR)	-.12	-.12	-.19	.23*	.69***	-				
7. Paternal Hostility (R) (AR)	-.08	-.27*	-.28*	.06	.61***	.31**	-			
8. Paternal Warmth (AR)	-.18	-.17	-.32**	.24*	.79***	.69***	.55***	-		
9. Paternal Secure Base Provision	-.18	-.14	-.29*	-.03	.37***	.19	.37***	.34**	-	
10. Teen Secure Base Use	.02	-.18	-.28*	.01	.11	.05	.27*	.06	.38***	-

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. FR = Father Report. AR = Adolescent Report. Adolescent Reported paternal hostility is reverse scored (higher scores = less hostility).

Table 5

Unstandardized Path Coefficients and Standard Errors for Mother and Father Secure Base

<i>Provision</i>	Unstandardized	
	<i>b</i>	<i>SE</i>
Mother Secure Base Provision		
Mom Avo to Mom Hostility	.24*	.12
Mom Anx to Mom Hostility	.04	.13
Mom Avo to MSE	-.15+	.08
Mom Anx to MSE	-.14+	.08
Mom Avo to MSBP	-.13	.12
Mom Anx to MSBP	-.03	.11
Mom Hostility to MSBP	-.45***	.12
MSE to MSBP	-.12	.17
Ethnicity to MSBP	-.30*	.14
Father Secure Base Provision		
Dad Avo to Dad Hostility	.14	.14
Dad Anx to Dad Hostility	.36*	.15
Dad Avo to FSE	-.40***	.11
Dad Anx to FSE	-.09	.08
Dad Avo to FSBP	-.32	.19
Dad Anx to FSBP	-.04	.14
Dad Hostility to MSBP	-.43**	.15
FSE to FSBP	-.54*	.22
Teen Gender to FSBP	.78**	.27

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. + marginal. Avo = attachment-related

avoidance. Anx = attachment-related anxiety. MSE = maternal parenting self-efficacy.

FSE = paternal parenting self-efficacy. MSBP = maternal secure base provision. FSBP =

father secure base provision.

Table 6

Unstandardized Path Coefficients and Standard Errors for Adolescent Secure Base Use with

Mother and Father

	Unstandardized	
	<i>b</i>	<i>SE</i>
Teen Use of Mother as Secure Base		
Mom Avo to Teen Pos. Percept.	-2.12***	.44
Mom Anx to Teen Pos. Percept.	.41	.45
Mom Avo to TSBU	-.07	.21
Mom Anx to TSBU	-.00	.17
Teen Pos. Percept. to TSBU	.10*	.05
Teen Use of Father as Secure Base		
Dad Avo to Teen Pos. Percept.	-.70	.63
Dad Anx to Teen Pos. Percept.	-.67	.47
Dad Avo to TSBU	.07	.20
Dad Anx to TSBU	-.22	.16
Teen Pos. Percept. to TSBU	-.01	.04
Ethnicity to TSBU	-.31	.22
Income to TSBU	.01	.36

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. Avo = attachment-related avoidance. Anx =

attachment-related anxiety. TSBU = teen secure base use.

Appendix B: Figures

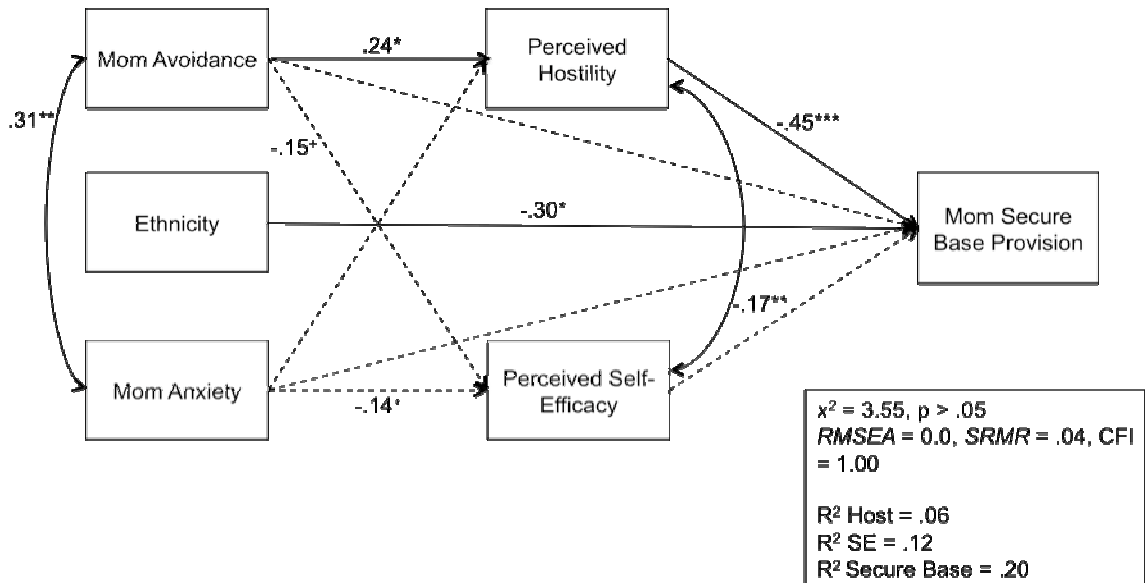


Figure 1. Path Model of Maternal Secure Base Provision

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. + marginal. Solid lines indicate significant

paths. Dashed lines indicate insignificant paths. The indirect effect from maternal

avoidance to mom secure base provision through perceived hostility was significant at the

.01 level.

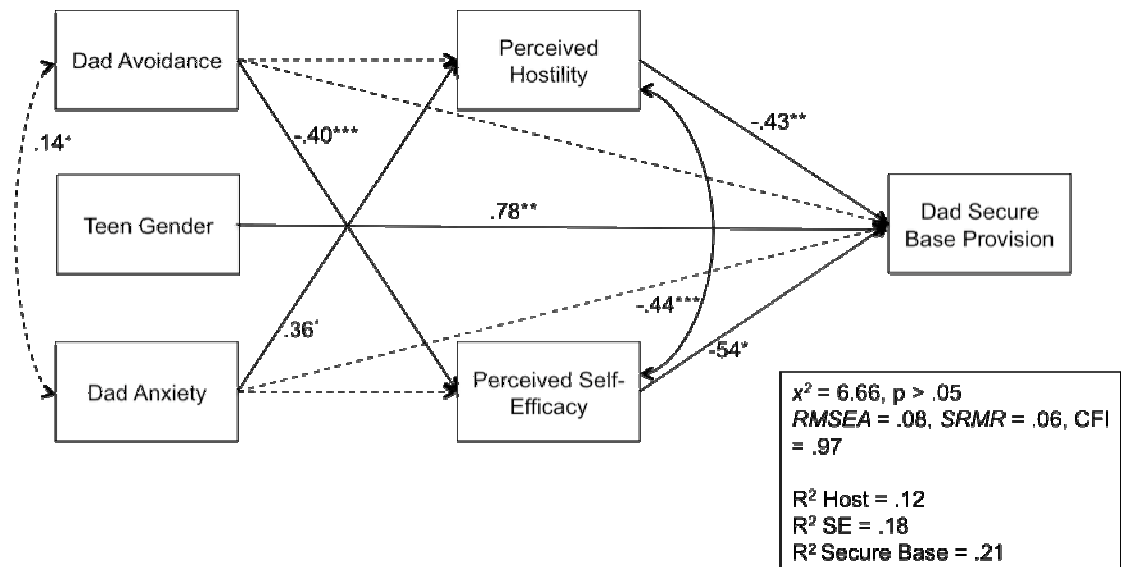


Figure 2. Path Model of Paternal Secure Base Provision

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. + marginal. Solid lines indicate significant paths. Dashed lines indicate insignificant paths. The indirect effect from paternal anxiety to father secure base provision through perceived hostility was significant at the .01 level. The indirect effect from paternal avoidance to father secure base provision through perceived parental self-efficacy was significant at the .01 level (but not in the hypothesized direction).

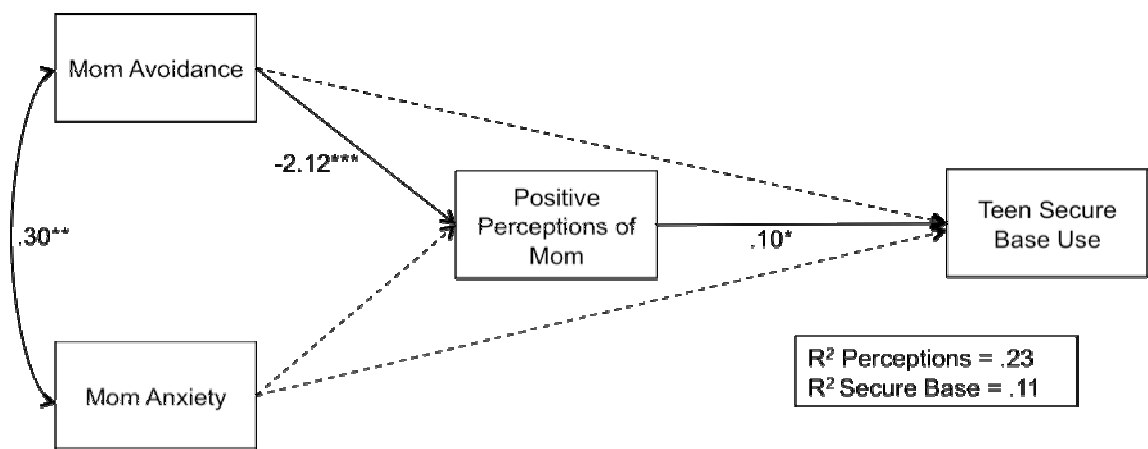


Figure 3. Path Model of Teen Secure Base Use with Mother

Notes. * $p < .05$. ** $p < .01$. *** $p < .001$. Solid lines indicate significant paths. Dashed lines indicate insignificant paths. The indirect effect from maternal avoidance to teen secure base use with mom through teen perceptions of mother was significant at the .01 level.

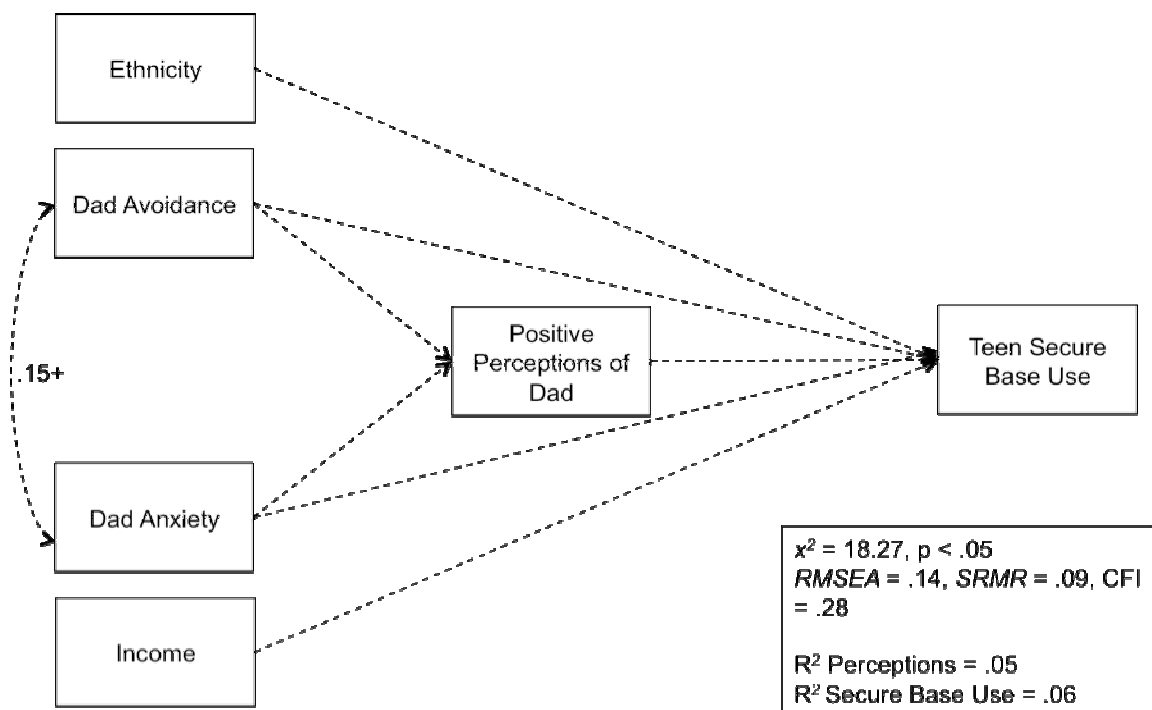


Figure 4. Teen Secure Base Use with Father

Notes. Solid lines indicate significant paths. Dashed lines indicate insignificant paths.

Appendix C

Experiences in Close Relationships Scale

The following statements concern how you generally feel in close relationships (e.g., with romantic partners, close friends, or family members). Respond to each statement by indicating how much you agree or disagree with it by circling **ONE** number.

1 = Disagree Strongly; 4 = Neutral/Mixed; 7 = Agree Strongly

- | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|
| 1. | I prefer not to show others how I feel deep down. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | I worry about being rejected or abandoned. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | I am very uncomfortable being close to other people. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | I worry a lot about my relationships. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | Just when someone starts to get close to me I find myself pulling away. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | I worry that others won't care about me as much as I care about them. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | I get uncomfortable when someone wants to be very close to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | I worry a fair amount about losing my close relationship partners. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | I don't feel comfortable opening up to others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | I often wish that close relationships partners' feelings for me were as strong as my feelings for them. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | I want to get close to others, but I keep pulling back. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | I want to get very close to others, and this sometimes scares them away. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. | I am nervous when another person gets too close to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | I worry about being alone. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | I feel comfortable sharing my private thoughts and feelings with others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | My desire to be very close sometimes scares people away. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | I try to avoid getting too close to others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | I need a lot of reassurance that close relationships partners really care about me | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | I find it relatively easy to get close to my partner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. | Sometimes I feel that I force others to show more feeling, more commitment to our relationship than they otherwise would. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. | I find it difficult to allow myself to depend on close relationship partners. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. | I do not often worry about being abandoned. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. | I prefer not to be too close to others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. | If I can't get a relationship partner to show interest | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

in me, I get upset or angry.

- | | | | | | | | | |
|-----|--|---|---|---|---|---|---|---|
| 25. | I tell my close relationship partners just about everything. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. | I find that my partners don't want to get as close as I would like. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. | I usually discuss my problems and concerns with close others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. | When I don't have close others around, I feel somewhat anxious and insecure. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. | I feel comfortable depending on others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. | I get frustrated when my close relationship partners are not around as much as I would like. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. | I don't mind asking close others for comfort, advice, or help. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. | I get frustrated if relationship partners are not available when I need them. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. | It helps to turn to close others in times of need. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. | When romantic partners disapprove of me, I feel really bad about myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. | I turn to close relationship partners for many things, including comfort and reassurance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36. | I resent it when my relationship partners spend time away from me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix D

Parental Self-Efficacy

Instructions: Carefully read the question below and then respond to each item using the rating scale on the right side of this page. Circle only one number per item. If you have more than one child, you may behave differently with different children. Please respond to the questions specifically in regard to the teen participating in our study.

Question: Within your present relationship with your teen, how confident are YOU in YOUR ability to do each of the following?

How confident are YOU that YOU can...

1 = I'm not sure at all; 4 = I'm moderately sure; 7 = I'm completely sure

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| 1. tell your teen when you feel hurt or upset with him/her? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. tell your teen you love him/her? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. be someone your teen can come to with problems? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. know when your teen is upset and needs your comfort? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. feel in charge with your teen when you need to? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. know how to effectively get your child to follow your guidelines? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. deal with your teen when he/she is angry or upset with you? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. understand when your teen would prefer to be left alone? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. tell your teen when you would prefer to spend time engaged in other activities without him/her? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. enjoy the time you spend with your teen? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. stay connected with your teen after he/she finishes high school? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. be someone your teen can count on in times of trouble? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. know what your teen needs from you? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. discipline your teen? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. feel comfortable letting your teen try things out or go places on his/her own? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. express affection to your teen freely and comfortably? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. accept your teen's affection freely and comfortably? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

18. feel comfortable with your teen?	1	2	3	4	5	6	7
19. help your teen when he/she is sick or hurt?	1	2	3	4	5	6	7
20. comfort your teen when he/she is “down” or depressed?	1	2	3	4	5	6	7
21. do something to change your teen’s negative behavior or behavior you disapprove of?	1	2	3	4	5	6	7
22. negotiate disagreements with your teen?	1	2	3	4	5	6	7
23. accept your teen’s independence?	1	2	3	4	5	6	7
24. protect your teen?	1	2	3	4	5	6	7
25. take care of your teen in the ways he/she needs?	1	2	3	4	5	6	7
26. find ways to work out “everyday” problems with your teen?	1	2	3	4	5	6	7
27. offer criticism to your teen without hurting his/her feelings?	1	2	3	4	5	6	7
28. comfort your teen when he/she is angry or upset with someone else?	1	2	3	4	5	6	7
29. understand how your teen is truly feeling about things?	1	2	3	4	5	6	7
30. tell your teen when you would prefer to be alone?	1	2	3	4	5	6	7
31. show respect to your teen when you disagree with his/ her opinions?	1	2	3	4	5	6	7
32. understand your teen?	1	2	3	4	5	6	7
33. accept criticism from your teen without attacking or challenging him/her?	1	2	3	4	5	6	7
34. accept your teen disagreeing with you?	1	2	3	4	5	6	7
35. understand when your teen is not feeling well?	1	2	3	4	5	6	7
36. make good decisions about how to be a parent to this teen?	1	2	3	4	5	6	7
37. know when things are going badly in your teen’s day, and he/she needs your help?	1	2	3	4	5	6	7
38. be available to your teen when he/she needs you?	1	2	3	4	5	6	7
39. accept your teen’s request to be alone?	1	2	3	4	5	6	7
40. help provide your teen with confidence when he/she is nervous about a new situation?	1	2	3	4	5	6	7

Appendix E

Parent Perceptions of Parental Hostility

Please think about times during the past month when you and your teen have spent time talking or doing things together.

Indicate how often you acted in the following ways towards your teen during the past month.

	always	almost always	fairly often	about half of the time	not too often	almost never	never
1. Get angry at my teen?	1	2	3	4	5	6	7
2. Criticized my teen for his or her ideas?	1	2	3	4	5	6	7
3. Shouted or yelled at my teen because I was mad at him or her?	1	2	3	4	5	6	7
4. Argued with my teen whenever we disagreed about something?	1	2	3	4	5	6	7

Appendix F

Parent as a Secure Base Scale – Revised

Please circle the number that indicates how true you feel the following statements are about your mother.

	not at all true		moderately true or not sure		definitely true
1. My mother listens to me	1	2	3	4	5
2. My mother understands the way I feel about things.	1	2	3	4	5
3. My mother cares how I feel	1	2	3	4	5
4. My mother isn't really there for me when I'm in trouble.	1	2	3	4	5
5. My mother doesn't understand me very well.	1	2	3	4	5
6. My mother is someone I can go to when I'm upset.	1	2	3	4	5
7. My mother is someone I can count on when I need help.	1	2	3	4	5
8. My mother accepts me.	1	2	3	4	5
9. My mother truly loves me.	1	2	3	4	5
10. My mother gets annoyed if I turn to her for help.	1	2	3	4	5
11. My mother rejects me	1	2	3	4	5
12. My mother is there for me in times of trouble.	1	2	3	4	5
13. My mother is happy that she is my mother and wants to stay close to me.	1	2	3	4	5

Appendix G

Parental Understanding Inventory

Instructions: Carefully read the question below and then respond to each item using the rating scale on the right side of this page. Circle only one number per item. Please respond to the questions specifically in regard to your mother.

Question: Within your present relationship with your mother, how confident are YOU in your mother's ability to do each of the following?

How confident are YOU that she can...

1 = I'm not sure at all; 4 = I'm moderately sure; 7 = I'm completely sure

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| 1. know when you are upset and need her comfort? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. know what you need from her? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. understand you? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. understand how you are truly feeling about things? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. know when things are going badly in your day, and that you need her help? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. understand when you are not feeling well? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix H

Behavioral Affect Rating Scale

Please think about times during the past month when you and your mother have spent time talking or doing things together.

Indicate how often your mother acted in the following ways towards you during the past month.

	always	almost always	fairly often	about half of the time	not too often	almost never	never
1. Get angry at you?	1	2	3	4	5	6	7
2. Ask you for your opinion about an important matter?	1	2	3	4	5	6	7
3. Listen carefully to your point of view	1	2	3	4	5	6	7
4. Let you know she really cares about you?	1	2	3	4	5	6	7
5. Criticize you or your ideas?	1	2	3	4	5	6	7
6. Shout or yell at you because she was mad at you?	1	2	3	4	5	6	7
7. Ignore you when you tried to talk to her?	1	2	3	4	5	6	7
8. Threaten to do something that would upset you if you didn't do what she wanted?	1	2	3	4	5	6	7
9. Try to make you feel guilty?	1	2	3	4	5	6	7
10. Act loving and affectionate toward you?	1	2	3	4	5	6	7
11. Let you know that she appreciated you, your ideas or the things you do?	1	2	3	4	5	6	7
12. Help you do something that was important to you?	1	2	3	4	5	6	7
13. Say you made her unhappy?	1	2	3	4	5	6	7
14. Have a good laugh with you about something that was funny?	1	2	3	4	5	6	7
15. Get into a fight or argument with you?	1	2	3	4	5	6	7
16. Hit, push, grab or shove you?	1	2	3	4	5	6	7
17. Argue with you whenever you disagreed about something?	1	2	3	4	5	6	7
18. Cry, whine or nag to get her way?	1	2	3	4	5	6	7
19. Not do things you asked	1	2	3	4	5	6	7
20. Act supportive and understanding toward you?	1	2	3	4	5	6	7

Appendix I

Parent-Teen Conflict Task Discussion Coding and Scales

General Description

The conflict task scales include 5 (7-point) scales on which various behaviors of the teen are coded. There are 4 teen scales, and 1 dyadic scale. For each scale, the teen, or dyad receives a score ranging from 1 to 7. The scales are identified below, and then defined in detail on the pages that follow. Since the teen and parents are being coded separately, there are two separate coding manuals. Coders will be asked to learn to code both the teen and parent. As such, coders must be thoroughly familiar with the two manuals.

General procedure

1. There are three possible areas of conflict that the teen and the parent may discuss; but they don't necessarily have to discuss all three. You are to score each conflict separately for all 5 scales using a 7-point scoring, or the omitted discussion category using a 0-1 scoring. You are to code only the teen and the dyadic scale. Note the number of conflict topics discussed by each dyad. Record the time (start, end and total time) the dyad spent discussing each issue. In addition, at the end of coding all topics discussed, give a global score for each of the scales. This score is not an average of your other scores, but rather a general overall score for the entire interaction focusing on the person you are assigned to code.
2. Watch each videotaped interaction twice – first to get a general sense of the interaction, then again focusing mainly on the teen and code all scales. You may, however, need to watch each interaction more than twice if you feel you missed something. Start watching and timing immediately after the research assistant leaves the dyad, unless the dyad start talking about something that is not relevant to the task. In this case, start the clock as soon as the dyad begins discussing relevant material.
3. The second time you watch the tape, stop the tape at least every 1 minute or more often as needed to give yourself a chance to take more detailed notes about what you just saw, as well as to flag each scale with some kind of notation denoting evidence or lack of evidence of behaviors fitting a particular scale. For instance, “(+ = high evidence of behaviors), or (- = low or no evidence of behaviors), or (-/+ = medium evidence of behaviors weighed slightly more on the negative side; +/- = medium evidence of behaviors weighed slightly more on the positive side).” The minute-by-minute notes section of the coding sheet is a good place for you to take notes, but feel free to use additional paper if needed. [If you take notes on an additional sheet of paper, please attach this note sheet to the coding sheet.] Taking notes will help you to remember things

that happened during the interaction when you are making your final ratings later.

4. Please remember to write your initials and the participant's ID number at the top of each coding sheet. Write the date the original interaction took place, and write boy or girl to specify gender of the teen in the appropriate spaces of the coding sheet. Provide a description of the teen (e.g., Caucasian, blond hair in a pony-tail).

5. If the dyad clearly indicates that they have finished with the conflict task discussion (e.g., by saying that they are ending it or by ending it in another way) before the 10-min period is over, please consider the discussion as being over, and indicate on your coding sheet the number of minutes of tape you watched before you stopped coding. However, be careful not to stop watching too early. Many dyads may go off-task for a minute or two, then return to the task. In order to stop watching the tape, the dyad must clearly end the discussion, and you must be completely certain that the dyad is not going to return to the task. You will need to watch the entire interaction once in order to determine whether or not the dyad returns to the task.

Note: Some dyads have slightly longer interactions than 10 minutes, be sure to code the entire interaction.

6. Coders must have the original checklist ratings (i.e., ratings from the Issues of Disagreement Checklist in which the dyad rated the conflicts) in hand when coding as these ratings are taken into account in the scales. Put the rating the teen and the parent provided for each issue on your coding sheet. Also, write the name of the discussion topic on the coding sheet. You will have access to a print out with the original checklist ratings.

Note: To keep things simple, original checklist ratings refer to the checklist ratings provided by the teen and parent and scores are those that you will be giving on the appropriate scales.

7. If the dyad discusses an issue for less than 1 minute, you will have two coding choices: (1) because of insufficient information, do not score the issue using the teen and parent scales. Instead, choose the "omitted discussion of issue" for the respective issue. Score it a zero if the teen originally rated that issue a 2 or less, and then talked about it for less than 1 minute. Score it a one if the teen rated a 3 or more, but again they talked about it for less than 1 minute. In addition, if the teen originally rated the topic high, but made an attempt at getting the parent to talk about the topic, the teen should get a zero. Only give a score of 1 if in your judgment the teen is evading discussion regarding the topic. When the "omitted discussion of issue" is selected, place a N/A (not-applicable) in the other scales boxes. Please take care in watching the entire taped interaction because sometimes dyads may skip a topic (e.g., talk about it for less than a minute) but return to it again later in the interaction.

(2) Code the interaction according to the usual scales only if you feel that there is sufficient information to code. After coding this interaction, however, bring it to consensus meeting.

8. There may be instances when it is not clear whether or not the dyad's discussion is on the specific topic identified as "the problem", but what is obvious is that the dyad is discussing an area or areas of conflict. In these instances do not consider veering away from the topic as a way of avoiding discussion.

9. Because of the complicated nature of this coding project, whenever a coder is unsure about a particular score, the coder is encouraged to bring that up for discussion at consensus meetings. All questions are appropriate.

TEEN MAINTAINING SECURE RELATEDNESS/SECURE BASE USE SCALE

This scale measures the teen's maintenance of secure relatedness and use of the parent as a secure base. How does this happen within an adolescent-parent conflict situation? The teen who receives a high score shows a clear wish to maintain the relationship even under the stress of conflict (presumably so that the relationship is not damaged and therefore is available when needed for support in times of trouble). The teen shows evidence of using the parent as a secure base to explore and discuss the emotionally powerful conflictual topic. The teen is clear and direct in stating his/her position and concerns, yet does this in a positive, respectful way that shows an underlying caring for the parent and a desire to maintain the relationship. There is a sense that the child uses the parent as a resource (secure base) in tackling the problems under discussion. Other aspects of secure base use are more rarely seen in an adolescent-teen conflict task, but may be present. One of these is seeking care from the parent. In this case, this would be a request for help rather than a demand or insistence on a position (Can you help me talk to Dad so that I can get the car sometimes?) Another secure base behavior is deriving comfort from the parent. Thus, if the teen and parent resolve the conflict, the teen seems comforted. In particular, if the parent offers any comfort, the teen, even if not agreeing with the parent, is not hostile, sarcastic, or rejecting of this attempt to comfort. If, however, these behaviors are not seen, the teen's score is not lowered. The desire to maintain secure relatedness in the face of conflict is the core of this scale, and is described in detail below.

Positive relatedness is evident when the teen is willing or open to discussing a topic and finding a shared solution to the conflict. Although the teen may be adamant about his/her position, he/she goes about it in a respectful way. A high score reflects the teen's ability to listen to the parent and willingness to understand (but not necessarily agree with) his/her point of view. That is, the teen demonstrates the ability to maintain the channels of communication with the parent and to negotiate and potentially reach a solution.

This is also a rating about the teen's ability to engage in a conversation that is obviously based on private shared meaning between the teen and parent likely as a result of the history of a child-parent relationship. Evidence of this might include instances when the teen gives you the sense that s/he understands the parent and in return the teen feels understood or at least accepted by the parent. This evidence may be in a form of a statement (e.g., the teen finished the other's sentences, but not in an intrusive way) or may be more subtle (e.g., non-verbal cues, such as eye-contact and shaking of head).

Teens who receive high scores demonstrate a comfort level with the parent, as if he/she were able to argue a differing position while knowing the parent has a high regard for his/her thoughts and feelings. In other words, the coder will get the sense that the teen knows that he/she is being understood or accepted by the parent, and no matter what the disagreement is about, the teen is not made to feel badly or shamed during the interaction.

To receive a high score, a teen does not necessarily need to connect with the parent in a gregarious manner. In fact, a teen may connect with a parent in a shy kind of way. However, there needs to be evidence of a definite positive connection between the teen and the parent. A low score on this scale represents the teen's inability to make a positive effort to maintain relatedness to the parent.

A high score does not necessarily mean that a solution was achieved, but, a teen who receives a high score on this scale is determined to keep the disagreement at a level that would not disrupt his or her positive relatedness to the parent.

Non-Verbal Cues (All apply for this scale primarily when the parent is speaking or the teen is waiting for the parent to speak.)

Is attentive and responsive to parent (high level of eye contact)

Body is relaxed and oriented toward the parent

Expressive voice (e.g. variations in rhythm and intonation) accompanies supportive statements

Indicates continuing attention by nodding or saying "mm-hm," "yes," "OK," or other similar utterances.

Teen appears comfortable with the interaction

Teen smiles at parent when parents talks

Verbal Cues or Statements that convey relatedness to parent

Expresses warmth toward parent

Does not interrupt parent rudely

May incorporate parent's ideas into constructive suggestions, statements, or inquiries

Positive mind-reading (i.e. attributes thoughts, feelings or motives that facilitates parent's expressing his or her views or reasons)

May accept the parent's mind-reading

May state that he/she values parent's views regarding the issue (but may not agree).
If necessary, demonstrates the ability to disagree with the parent in a respectful way

7. Teen Displays the Highest Effort Toward Maintaining Secure Relatedness with the Parent

The teen consistently shows effort in maintaining relatedness throughout the discussion with parent. The teen's affect is generally warm (even when discussing matters that are clearly in dispute with the parent). For instance a teen may say, "I know you're concerned about me. I know you care, but I've adapted to getting less hours of sleep and still managing to do what I need to do." The teen does not have to verbally state that maintaining a positive relationship with the parent is more important than getting his/her own way in their disagreement but his/her behavior suggests a wish to keep the relationship balanced. This teen is tactful in discussing varying opinions with a parent, even if the parent's position angers the teen. The teen consistently displays non-verbal cues that indicate attentive listening: the face is expressive and the body is relaxed and oriented toward the parent when the parent is speaking, and the teen indicates continuing attention by maintaining eye contact and/or nodding or saying "mm-hm", "yes", "OK", or similar utterances.

6. Teen Displays High Effort Toward Maintaining Secure Relatedness with the Parent.

The teen shows a great deal of effort in maintaining relatedness throughout the discussion with parent. The teen who receives this score displays the same set of verbal and non-verbal cues described for a score of 7 but a little less frequently or of lower quality.

5. Teen Displays a Fair Amount of Effort Toward Maintaining Secure Relatedness with Parent.

The teen displays a fair amount of effort in maintaining relatedness throughout the discussion with parent. To score a 5 this teen displays the same set of verbal and non-verbal cues described for a score of 6 but with less frequency and lower quality. The teen who receives a score of 5 may display a connection with the parent in a shyly pleased way. The teen indicates continuing attention by sustaining eye contact and/or nodding or saying mm-hm, yes, OK, or similar utterances.

4. The Teen Makes some Effort Toward Maintaining Secure Relatedness With Parent.

This teen is clearly related to the parent in some ways, but there also some clear difficulties in his/her ability to connect with the parent. The teen may make some effort to maintain relatedness in the discussion with the parent. He/she may display non-verbal

cues that indicate attentive listening. This score might also be assigned when the teen start the discussion in what seems like a very high level of relatedness but as the discussion progresses this high quality of relatedness is not sustained.

3. The Teen Makes some Effort Toward Maintaining Secure Relatedness with Parent.

2. Teen Shows Little Effort Toward Maintaining Secure Relatedness With Parent.

1. The Teen Does Not Show Any Signs of Positive Relatedness.

PARENT MAINTAINING SECURE RELATEDNESS /SECURE BASE PROVISION

The purpose of this scale is to rate the extent to which a parent's non-verbal and verbal behaviors convey a sense of serving as a secure base for the teen. Provision a secure base means that the parent conveys to the teen that even though there is conflict, there is no threat to a basic acceptance or to the relationship. This means that the parent is allowing teen to explore negative, conflictual thoughts and feelings and still have the relationship as an underlying base of support. It also means that the parent does not do anything in anger or frustration to threaten the teen's belief in an underlying availability and acceptance. In other words, the parent stays bigger, stronger, wiser and kind than the teen throughout the interaction.

Evidence of maintaining secure relatedness/secure base provision may be demonstrated in the following examples.

- The coder gets a clear indication that the parent has a genuine interest in the child. Although the parent may also be adamant (insistent) about his/her position, he/she presents his/her position in a caring and respectful way.
- A high score reflects behavior that indicates the parent is actively listening to the teen in a supportive way (or trying hard to do so with an unresponsive teen). The teen's statements are listened to attentively and registered.
- The parent may not accept the teen's statements; nonetheless, the parent displays a general acceptance for the teen (not agreeing with the teen's statements does not lower the scores for maintaining relatedness/secure base provision).
- The parent demonstrates the ability to facilitate the teen to hold on to a sense of basic worthiness.
- In addition, the parent may help the teen feel understood (e.g., "I know you don't like to take out the garbage. But I must ask you to do it anyway because we live as a family, and you must take on some family related tasks that you don't necessarily like to do").

- Furthermore, the parent fosters teen to feel good about herself/himself. The parent does not retaliate for teen's assertion, aggression or hostility.
- Parents who receive a high score may also make statements that indicate positive shared-meaning. That is, a parent may bring up an example that illustrates special meaning for the dyad. The rater might not understand this meaning, but it is obvious that the two sides share a special understanding of it.
- The coder gets a clear sense that the parent shows awareness of and correctly recognizes the teen's distress, needs, or concerns. The parent shows a willingness and ability to be a good listener and encourages the teen to express his/her thoughts and feelings; and a willingness to be cooperative in the discussion with the teen, but the parent does not necessarily give up the rule. The parent lets teen know that he/she understands that "the rule" upsets him/her (e.g., "I know that it upsets you," "I know you don't think this is fair," "I know you don't like to take out the garbage," "I know you do more than your brothers and sisters.")

Also, this scale should be thought of on a more global level as for instance, the parent may have an issue that is a conflict for the dyad and in this case relatedness would be demonstrated by the parent's ability to allow the teen to freely express what is on his/her mind in regard to the problem and to accept the validity (if not the content) of the teen's statements.

To score above 3 in this scale, the individual must go beyond "courtroom listening." Courtroom listening is attending to what the other says with the goal of arguing back effectively, not with the goal of being supportive in an emotionally meaningful way. Reluctantly conceding a point does not count as supporting the teen. The parent who receives a high score does not shame the teen during the course of the discussion.

Non-Verbal Cues

Behaviors by parent may include:

Maintains high level of eye contact

Face is expressive in response to what teen is saying (e.g., nods, smiles, makes eyebrow movements).

Body is relaxed and open (without arms akimbo or fidgeting)

Body (head, shoulders and trunk) is oriented toward teen

Torso is leaning toward teen

Relaxed arms, hands, and movements accompany supportive statements

Expressive voice (e.g. variations in rhythm and intonation) accompanies supportive statements

Refrains from abruptly interrupting teen while teen is speaking.

Verbal Cues or Statements that Convey Support for Teen

Expresses warmth, concern, or sympathy toward teen

Acknowledges what teen is saying or trying to say

May incorporate teen's ideas into constructive suggestions, statements, or inquiries

Allows teen to express his/her views

May compliment teen

May display positive mind-reading (i.e. attributes thoughts, feelings or motives that facilitates teen's expressing his or her views or reasons)

Minimizes or disagrees with teen's self-deprecating statements

May ask questions or makes statements that encourage the teen to voice his or her views and reasons.

May display attunement toward what teen is saying

May use language that indicates like-mindedness (e.g., discussion that leaves the coder thinking that this dyad has had numerous such discussions and that differences of opinion do not disrupt positive relatedness)

Note: Asking a general question such as "Well, what do you want to say about this topic?" or saying "This is a problem because you don't pay any attention to what we tell you" does not usually convey much interest or support. Context and tone of voice should be considered in determining whether a question in particular conveys support for the teen to express his or her views.

7. Parent is Very Supportive of Teen and Consistently Maintains a Very High Level of Secure Relatedness/Secure Base Provision

The parent consistently displays non-verbal cues that indicate supportive listening: The face is expressive and the body is relaxed and oriented toward the teen when the teen is speaking. The parent indicates continuing attention by sustaining eye contact and/or nodding or saying mm-hm, yes, OK, or similar utterances. The parent demonstrates a high level of empathic listening (e.g., the parent seems able to place himself/herself in the same shoes as the teen). The parent shows a high awareness of and correctly recognizes the teen's distress, needs, or concerns. The parent encourages the teen to express his/her thoughts and feelings, and demonstrates a willingness to be cooperative in the discussion with the teen.

The parent displays a general sense of supportiveness toward the teen by providing allowing the teen to speak his/her mind freely about differences of opinion. For instance, in discussing an issue involving "Times for going to bed" a parent told the teen that she was concerned that the teen is not getting enough sleep and as a result may become sick or grades may suffer. In response, a teen told the parent that he is getting used to dealing with less sleep and so far things are working out well. The parent then responds by

saying, “Yes, I know you are not one to get sick and your grades are good. Part of me is concerned that perhaps your grades could even be better and I want to be sure you don’t run yourself down.”

In addition, the parent makes statements that support the teen (e.g., positive or neutral mind-reading; complimenting; minimizing teen’s self-deprecating statements; or expressing sincere sympathy). Parents who receive this high score are likely to make statements that indicate positive shared-meaning.

6. Parent is Very Supportive of Teen and Consistently Maintains a High Level Secure Relatedness/Secure Base Provision

Parents who receive this score display the same set of verbal and non-verbal cues described for a score of 7 but of slightly lower quality or with less frequency.

5. Parent is Mostly Supportive of Teen and Consistently Maintains a Good Level of Secure Relatedness/Secure Base Provision

Parents who receive this score display less verbal and non-verbal cues described for a score of 6 and these cues are generally of lower quality than those for a score of 6. For instance, the parent consistently displays non-verbal cues that indicate supportive listening: The face is expressive and the body is relaxed and oriented toward the teen when the teen is speaking, and the parent indicates continuing attention by sustaining eye contact and/or nodding or saying mm-hm, yes, OK, or similar utterances. This parent might be less open to the emotional needs of the teen and may show a tendency to provide more instrumental type of caregiving as compared to the emotional type of caregiving characterizing parents who receive scores of 6 or 7 (i.e., A parent who provides instrumental caregiving might say to a teen, “what exactly caused you to do poorly in school in your sophomore year?” or “I think what you need to do is to keep in mind that your little sister is only twelve.” A parent who provides emotional caregiving might say to a teen, “You sound concerned about your performance in your sophomore year” or “It sounds like it annoys you that your little sister wants to be just like you.”

4. Parent is Generally Supportive of Teen and Maintains Some Level of Secure Relatedness/Secure Base Provision

Parents who receive this score display much less verbal and non-verbal cues described for scores of 5 or above and these cues are of lower quality than those for higher scores. The rater get a sense that this parent is sensitive to the teen’s needs in some ways, but insensitive in others. That is, the parent show some definite signs of support toward the teen, but also some sign of not accepting or understanding the teen’s emotional or even instrumental needs.

OR

The parent is attentive to teen’s statements but rarely shows any signs of support or

understanding of teen's needs.

3. Parent is Generally Attentive to Teen but Seldom Shows Any Signs of Support or Understanding of Teen's Needs

2. Parent is Sometimes Attentive to Teen but does Not Show Any Signs of Support or Understanding of Teen's Needs

1. Parent is Never Attentive Toward Teen in a Supportive Way

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