Research and theory have recognized parenting as a key predictor of parent-child attachment. Research on parenting and attachment has primarily focused on parental sensitivity, but scholars have recently called for the additional investigation of other parenting characteristics, such as autonomy support. Attachment can be considered in terms of safe haven and secure base support. Theoretically, parental sensitivity links most directly to safe haven support and parental autonomy support links most directly to secure base support. I investigated parental sensitivity as a unique predictor of safe haven support and parental autonomy support as a unique predictor of secure base support. Participants included parent-child dyads \((N = 92)\) with children aged 10-14. Parenting was measured observationally from an interaction task and per child report; attachment was measured from an attachment representation interview. Results were mixed. The observational measures were unrelated to attachment measures. Child-reported parental sensitivity was uniquely predictive of safe haven support. Child-reported parental autonomy support was uniquely predictive of secure base support. My findings regarding child report of parenting indicate children’s perceptions of parental autonomy support in addition to parental sensitivity are important to understanding the development of parent-child attachment. I explore potential explanations (e.g. conceptual and methodological concerns) for the lack of significant associations with the observational measures.
DISTINGUISHING THE ROLES OF PARENTAL AUTONOMY SUPPORT AND SENSITIVITY IN PREDICTING DIMENSIONS OF ATTACHMENT

A thesis submitted

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by

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# Table of Contents

- Introduction ................................................................................................................. 1  
  - Parent-Child Attachment and Parenting .................................................................. 2  
  - The Present Study .................................................................................................... 6  
- Method .......................................................................................................................... 8  
  - Participants ............................................................................................................... 8  
  - Procedure .................................................................................................................. 9  
  - Measures .................................................................................................................... 9  
- Results ............................................................................................................................. 17  
  - Overview of Analyses ............................................................................................... 17  
  - Analyses .................................................................................................................... 17  
- Discussion ....................................................................................................................... 21  
  - Parenting and Attachment ......................................................................................... 21  
  - Limitations and Future Directions ............................................................................ 28  
- References ....................................................................................................................... 30  
- Appendices ..................................................................................................................... 44
List of Tables

Table 1. Intercorrelations Between Parenting and Attachment variables………………………39

Table 2. Correlations Between Main and Control Variables……………………………………..40

Table 3. Hierarchical Linear Regressions: Observed Parenting Predicting Attachment Security on the FFI……………………………………………………………………………….41

Table 4. Hierarchical Linear Regressions: Child Report of Parenting Predicting Attachment Security on the FFI……………………………………………………………………………….42

Table 5. Post-Hoc Correlational Analyses of Observed Parenting Variables…………………..43
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Distinguishing the Roles of Parental Autonomy Support and Sensitivity in Predicting Dimensions of Attachment

A considerable body of research has identified parent-child attachment security as an important predictor of a variety of child outcomes (Bowlby, 1982; Sroufe & Fleeson, 1986). Broadly, secure parent-child attachment is related to fewer internalizing and externalizing symptoms, competence in interpersonal relationships, and cognitive development and school performance (Groh et al., 2014; Kerns & Brumariu, 2016; Madigan, Atkinson, Laurin, & Benoit, 2013; van IJzendoorn, Dijkstra, & Bus, 1995). The relevance of attachment to important developmental outcomes has placed a premium on exploring what factors promote secure attachment (Fearon & Belsky, 2016). Attachment scholars have emphasized the theoretical importance of parenting behaviors to the development of parent-child attachment since Bowlby’s (1969, 1982) introduction of attachment theory. Indeed, decades of research have supported parenting’s unique and robust role in predicting attachment security (De Wolff & van IJzendoorn, 1997; Koehn & Kerns, 2017; Nievar & Becker, 2008; van IJzendoorn & De Wolff, 1997). Evidence suggesting that genetic and temperamental contributions to developing attachment security are generally minimal has bolstered the apparent importance of parenting behaviors to predicting attachment (Bokhorst et al., 2003; Fearon et al., 2006; Fearon & Belsky, 2016; Roisman & Fraley, 2008).

Parental sensitivity, or the parents’ ability to appropriately respond to a child’s needs, in particular has been related to attachment security across a variety of populations and contexts (De Wolff & van IJzendoorn, 1997; Koehn & Kerns, 2017; Lucassen et al., 2011; van
IJzendoorn & De Wolff, 1997). However, sensitivity does not appear to account for as much of the variance found in attachment security, even after considering measurement error, as would be expected (De Wolff & van IJzendoorn, 1997; Koehn & Kerns, 2017). This suggests a need to further investigate other factors that might influence attachment security (De Wolff & van IJzendoorn, 1997; van IJzendoorn, 1995). The goal of this study was to identify whether another parenting quality, specifically autonomy support, would play a role in predicting parent-child attachment beyond sensitivity. I examine this question in early adolescence when parental autonomy support may be particularly important for children’s healthy development (Kerns, Mathews, Koehn, Williams, & Siener-Ciesla, 2015).

**Parent-Child Attachment and Parenting**

Children develop affectional bonds with caregivers, and the quality of those bonds depends on the consistency and quality of care they experience (Ainsworth, Blehar, Waters, & Wall, 2015). Theoretically, children who receive consistent and appropriate care are expected to develop a secure attachment in which they are able to use a parent as both a safe haven and secure base (Ainsworth et al., 2015). Safe haven support refers to the child’s expectations that their parent will be able to appropriately aid and comfort them when they are distressed. Secure base support refers to children’s perceptions of their own ability to explore their surroundings safely with the support and availability of their parent should it be needed.

Theoretically, both safe haven and secure base support are integral to attachment security, as children must develop expectations of comfort, reliability, and encouragement from their parents for secure attachment to emerge. Both dimensions fundamentally relate to each other: expectations of emotional support during distress are likely to foster willingness to explore (with the assurance of having a safe place to turn to if things go awry), and comfort with expressing
emotions. However, while safe haven and secure base support are conceptually interrelated as components of attachment, it still is important to distinguish them, as they serve different functions (Kerns et al., 2015). Previous research has largely been concerned with predicting safe haven support and has considered secure base support as something of a byproduct, without adequately addressing it (Kerns et al., 2015; Whipple, Bernier, & Mageau, 2009). Further, research on parental behavior as a predictor of attachment has primarily focused on sensitivity (Bernier, Matte-Gagné, Bélanger, & Whipple, 2014). This study aims to address that gap by considering how both sensitivity and autonomy support from parents may differentially predict children’s views of safe haven and secure base support.

**Sensitivity** involves correctly identifying and appropriately responding to children’s cues (Pederson et al., 1990). To accomplish this, parents must be aware of the child’s behaviors, able to interpret their children’s emotions, and respond in a way that is helpful to the child (Borelli, Vazquez, Rasmussen, Teachanarong, & Smiley, 2016; Nievar & Becker, 2008). Sensitivity has an integral role in attachment research because sensitive responses allow the child to develop the expectation that their parents will be able and willing to help and comfort them should they become distressed (De Wolff & van IJzendoorn, 1997; Koehn & Kerns, 2017; Pederson et al., 1990). Conceptually, sensitivity links most clearly to safe haven support in providing the expectation of reliable emotional comfort during distress (Bernier, Beauchamp, Carlson, & Lalonde, 2015). Sensitivity may also less directly promote the secure base dimensions of attachment, in that children may feel more willing to explore when they feel that they have a support system to return to should they be unable to cope with the new challenges.

An abundance of research has consistently shown a relation between parental sensitivity and attachment security across a variety of ages and contexts and for both mother- and father-
child dyads (De Wolff & van IJzendoorn, 1997; Koehn & Kerns, 2017; van IJzendoorn & De Wolff, 1997). The effect size of the association between maternal sensitivity and attachment found in meta-analytic research has ranged from $r = .24$ in infants (De Wolff & van IJzendoorn, 1997) to $r = .30$ in older children and adolescents (Koehn & Kerns, 2017). For paternal sensitivity, effect sizes in meta-analytic research have ranged from $r = .12$ in infants (Lucassen et al., 2011) to $r = .19$ in older children and adolescents (Koehn & Kerns, 2017). Most of this research has focused on infants and young children, though a consistent association between mother and father sensitivity and attachment has also been found in older ages (Koehn & Kerns, 2017).

As the majority of the research on parenting behaviors in relation to attachment focuses on sensitivity, it presents an apparently incomplete view of the relation between parenting and attachment with an overemphasis on safe haven support. To address this, scholars have recently called for consideration of other aspects of parenting behaviors (Whipple et al., 2009). One such factor is the concept of autonomy support from Self-Determination Theory, which may most directly relate to the development of the secure base dimension of attachment (Whipple et al., 2009).

**Autonomy support** consists of behaviors and communication practices that recognize the child’s individual perspective, encourage exploration of interests of the child’s choice, and minimally attempt to control the child’s expression of values and interests (Deci & Ryan, 2012). Autonomy supportive parenting respects the child’s perspective without necessarily catering to it. That is to say, the child is allowed the opportunity to have and voice their own beliefs, but autonomy support does not imply that the child is granted full control over their behaviors. For instance, allowing an 11-year-old child to select his or her own hobbies is autonomy supportive,
but forbidding that child from driving a car is not incompatible with autonomy supportive parenting. Autonomy support is an important aspect of parenting as it relates to improved academic achievement and psychosocial functioning among children, as well as to increased levels of autonomous motivation and other domains of well-being (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017; Vasquez, Patall, Fong, Corrigan, & Pine, 2016).

Autonomy supportive parenting may promote parent child attachment as children may feel more comfortable and confident when facing challenges. Theoretically, autonomy support links most directly to the secure base aspect of attachment, in that support of children’s exploration and self-expression is likely to bolster their sense of capability in the face of novel challenges and decision making (Whipple et al., 2009). Autonomy supportive parenting may also promote safe haven support as children who feel comfortable and accepted when expressing their interests and beliefs may feel safer to discuss problems that arise during their exploration. For example, a child who is encouraged to pursue friendships of his or her own choosing may be more willing to seek comfort from parents when fighting with friends.

Research linking parent-child attachment to autonomy supportive parenting in middle childhood and early adolescence is limited, despite the theoretical connections (Grossmann, Grossman, Kindler, & Zimmermann, 2008; Whipple et al., 2009). Self-report of autonomy support has been found to relate to attachment self-report in middle childhood (Bosmans, Braet, Koster, & De Raedt, 2009; Karavasilis, Doyle, & Markiewicz, 2003). Additionally, attachment security was related to display of adolescent’s autonomy behaviors in an interaction with their mothers (Becker-Stoll, Fremmer-Bombik, Wartner, Zimmermann, & Grossmann, 2008).

Autonomy support has also been found to explain additional variance in predicting broad measures of secure attachment above and beyond the contributions of sensitivity among toddlers.
(Bernier et al., 2014) as well as later adolescents (Brenning, Soenens, Braet, & Bal, 2012), but this relation has not been considered during middle childhood or early adolescence. Autonomy support is particularly important to consider within this age group as children develop greater levels of independence from their parents and their relationship becomes more collaborative and reciprocal (Kerns, Brumariu, & Seibert, 2011; Kerns et al., 2015). Children at this age are expected to spend less time directly in the care of their parents, but to still maintain an attachment relationship (Allen, 2008). Additionally, the theoretical implication that sensitivity relates most directly to safe haven support while autonomy support relates most directly to secure base support has not been explicitly tested.

The Present Study

I extend the previous literature by examining the specific contributions of parental autonomy support and sensitivity to predicting parent-child attachment, specifically in relation to children’s representations of parental safe haven and secure base support. This study also examined this relation during later middle childhood and early adolescence, to supplement existing research on the unique role of autonomy support in relation to attachment during toddlerhood and later adolescence. This study examined both observed parenting behaviors and child reported parenting based on recommendations from prior research of using multiple reporters to assess parenting (Schofield, Parke, Coltrane, & Weaver, 2016). Child report is sensitive to children’s attitudes and beliefs about their parent’s behaviors (Tein, Roosa, & Michaels, 1994) whereas observational measures are able to interpret behaviors from a less biased perspective (McKee, Jones, Forehand, & Cuellar, 2013). Child report of sensitivity was evaluated with the Child Rearing Practices Behavior Inventory (CRPBI; Barber, Stolz, Olsen, Collins, & Burchinal, 2005) and child report of autonomy support was evaluated with the
Perceptions of Parents Scale (POPS; Grolnick, Ryan, & Deci, 1991). I evaluated safe haven support and secure base support as measures of attachment security, based on coding of the Friends and Family Interview (FFI; Steele, Steele, & Kriss, 2009).

I addressed this question by first investigating how each of the attachment and parenting variables were interrelated. I hypothesized that both autonomy supportive and sensitive parenting would be positively related to safe haven and secure base support dimensions of attachment. I evaluated whether parental sensitivity and autonomy support differentially predicted safe haven and secure base support in regression analyses. I hypothesized that sensitivity would be uniquely predictive of safe haven support. Additionally, I hypothesized that autonomy support would be uniquely predictive of secure base support.
Method

Participants

Research assistants in the lab recruited families for the study by distributing fliers to local schools and summer camps as well as by contacting families who had participated in previous research with the lab. Recruitment fliers included a brief description of the study and invited families to contact the lab for more information and to schedule an appointment. Eligible families had at least one child in 5th to 8th grade and one parent willing to participate (I requested that mothers participate when possible). A graduate student then contacted interested families, provided them with more information regarding participation, and scheduled families for a visit.

A total of 93 families were recruited for the study. One family was removed because the family had to leave due to a scheduling conflict prior to completion of the study. The final sample included 92 children (63% male) and the parent who attended the lab visit with them (87% mothers; the high percentage of mothers was likely influenced by recruitment procedures). The children were aged 10-14 years (M = 11.91; SD = 1.25). Parents reported their child’s race/ethnicity as 82.6% White/Caucasian, 10.9% mixed race or other, and less than 2% each for African American, American Indian, or Asian. Parents reported that 73.9% were intact two-parent families, 16.3% were single parent families, 6.5% were blended two-parent families, and 3.3% were single parents co-parenting with a grandparent. Of the parents who visited the lab, 7.7% reported having a high school diploma or less, 8.8% reported having an associate’s degree or less, 45.1% reported a having four-year degree, and 38.5% of families reported having 1-4
years of postgraduate education. Families reported that 9.8% qualified for food stamps and 13% qualified for free or reduced lunches.

Procedure

Data collection was conducted during a lab visit that typically lasted approximately 2 hours. Each visit was coordinated by two research assistants, at least one of whom was a graduate student. Upon arriving to the lab families were presented with a brief description of procedures and parents and children were consented/assented. Parents were then lead to a separate room and asked to complete questionnaires related to attachment, their parenting, and their perceptions of their child. A research assistant remained in the room with parents and was available to answer questions and facilitate. While the parents responded to questionnaires, a graduate student researcher administered questionnaires to the child that were related to attachment and parenting and conducted a videotaped attachment interview with the child (described below). Parents and children were then reunited and participated in a videotaped interaction task that was scored for parenting (described below). Mothers and children were compensated $25 each for participation. The measures included in the present study were parenting observed during the parent-child interaction, child-report of parenting, and coding from the attachment interview.

Measures

Parent-Child Interaction

Parental sensitivity and autonomy support were coded from a parent-child interaction task. After completion of the attachment interview, parents and children were reunited and participated in a variety of videotaped interactions together. They first participated in a warmup task consisting of a game (Jenga) for three minutes. They were then asked to pick an important
problem in their relationship to discuss for 8 minutes. They were invited to select their own topic or review a list of suggestions of topics that parents and children often disagree on (e.g. “not cooperating with other children” and “getting homework done on time”; see Appendix A for the full list of topic suggestions). Finally, parents and children completed a dilemma task wherein they were asked to discuss a hypothetical dilemma involving a young adolescent. Coding for the current project was based on parent-child interactions during the problem discussion task. I selected this task because it appeared to be particularly challenging for the families. Parents appeared generally to have a more difficult time demonstrating positive parenting behaviors during this task and I expected it would therefore elicit a broader range of parental responses.

**Sensitivity.** I developed a sensitivity coding scale for parent-child interactions (Appendix B) based on concepts considered key in a review of the sensitivity literature (Ainsworth et al., 2015; Biringen, Robinson, & Emde, 2000; Crittenden, 2001; Feldman, 1998; Mesman & Emmen, 2013; Murray, Fiori-Cowley, Hooper, & Cooper, 1996; Owen, 1992; Pederson & Moran, 1995). Mesman & Emmen's (2013) review and specific descriptions of parental behaviors in the “Supportive Presence” scale, used to code parent-child interactions in the NICHD Study of Early Childcare and Youth Development (Owen, 1992), were particularly influential in scale development. The first parenting component identified in the scale was parental engagement and interest in the interaction (e.g. if the parent appears to be physically oriented toward the child, makes eye contact, etc.). The second component was warmth and positive regard (e.g. if the parent appeared to enjoy the child, show appropriate affection toward them). The final sensitivity component was consistent and appropriate responses (e.g. if the parent was attuned to the child’s cues and made appropriate and consistent responses to the
child). All three components guided scoring a single global sensitivity score for each parent-child interaction.

The scale developer (thesis author) reviewed approximately 15 tapes to identify 5 anchor points on the sensitivity scale (scored ranged from 1-5, scores of 5 represent prototypically sensitive interactions and scores of 1 represent consistently insensitive interactions). The scale developer then trained a primary coder on the sensitivity scale, and for training purposes they both scored 24 tapes of the same interaction task recorded with a different sample (used in a different project). Once a satisfactory level of agreement was achieved, the primary coder then completed coding for all tapes. The scale developer coded 18 tapes for reliability. Thus, 20% of tapes were used for agreement. The primary coder’s scores were the final scores used for analyses. Reliability for sensitivity coding was ICC = 0.62. The primary coder had assisted parents during data collection for approximately eight families (8.7%); the secondary coder (scale developer) had assisted parents during data collection for approximately 5 families (5.43%) and otherwise had no previous knowledge of families involved in the study.

**Autonomy support.** I developed the autonomy support coding scale for parent-child interactions (Appendix C) using concepts considered key based on theory from previous literature (Deci & Ryan, 2012; Grolnick, 2003; Owen, 1992; Whipple, Bernier, & Mageau, 2011). I adapted three primary components used by Whipple et al., (2011) to score parental autonomy support. The scales were originally developed for parents with children aged 15 months and were modified to be more developmentally appropriate for the older sample. The original scales were “concern for child’s sense of competence to allow autonomy” (e.g. whether the mother appropriately intervened to adapt the task to the child’s ability), “mother’s verbalizations toward her child” (e.g. whether the mother made supportive comments, praised
the child’s exploration, etc.), and “following the child’s pace and giving the child opportunities to make choices” (e.g. the mother respects the child’s pace, the child is able to actively participate). I did not directly adapt a fourth component “flexibility and perspective taking” from Whipple et al.’s (2011) coding scale because the core component of that scale (flexibly redirecting the child if they became off-task) was less relevant to the sample of older children.

When adapting these components for older ages, I specifically considered behaviors outlined in the “Parent’s Respect for Child’s Autonomy” scale from the NICHD Study of Early Child Care and Youth Development (Owen, 1992). The first component was scaffolding (corresponding most directly to “concern for child’s sense of competence to allow autonomy;” e.g. mother provides support at appropriate times, such as suggestions and prompts when the child is struggling, without being demanding or controlling). Second, I identified encouragement as the second component (corresponding most directly to “mother’s verbalizations toward her child;” e.g. the mother encourages the child to provide his own opinions, is receptive to input and considerate even if the child disagrees). Finally, I identified a nondirective component (corresponding most directly to “following the child’s pace and giving the child opportunities to make choices;” e.g. the mother respects the child’s pace, the child is able to play an active role in the discussion). Coders considered all three autonomy support components in determining a single, overall, autonomy support score.

The scale developer (thesis author) reviewed approximately 20 tapes to identify 5 anchor points for the autonomy support scale (scores ranged from 1-5; scores of 5 represented prototypically supportive interactions while scores of 1 were assigned to parent interactions in which the parent consistently evidenced pronounced unsupportive behaviors). The scale developer then trained a research assistant (who was not involved with sensitivity coding) as a
secondary coder using 15 tapes of the same interaction task used in another study conducted by the lab and 59 tapes from the present study. Once satisfactory agreement was reached, the secondary coder coded 29 tapes for agreement. Thus, 32% of tapes were coded for agreement for the study. The primary coder’s scores were used for analyses. Reliability for autonomy support coding was ICC = 0.74. The secondary coder had no previous knowledge of families involved in the study. The master coder had assisted parents during data collection with approximately five families (5.43%) and otherwise had no previous knowledge of families.

**Child Report of Parenting**

**Sensitivity.** Children completed the 10-item version of the Child Rearing Practices Behavior Inventory’s (CRPBI) acceptance subscale (Appendix D; Barber et al., 2005; Schaefer, 1965). The CRPBI is a questionnaire intended to assess children’s perceptions of the parenting that they receive. Children responded to items such as “My mother/father often praises me” and “My mother/father cheers me up when I am sad.” Children rated whether the item was “not like her/him” “somewhat like her/him” or “a lot like her/him.” Items are scored from 1-3 with higher scores representing more sensitive parenting. This scale has been shown to relate to have high test-retest reliability in previous research (Barber et al., 2005) and has been shown to relate to a more secure self-report of attachment in previous research with adolescents (Brenning, Soenens, Braet, & Bosmans, 2012). Internal consistency (Cronbach’s α) was α = 0.81.

**Autonomy support.** Children completed the 7-item parental autonomy support subscale from the Perceptions of Parents Scale (POPS; Appendix E; Grolnick et al., 1991). Items include “My mother/father is usually willing to consider things from my point of view” and “My mother/father allows me to decide things for myself.” Children rated items from 1-5, with 1 representing “strongly disagree” and 5 representing “strongly agree.” Higher mean scores
represent greater reported autonomy support. This scale has been found to be related to child self-report of attachment security in previous research (Bosmans et al., 2009). Internal consistency for autonomy support (Cronbach’s \( \alpha \)) was \( \alpha = 0.74 \) for autonomy support.

**Attachment**

A modified version of the Friends and Family Inventory (FFI) was administered to children by a graduate student researcher and scored for safe haven support and secure base support (Kerns et al., 2015; Steele & Steele, 2005). Children were asked to respond to prompts relating to themselves, their emotions, and each of their parents. The original version of the FFI includes parenting questions primarily oriented toward assessing safe haven support (e.g. “What do you do when you are upset?”) and assessed a number of other relationships (e.g. friendships; Kerns et al., 2015; Steele & Steele, 2005). Modifications of the FFI developed by Kerns et al. (2015) included additional questions developed to assess secure base support (e.g. “When you have to try something hard, how do you get yourself ready?”) and removal of questions that asked about nonparent relationships. Further, the present study included three additional questions regarding communication and decision making to more fully capture family interactions.

**Safe haven support.** Responses on the FFI were scored for safe haven support based on evidence of whether the child considered their parents an available source of support when they are upset. Coding was completed using a scale from the original FFI coding manual with minor modifications (referred to as “secure base support” in the original manual, Steele & Steele, 2005). High safe haven support scores were earned by responses that provided consistent, credible, appropriate, and specific descriptions of parental safe haven support. For example, children who described seeking (and receiving) comfort during times of stress received high
scores. Low safe haven support scores were assigned to responses that failed to demonstrate credible evidence of safe haven support (e.g. children did not describe their parents as available when they are distressed, descriptions of support were vague or cursory, etc.).

**Secure base support.** FFI responses were also coded for secure base support based on evidence in children’s responses that their parent provides support for their exploration and independence. The secure base support coding scale was based on the scale developed by Kerns et al. (2015). High scoring secure base responses included convincing and specific descriptions of appropriate encouragement and support from parents. For example, descriptions of receiving positive encouragement in personal endeavors (e.g. hobbies) received high scores on autonomy support. Low scores were given to responses that failed to demonstrate credible evidence of secure base support or suggested that the child felt overly controlled or limited by their parents.

**Coding and agreement.** Coders considered answers to all questions on the FFI if they considered them relevant. For example, during coding for secure base support, coders would consider elements pertinent to secure base support even if they were provided in response to a question designed to elicit information about safe haven support. Transcripts of the participants’ FFI interviews were coded independently by a graduate student researcher and the faculty advisor, neither of whom was involved in rating parenting. Both safe haven support and secure base support were rated on four point scales with higher scores indicating greater evidence of support. Interrater reliability was ICC = .88 for safe haven support and ICC = 0.75 for secure base support. Codes from the two raters were averaged for the final scores. These aggregated scores were highly reliable with ICC = .94 for safe haven support and ICC = .86 for secure base support. The FFI has been shown to have high construct validity with regard to other attachment
measures, including other narrative-based measures (Psouni & Apetroaia, 2014), parent
attachment (Steele & Steele, 2005), and self-report questionnaires (Kerns et al., 2015).

**Verbal IQ**

Children completed the computerized Picture Vocabulary Test from the National
Institutes of Health (NIH) Toolbox (Akshoomoff et al., 2014) to assess their verbal IQ. They
were presented with a screen including four photographs and asked to listen to a vocabulary
word. Children had to select the photograph closest to the vocabulary word they heard. The mean
verbal IQ score was 111.51 ($SD = 12.43$, range: 70.42 – 136.13).
Results

Overview of Analyses

I began analyses by calculating the intercorrelations between the main variables (observed and child reported parenting, safe haven and secure base support). I then calculated the correlations between the main variables and demographic variables and selected control variables. Next, I conducted regression analyses to test the relation between parenting and attachment. Specifically, I ran four separate regressions assessing observed or child-reported parenting as predictors of safe haven or secure base support. All analyses were calculated including the entire sample ($N = 92$), and separately again with mother-child dyads only ($N = 80$). Information presented in the body of this section is based on all participants and mothers-only data is presented in the tables for reference. I did not calculate data for fathers-only or compare means due to the small number of fathers that participated in the study ($N = 12$).

Analyses

Relations among main variables. I present intercorrelations among the main variables in Table 1. Observed sensitivity and autonomy support were significantly positively correlated with each other. However, neither of the two observed parenting measures were significantly associated with the child report of parenting, or attachment security.

Child-reported sensitivity and autonomy support were also significantly positively correlated with each other. Child-reported sensitivity was significantly positively associated with both safe haven and secure base support. Child-reported autonomy support was significantly positively associated only with secure base support.
Demographic variables and selection of controls. To examine whether demographic variables were related to the attachment and parenting variables, correlations among main and demographic variables (child age, gender, ethnicity, and verbal IQ; whether the child qualified for a free or reduced school lunch; parent education and marital status) are presented in Table 2. Child age was found to be negatively associated with children’s reports of parental sensitivity. The child’s verbal IQ was found to be positively associated with secure base support, child report of parental sensitivity, and child report of autonomy support. I selected controls for use in regression analyses that had significant associations with parenting or attachment; thus, the child’s age and verbal IQ were retained as controls in the analyses.

Multivariate associations between observed parenting and attachment. I present two hierarchical linear regressions, separately predicting safe haven and secure base support, from observed parenting in Table 3. I included controls in Step 1 and observed parenting in Step 2.

Safe haven support. None of the predictors were found to be significantly related to observed safe haven support.

Secure base support. Only child’s verbal IQ was found to be uniquely significantly predictive of observed secure base support. When parents were more autonomy supportive their children had more extensive vocabularies.

Multivariate associations between child report of parenting and attachment. I present analogous hierarchical linear regressions predicting safe haven and secure base support from child reports of parenting in Table 4.

Safe haven support. The control variables in the first step of the analyses were unrelated to observed safe haven support. In the second step, sensitivity was found to be a unique predictor of observed safe haven support. Children who perceived their parents as higher in sensitivity
were rated higher in safe haven support on the FFI. Overall, parenting uniquely accounted for 9% of the variance in safe haven support.

**Secure base support.** In the first step, higher child verbal IQ was uniquely predictive of secure base support. The control variables accounted for 10% of the total variance in secure base support. After including the parenting variables in the second step, children’s report of parental autonomy support was uniquely predictive of higher secure base support. Children who reported that their parents were more autonomy supportive were rated higher in secure base support. Overall the model accounted for 19% of the variance in secure base support, with parenting uniquely accounting for 9% of the variance.

**Post-hoc analyses.** It was unclear whether the lack of significant findings related to the observed parenting variables was due to a general lack of construct validity of the observational measures or instead reflect a lack of association for the constructs. To examine their validity further, I tested if they were predictive of other theoretically relevant variables in the dataset. Therefore, I ran exploratory post-hoc analyses to determine if the observational variables had more direct associations with other variables that might relate to parenting. I conducted correlational analyses (Table 5) with each of the observed parenting variables to examine their associations with narrative coherence (another overall measure of attachment security) as coded from the FFI. I also ran correlational analyses of teacher report \((N = 57\) for the full sample, \(N = 51\) for mother-child dyads only) to examine whether the observed sensitivity and autonomy support measures were related to the child’s social, internalizing, externalizing, and task-oriented functioning as reported on the Teacher-Child Rating Scale version 2.1 (T-CRS 2.1; Perkins & Hightower, 2002). None of those correlations were significant, with the exception of a significant positive correlation between observed parental autonomy support and coherence; parents who
were more autonomy supportive had children who were more coherent. I also considered whether observed autonomy support and sensitivity may have an interactive effect not captured by the main effects model run in regression analyses. I tested our regression models including an interaction variable in a third and final step for both the safe haven support and secure base support models. The tests of the interactions were not found to be significant. Taken together with the primary planned analyses included in the main study, the post-hoc analyses suggest that the observational parenting variables may not have adequately captured relevant parenting constructs, at least as they pertain to attachment and child outcomes as observed by teachers.
**Discussion**

This study aimed to identify whether parental autonomy support was uniquely predictive of attachment. I also examined two aspects of attachment, safe haven and secure base support. I predicted that parental sensitivity would associate most directly with children’s representations of safe haven support, and parental autonomy support would associate most directly with children’s representations of secure base support. The results were mixed with regard to my main hypotheses. Child report of parenting appeared to generally support the hypotheses. Child report of sensitivity and autonomy support were indeed positively associated with child report of secure base support on the FFI. Child report of sensitivity, but not autonomy support, was related to safe haven support on the FFI. Parental sensitivity was uniquely predictive of safe haven support, and parental autonomy support was uniquely predictive of secure base support. The observational parenting variables, on the other hand, were not found to have significant associations with safe haven or secure base support, although post-hoc analyses found that parental autonomy support was significantly positively associated with coherence. The findings were surprising based on previous research on parenting and attachment in middle childhood and early adolescence (Koehn & Kerns, 2017).

**Parenting and Attachment**

The findings support my hypotheses that children’s perceptions of the parenting they receive are related to safe haven and secure base support. The findings for autonomy support as a predictor of secure base support the call of existing research to examine autonomy support as a unique predictor of attachment (Whipple et al., 2009). The direct, unique associations between
sensitivity and safe haven and autonomy support and secure base help clarify how autonomy support fits within the theoretical framework for the link between parenting and parent-child attachment. Children’s perceptions of their parents as understanding and comforting support their willingness to seek help from them in times of distress. Children who feel that their parents respect their perspective and encourage them to make their own decisions when appropriate, in addition to believing their parents can competently address their emotional needs, feel more supported in exploration. The differential findings support existing research that has supported the importance of considering secure base support separately from safe haven support (Kerns et al., 2015; Whipple et al., 2009).

The findings also contribute to existing research that has explored the unique role of autonomy support in predicting parent-child attachment by supporting evidence of this relation in middle childhood (Bernier et al., 2014; Brenning, Soenens, Braet, & Bal, 2012). The findings of a unique predictive association of autonomy support with secure base support (β = .22 for the entire sample; β = .25 for mothers only) are comparable to what was found with the unique associations of observed maternal autonomy support to attachment security in toddlers (β = .22; Bernier et al., 2014). Other research with adolescents suggested that self-report of maternal autonomy support was strongly uniquely negatively predictive of attachment anxiety (a subtype of attachment insecurity associated with fears of abandonment and need for reassurance; β = -.61) but did not report findings with a global measure of attachment which makes it difficult to directly compare their results (Brenning, Soenens, Braet, & Bal, 2012). Taken together, all three studies suggest a unique role of parental autonomy support in predicting attachment.

One interesting finding, in addition to the findings supporting the main hypotheses, was that for mothers only sensitivity was also uniquely positively associated with secure base support
after controlling for other variables, including autonomy support. This association suggests that children who believe their mothers are able to respond appropriately to their needs are also more willing to explore and develop their independence. This finding supports the wealth of other research emphasizing the importance of sensitivity to parent-child attachment. It further suggests that children who see their mothers as emotionally responsive are more willing to explore, knowing that they can seek emotional comfort should they be unable to meet the demands of new situations individually.

To fully explore the implications of the findings, it is important to note the unique and overlapping features of the child report measure of parenting behaviors and the attachment interview. Both variables are child-reported, which may conflate the findings as both are to some degree subject to children’s biases with regard to how they report about their attachment relationships. Importantly, however, ratings from the FFI are not directly scored based on the valence of the child’s responses. Coding also considers whether children can provide convincing evidence for their descriptions of their parents. It is possible that some of the association between these variables is due to use of a single reporter, but the effect of self-report bias is likely at least somewhat mitigated by the evaluation of believability embedded in the FFI coding process.

Although the results based on child reports of parenting confirmed my hypotheses, results based on observed measures did not. Observational measures did not show the expected pattern, as the parenting variables were found to be unrelated to either safe haven or secure base support. Although both scales were adapted from scales used in prior research, there may also have been conceptual flaws in the development of the coding scales. Regarding sensitivity, an important feature of the scale is the inclusion of warmth as a core component. While modern sensitivity research does often include warmth as a component of sensitivity (Mesman & Emmen, 2013),
warmth was not included in Ainsworth et al.’s (2015) original operationalization of sensitivity. Further, research that has distinguished parental warmth and sensitivity has suggested that they are not redundant (Davidov & Grusec, 2006; Lohaus, Keller, Ball, Elben, & Voelker, 2001). This is particularly noteworthy, because in the structure of my coding scale a mother low in warmth but otherwise apparently sensitive would not receive a high score. For autonomy support, one conceptual concern may be the developmental appropriateness of the scale. Per the autonomy support scale, the mother setting the pace of the interaction, or dominating the conversation or decision making was considered unsupportive with regard to nondirectiveness. It may be that parents structuring the interactive dynamic is still appropriate for children in this age group as the reciprocity of parent-child relationships is expected to gradually increase over time (McElhaney, Allen, Stephenson, & Hare, 2009).

It is noteworthy in discussion of the conceptual concerns of my parenting scales that in post-hoc analyses autonomy support was positively associated with narrative coherence. Narrative coherence is an overall attachment measure that refers to the ability with which children are able to provide a clear and convincing account of their relationship with their parents with appropriate details. Theoretically, narrative coherence may be a purer attachment measure for children and adults because it is not necessarily impacted by the child’s subjective impressions of relationship quality (Main, Kaplan, & Cassidy, 1985; Steele & Steele, 2005). A child who describes their relationship with their parent negatively or with mixed emotions could still score highly on coherence if they were able to speak about their negative experiences convincingly and with appropriate manner and detail. While the overall pattern of results for autonomy support was not as expected, the association between autonomy support and narrative
coherence may suggest that objectively observed parenting does relate to attachment in a way that is less biased by the child’s perspective.

Another concern with the observational measures pertains to psychometric and methodological problems. The relatively low interrater reliability of the sensitivity scores was of primary concern regarding the psychometric properties of the parenting variables, which called into question the methodology of the coding. I found that it was relatively difficult to train coders on the scales; the primary sensitivity and secondary autonomy support coders respectively coded 29 and 74 tapes prior to being considered reliable and final agreement was ICC = .62 for sensitivity. The coders observed several difficulties in achieving reliability. First, they noted that the child’s behaviors made scoring difficult at times because it made it difficult to evaluate the parent’s responses. Although the coding scale was intended to evaluate parental behaviors as opposed to the quality of the interaction, it was still necessary at times to consider the parents’ behaviors in the context of the child. For example, appearing irritated by the child was generally considered an insensitive behavior, but the coders also considered the context of what irritated the parents. In one instance a mother appeared irritated in response to the child putting his foot in her face. This was weighted as less insensitive than in a different situation when a mother appeared to be irritated by her child crying after being asked if he knew whether his mother loved him. The context of other behaviors was less clear. In another situation a mother appeared irritated by her child putting his feet up on the table. Coders differed on their interpretation, as one viewed the mother’s irritation as relatively justified based on social norms whereas the other coder interpreted the irritation as being excessively concerned about appearance.

Another methodological concern that may have made impacted the coding of the scale and made achieving reliability difficult is the use of a single global score to represent sensitivity
and autonomy support. The sensitivity scale in particular was worded in such a way that if a parent was consistently insensitive on any of the three identified parenting components (parental engagement and interest in the interaction, warmth and positive regard, consistent and appropriate responses) he or she received the lowest possible score regardless of their rating on the other scales. The autonomy support scale could also be highly impacted by a low rating on a single one of the three components (scaffolding, encouragement, nondirective). If the parent was considered consistently unsupportive on one component the highest score she could receive was a two, regardless of the coder’s interpretation of the other components. Future research may benefit from a scoring system that would allow for separate analyses of individual components of parenting within sensitivity and autonomy support.

Taken together, the finding of significant associations between child report of parenting and attachment must be considered in the context of the lack of significant associations found with the observed parenting variables. One possible explanation of the discrepant findings may be that the observed and child reported variables were not truly analogous. I compared the observational scales to the child report items to explore if there were meaningful conceptual differences. One possible differentiating factor may be that on the self-report scale used to measure sensitivity few items reference an explicit concrete behavior (e.g. frequently smiling at the child, praising the child), while the majority of items reference more subjective evaluations from the perspective of the child (e.g. making the child feel better after discussing worries, making the child feel like the most important person in the parent’s life). This may suggest coding was not adequately sensitive to the child’s reactions to parental behaviors, given that a core component of sensitivity is appropriate and attuned responses, and thus any single “positive” parenting behavior needs to be evaluated within its context, including how it affects
the child. Additionally, a comparison of the observational coding scale for autonomy support and
the child-reported questionnaire reveals that the observational codes may have had a stronger
emphasis on interactive quality than decision making. It may be that a parent that tends to lead
the conversation about a disagreed upon topic is still able to allow their child to make choices
about less contentious decisions.

Another interpretation of the findings is that the child’s perceptions of their parenting
experience matter more than the parents’ behaviors as evaluated objectively by others. Parenting
research has long acknowledged that individual differences among children impact their
receptivity to parenting behaviors. Children may differentially interpret and respond to parenting
behaviors based on a variety of factors, including their temperament and cultural background
(McKee et al., 2013). For example, a review of cross-cultural research (Soenens, Vansteenkiste,
& Van Petegem, 2015) has suggested that children’s differential perceptions of parental
behaviors based on cultural expectations may moderate the association between parenting and
behavioral outcomes.

As another example of individual differences in response to parenting, differential
susceptibility theory has suggested that some children are more impacted by parenting quality
than are other children (Belsky & Pluess, 2009). Differential susceptibility theory posits that
children with more reactive temperaments receive more benefits from positive parenting and are
more disadvantaged by negative parenting than less reactive children who are relatively resilient
in the face of negative parenting but benefit less from positive parenting (Belsky & Pluess,
2009). It may be that considering parenting from the child’s perspective captures such individual
differences. Perhaps reactive children are more sensitive to their parents’ perceived behaviors in
a way that my observational coding method was not able to detect.
Limitations and Future Directions

I note several further limitations to my study in addition to the limitations noted above. First, my study was cross-sectional. I conceptualize parenting behaviors as influential to attachment but the design of the study did not allow us to assess causation. It is possible that child attachment has a reciprocal effect on parent behaviors. Second, the sample had limited diversity. Cultural differences, particularly with regard to parent dimensions related to control and autonomy support, may impact the generalizability of my findings (Rothbaum & Trommsdorff, 2007). Finally, my primary analyses included a sample of nearly all mothers (87% of dyads were mother-child) which limits the generalizability of the findings to parents in general. Although the main results did not appear to be substantially affected by the inclusion of fathers, there was insufficient data available to make reliable statistical comparisons.

The results of the present study provide partial support for the hypothesized unique role of autonomy supportive parenting to parent-child attachment in middle childhood and early adolescence. Future research could explore this association longitudinally. In particular, future research could consider whether the relative importance of autonomy support to attachment is greater for children at this age than at younger ages as children begin to assert their independence. Longitudinal research could also consider the predictive associations of autonomy support with regard to attachment to consider its long-term implications.

Future research could also compare the associations between autonomy support and attachment with respect to parent gender. Previous research has suggested that children tend to rate their mothers higher on safe haven support and their fathers higher on secure base support (Kerns et al., 2015). Meta-analytic data considering parenting and attachment in middle childhood and early adolescence has suggested that parental sensitivity relates more strongly to
attachment security for mother-child than for father-child dyads; by contrast, the association between autonomy support and attachment security is not moderated by parent gender (Koehn & Kerns, 2017). Future studies could examine these relationships with parent gender further with regard to distinguishing parenting behaviors that might be unique predictors of safe haven and secure base support for mother-child and father-child dyads. Future directions could also include exploring autonomy support’s unique predictive role to specific patterns of attachment. Some research has theorized that (a lack of) autonomy support is likely to be especially important in the development of insecure ambivalent attachment patterns (Cassidy & Berlin, 1994).
References


Books.


https://doi.org/10.1080/14616734.2011.584398


Development, 50(1/2), 66–104.


### Table 1. Intercorrelations Between Parenting and Attachment Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Obs. sensitivity</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Obs. autonomy support</td>
<td>0.57** (0.59**)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sensitivity (CR)</td>
<td>0.05 (0.08)</td>
<td>0.03 (0.08)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Autonomy support (CR)</td>
<td>0.08 (0.12)</td>
<td>0.15 (0.20†)</td>
<td>0.41** (0.40**)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5. FFI Safe Haven</td>
<td>0.04 (0.08)</td>
<td>0.11 (0.14)</td>
<td>0.34** (0.33**)</td>
<td>0.09 (0.13)</td>
<td>-</td>
</tr>
<tr>
<td>6. FFI Secure Base</td>
<td>0.16 (0.10)</td>
<td>0.14 (0.17)</td>
<td>0.28** (0.38**)</td>
<td>0.35** (0.41**)</td>
<td>0.49** (0.61**)</td>
</tr>
</tbody>
</table>

**Notes:** Values listed in parentheses reflect the results from analyses including only mothers. $N = 92$; $N = 80$ for mothers only. †$p < 0.10$. *$p < 0.05$. **$p < .01$. CR = child-report.
Table 2. Correlations Between Main and Control Variables

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Child age</td>
<td>-0.17 (-0.14)</td>
<td></td>
<td>-0.14 (-0.15)</td>
<td></td>
<td>-0.26* (-0.23*)</td>
<td></td>
<td>-0.6 (-0.04)</td>
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<td>-0.18† (-0.15)</td>
</tr>
<tr>
<td>Child gender</td>
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<td></td>
<td>-0.06 (-0.05)</td>
<td></td>
<td>0.06 (-0.00)</td>
<td></td>
<td>-0.04 (-0.06)</td>
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<td>0.13 (0.19†)</td>
</tr>
<tr>
<td>Child ethnicity</td>
<td>-0.09 (-0.00)</td>
<td></td>
<td>-0.13 (-0.08)</td>
<td></td>
<td>0.03 (-0.01)</td>
<td></td>
<td>0.19† (-0.12)</td>
<td></td>
<td>0.04 (0.02)</td>
</tr>
<tr>
<td>Child verbal IQ</td>
<td>0.09 (0.07)</td>
<td></td>
<td>0.16 (0.17)</td>
<td></td>
<td>0.23* (0.22*)</td>
<td></td>
<td>0.29** (0.27*)</td>
<td></td>
<td>0.10 (0.12)</td>
</tr>
<tr>
<td>Free/reduced lunch</td>
<td>-0.14 (-0.13)</td>
<td></td>
<td>-0.05 (-0.05)</td>
<td></td>
<td>0.03 (-0.00)</td>
<td></td>
<td>-0.10 (-0.13)</td>
<td></td>
<td>0.01 (-0.03)</td>
</tr>
<tr>
<td>Parent education</td>
<td>0.07 (0.11)</td>
<td></td>
<td>0.10 (0.10)</td>
<td></td>
<td>0.12 (0.12)</td>
<td></td>
<td>0.12 (0.05)</td>
<td></td>
<td>0.09 (0.07)</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>-0.11 (-0.11)</td>
<td></td>
<td>0.03 (0.04)</td>
<td></td>
<td>-0.17† (-0.12)</td>
<td></td>
<td>-0.20† (-0.15)</td>
<td></td>
<td>-0.11 (-0.09)</td>
</tr>
</tbody>
</table>

Notes: Values listed in parentheses reflect the results from analyses including only mothers. N = 92; N = 80 for mothers only. Child gender coded 1 = male, 2 = female. Child ethnicity coded 0 = Hispanic or nonwhite, 1 = Nonhispanic white. Free/reduced lunch coded 0 = not eligible, 1 = eligible. Divorced/separated coded 0 = not divorced or separated, 1 = divorced or separated.

Table 3. Hierarchical Linear Regressions: Observed Parenting Predicting Attachment Security on the FFI

<table>
<thead>
<tr>
<th>Variable</th>
<th>Safe Haven</th>
<th></th>
<th>Secure Base</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$R^2 \Delta$</td>
<td>$\beta_{final}$</td>
<td>$R^2 \Delta$</td>
</tr>
<tr>
<td>Step 1: Control Variables</td>
<td>0.04 (0.03)</td>
<td>-0.16 (-0.13)</td>
<td>0.10** (0.10*)</td>
<td>0.00 (0.02)</td>
</tr>
<tr>
<td>Child’s age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal IQ</td>
<td>0.07 (0.90)</td>
<td>0.30** (0.31**)</td>
<td>0.30** (0.31**)</td>
<td></td>
</tr>
<tr>
<td>Step 2: Observed parenting</td>
<td>0.01 (0.01)</td>
<td>-0.05 (0.00)</td>
<td>0.12 (-0.01)</td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy Support</td>
<td>0.10 (0.10)</td>
<td>0.03 (0.12)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Values listed in parentheses reflect the results from analyses including only mothers. $N = 92$; $N = 80$ for mothers only. †$p < .10$. *$p < .05$. **$p < .01$. 

Table 4. Hierarchical Linear Regressions: Child Report of Parenting Predicting Attachment Security on the FFI

<table>
<thead>
<tr>
<th>Variable</th>
<th>Safe Haven</th>
<th></th>
<th>Secure Base</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R^2Δ β final</td>
<td></td>
<td>R^2Δ β final</td>
<td></td>
</tr>
<tr>
<td>Step 1: Control Variables</td>
<td>0.04 (0.03)</td>
<td>-0.09 (-0.08)</td>
<td>0.10** (0.10*)</td>
<td>0.01 (0.06)</td>
</tr>
<tr>
<td>Child’s age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal IQ</td>
<td>0.04 (0.05)</td>
<td></td>
<td>0.23* (0.20†)</td>
<td></td>
</tr>
<tr>
<td>Step 2: Child report</td>
<td>0.09* (0.09*)</td>
<td>0.34** (0.31*)</td>
<td>0.09* (0.16**)</td>
<td>0.13 (0.25*)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy Support</td>
<td>-0.08 (-0.01)</td>
<td></td>
<td>0.23* (0.26*)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Values listed in parentheses reflect the results from analyses including only mothers. N = 92; N = 80 for mothers only. †p < .10. *p < .05. **p < .01.
Table 5. *Post-hoc Correlational Analyses of Observed Parenting Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coherence</th>
<th>Internalizing (TR)</th>
<th>Externalizing (TR)</th>
<th>Task orient. (TR)</th>
<th>Peer social skills (TR)</th>
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</thead>
<tbody>
<tr>
<td>Obs. Sensitivity</td>
<td>0.12 (0.10)</td>
<td>0.10 (0.13)</td>
<td>-0.08 (-0.21)</td>
<td>0.12 (0.18)</td>
<td>0.13 (0.16)</td>
</tr>
<tr>
<td>Obs. Autonomy support</td>
<td>0.20* (0.23*)</td>
<td>0.13 (0.14)</td>
<td>-0.01 (-0.04)</td>
<td>0.01 (-0.02)</td>
<td>0.05 (0.03)</td>
</tr>
</tbody>
</table>

*Notes: Values listed in parentheses reflect the results from analyses including only mothers. For coherence: N = 92; N = 80 for mothers only. For teacher report: N = 57; N = 51 for mothers only. †p < .10. *p < .05. **p < .01. TR = Teacher report.*
Appendix A

**Topics on which children and parents may disagree:**

1. choosing her/his clothes
2. how to spend her/his money
3. which friends to spend time with
4. which TV channels the child watches and for how long
5. getting homework done on time
6. doing household chores
7. not cooperating with siblings or other children
8. Bedtime
9. keeping their room clean
10. not following parental rules
11. child’s attitude (example: whining)

**What is the most important problem in your relationship?**

**Why is it a problem?**

**How do you feel about this problem?**

**What are the possible solutions that you have?**
Appendix B

Sensitivity
Maternal sensitivity consists of consistent, appropriate, and attuned responses to the child (Ainsworth et al., 2015). Sensitive behavior also conveys warmth and engagement in the interaction (Owen, Ware, Vaughn, & Barfoot, 1996; Pederson & Moran, 1995). Sensitive mothers take note of their children’s emotional and communicative cues and flexibly respond to them in a way that is considerate of the child.

**Sensitive** behaviors include:
- Demonstrating engagement and interest in the interaction
  - Behavioral engagement
    - Eye contact and demonstrates paying attention
    - Physically oriented to child (facing child, not closing self off)
  - Verbal engagement
    - Tone and content suggests mother is interested in the interaction
- Warmth/Positive regard
  - Affection shown towards child
    - Affectionate touch, body language
    - Affectionate language
  - Shows positive regard
    - Affirmation and acceptance of child
  - Appears to enjoy interaction
- Consistent and appropriate responses
  - Tone and volume appropriate to child’s interaction
  - Responds to child’s verbal and nonverbal communication, is aware of child’s cues
  - Emotionally supportive in response to child’s concerns

**Not sensitive** behaviors include:
- Demonstrating disengagement and disinterest
  - Behaviorally
    - Avoiding eye contact
    - Closed body language (folded arms, oriented away from the child)
    - Appearing distracted (i.e. biting nails, on phone, etc.) to the extent it interrupts the interaction
    - Avoids task
  - Verbal engagement
    - Sounds bored or dismissive
    - Short, abrupt, disinterested responses
- Negative tone
  - Appears cold or hostile
    - Insulting or apathetic language toward child
    - Sarcastic or cruel tone
    - Highly critical or cynical (tone and words mismatch- e.g. praise sounds sarcastic or insincere)
  - Appears annoyed by child overall
- Inconsistent, absent, or inappropriate responses
  - Ignores or is unaffected by child’s communication, noncontingent responding
  - Responds inappropriately to child’s tone or volume (i.e. escalates volume)
  - Appears to be more focused on performance than child (e.g. looking good for the camera, feels false or fake)
  - Appears to be more focused on own emotional needs than child’s
5) **Very sensitive:** Mother displays evidence of all three sensitive indicators (engagement, warmth/positive regard, consistent and appropriate responses) consistently throughout the segment. There is no evidence of insensitive interaction. Interaction is prototypically sensitive.

4) **Sensitive:** Mother displays evidence of all three sensitive indicators at during the segment, and interaction is generally sensitive throughout. Displays of sensitivity may be less frequent or intense than interactions scored 5. Interaction appears to be sensitive overall.

3) **Moderately sensitive:** Mother displays some evidence of sensitive indicators intermittently throughout the session, but sensitivity is inconsistent or only representative of 2 or fewer indicators. There may be some evidence of insensitive interaction, but it is limited to 1 or 2 instances and brief and mild.

2) **Insensitive:** Mother displays evidence of insensitive interaction that is prolonged, occurs more than two times and/or is relatively harsh. Insensitivity does not occur consistently throughout the interaction (consistently harsh behavior is scored a 1).

1) **Very insensitive:** Mother displays consistent evidence of at least one of the three insensitive indicators.
Appendix C

**Autonomy Support**

Autonomy support consists of behaviors and communication practices that recognize the child’s individual perspective, encourage exploration of the interests of the child’s choice, and minimally attempt to control the child’s expression of values and interests (Deci & Ryan, 2012). Autonomy supportive parenting respects the child’s perspective without necessarily catering to it. That is to say, the child is allowed the opportunity to have and voice their own beliefs, but autonomy support does not imply that the child is granted full control over their behaviors.

**Autonomy supportive** behaviors include:

- **Scaffolding**
  - Mother intervenes according to child’s needs/adapts task to create optimal challenge for the child
    - Prompts child at appropriate times
    - Prompts child in ways that encourage genuine response
    - Offers suggestions and thoughts in response to uncertainty or confusion with the task (without appearing to demand agreement from the child or steamroll over their independent ideas)
- **Encouragement**
  - Encourages child to respond and give own opinion
  - Praises expression of opinions and ideas
  - Offers hints and suggestions (rather than directing)
  - Handles disagreements respectfully and provides rationale (without lecturing or dominating conversation)
- **Nondirectiveness**
  - Respects child’s pace, allows them to play an active role during the interaction
    - Gives child time to respond
  - Allows child to explain opinions and considers child’s ideas (does not necessarily have to agree)
  - Allows child to direct conversation

**Autonomy unsupportive** behaviors include:

- **Control or withdrawal**
  - Mother intervenes excessively
    - Prompts child excessively
    - Prompts child in ways that impose own opinions (leading questions, aggressive tone)
  - OR
  - Mother does not intervene when child is obviously struggling to respond (child is unsure, shy, etc.)
- **Dismissive, critical, or overbearing**
  - Lectures, talks over child or pressures child to ultimately express agreement
  - Is dismissive, ridiculing, or hostile to child’s expression of ideas
- **Controls or dominates conversation**
  - Mother sets pace, rushes child to conclusions or makes child’s choices herself
  - Does not provide child opportunity to make individual choices
  - Parent dominates conversation and decision making
5) **Very autonomy supportive:** Mother displays evidence of all three autonomy supportive indicators (scaffolding, encouragement, nondirectiveness) consistently throughout the segment. There is no evidence of controlling or highly withdrawn behaviors. The interaction is prototypically autonomy supportive.

4) **Autonomy supportive:** Mother displays evidence of all three autonomy supportive indicators at points during the segment, and interaction is generally autonomy supportive throughout. Displays of autonomy support are less frequent or intense than interactions scored a 5. Any evidence of intrusive or withdrawn behaviors is very rare (no more than 1-2 instances), brief, and mild. Interaction appears to be autonomy supportive overall.

3) **Moderately autonomy supportive:** Mother displays some evidence of autonomy supportive indicators intermittently throughout the session, but autonomy support is inconsistent or only representative of 2 or fewer indicators. There may be some evidence of autonomy unsupportive interaction, but it is brief and mild and not characteristic of the session overall.

2) **Autonomy unsupportive:** Mother displays evidence of autonomy unsupportive behavior that is prolonged, frequent, and/or is relatively intense. Mother may be unsupportive consistently throughout, but only if their unsupportive behaviors are relatively mild or characteristic of no more than two unsupportive indicators.

1) **Very autonomy unsupportive:** Mother displays consistent evidence of unsupportiveness that occurs throughout the interaction. Displays evidence of all three unsupportive indicators during the session or unsupportive behavior is intense for at least several instances.
Appendix D

CRPBI

Scale: 1 = Not like her, 2 = somewhat like her, 3 = a lot like her
Items:
1. My mother is a person who makes me feel better after talking over my worries with her.
2. My mother changes the subject whenever I have something to say to her.
3. My mother smiles at me very often.
4. My mother always tries to change how I feel or think about things.
5. My mother often interrupts me.
6. My mother is able to make me feel better when I am upset.
7. My mother enjoys doing things with me.
8. My mother blames me for other family members’ problems.
9. My mother cheers me up when I am sad.
10. My mother brings up my past mistakes when she criticizes me.
11. My mother is less friendly with me if I do not see things her way.
12. My mother gives me a lot of care and attention.
13. My mother makes me feel like the most important person in her life.
14. My mother avoids looking at me when I have disappointed her.
15. My mother believes in showing her love for me.
16. If I have hurt my mother’s feelings, she stops talking to me until I please her again.
17. My mother often praises me.
18. My mother is easy to talk to.
19. My mother would like to be able to tell me what to do all the time.
20. How much does your mother REALLY know who your friends are?
21. How much does your mother REALLY know where you go at night?
22. How much does your mother REALLY know how you spend your money?
23. How much does your mother REALLY know what you do with your free time?
24. How much does your mother REALLY know where you are most days after school?

Parental Sensitivity: MEAN (1, 3, 6, 7, 9, 12, 13, 15, 17, 18)
Administered for both mother and father.
Appendix E

POPS

Scale 1= Strongly Disagree to 5= Strongly Agree

My mother/father

1. Lets me make my own plans for things I want to do
2. Is usually willing to consider things from my point of view
3. Isn’t very sensitive to many of my needs (reverse coded)
4. Whenever possible, allows me to choose what to do
5. Allows me to decide things for myself
6. Insists upon doing things her/his way (reverse coded)
7. Allows me to choose my own direction in life