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VALIDATING THE SUPERVISION PARTNERSHIP AS A PHASE OF ATTACHMENT (131 PP.)

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The supervision partnership was proposed by Waters and colleagues (1991) to be the last of 8 phases of parent-child attachment in late middle childhood. Previous research (Koehn & Kerns, 2015) has proposed that the supervision partnership consists of three components: availability and accessibility, willingness to communicate, and mutual recognition of the other's rights. The goal of the present study was to validate the supervision partnership by measuring the three components more precisely and by investigating the link between the supervision partnership and constructs that have proven to be highly related to attachment, such as parenting and peer competence. Another goal of this study was to compare the supervision partnership to other measures of attachment, including narrative coherence, and to evaluate discriminant validity in relation to temperament and IQ. 92 children ages of 10 to 14 (63% male) and one parent (81 mothers and 11 fathers) attended a laboratory visit, where the children participated in an interview and both responded to questionnaires. Modifications were made to the Friends and Family Interview (Steele & Steele, 2005), Security Scale (Kerns et al., 2001), Parental Monitoring Questionnaire (Stattin & Kerr, 2000) and the Making Decisions Questionnaire (Eccles et al., 1991) to measure the supervision partnership. Parenting questionnaires were administered to both children and parents, peer competence and friendship questionnaires were administered to children, parents, and teachers, and a temperament questionnaire was

administered to the in-lab parent. Children also completed a computerized verbal intelligence task. Results indicated that the three components of the supervision partnership were significantly related to each other for both mothers and fathers, both when measured by interview and self-report questionnaires. Results also found that the supervision partnership for both mothers and fathers was related to child reports of parental responsiveness and autonomy support, but not to mother reports of maternal parenting. The supervision partnership for both mothers and fathers was also related to child reports of friendship quality, and the supervision partnership for fathers only was related to parent reports of peer problems, but not to teacher reports of peer competence. The supervision partnership for both mothers and fathers, measured by both interview and questionnaire was also related to narrative coherence. The supervision partnership demonstrated discriminant validity by having no significant relationship to temperament. The supervision partnership was modestly related to verbal intelligence, so verbal intelligence was controlled for in all analyses. This study provides some support for the supervision partnership as a phase of attachment in late middle childhood and early adolescence, although additional work is needed to revise measures to more fully capture the mutual recognition of others' rights component.

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Validating the Supervision Partnership as a Phase of Attachment

The significance of children's relationships with their parents has been a thriving area of research for decades. Although there are many different aspects of the parent-child relationship, one of the most studied aspects is the child's ability to use a parent as an attachment figure. It has been well established that children's attachment security with their parents predicts better overall adjustment, and to many specific indices of adjustment, including cognitive development (West, Mathews, & Kerns, 2013), self-esteem (Cassidy, Ziv, Mehta, & Feeney, 2003; Doyle, Markiewicz, Brengden, Lieberman, & Voss, 2000; Kerns, Klepac, & Cole, 1996, Study 1; Vershueren & Marcoen, 2002, 2005; Yunger, Corby, & Perry, 2005), emotion regulation (Abraham & Kerns, 2013; Colle & Del Giudice, 2011; Contreras, Kerns, Weimer, Gentzler, & Tomich, 2000; Kerns, Abraham, Schlegelmilch, & Morgan, 2007; Psouni & Apetroaia, 2014), peer relationships (Schneider, Atkinson, & Tardif, 2001), peer competence (Groh, Fearon, Bakermans-Kranenburg, van IJzendoorn, Steele & Roisman, 2014; Pallini, Baiocco, Schneider, Madigan & Atkinson, 2014), behavior problems (Cummings, George, Koss, & Davies, 2013; Scott, Briskman, Woolgar, Humayun, & O'Connor, 2011), and psychopathology (Brenning Soenens, Braet, & Bosmans, 2012b; Brumariu & Kerns, 2008, 2010). While research in recent years has helped define what parent-child attachment looks like in middle childhood and adolescence, the current conceptualization of attachment for this age period needs some elaboration.

The goal of the present study was to validate the supervision partnership, a three-component conceptualization of attachment that takes into account the developmental changes in

attachment in the transition between late middle childhood and early adolescence. Although sometimes referred to as a "collaborative alliance" (Kerns & Brumariu, 2016), the term "supervision partnership" was originally coined by Waters, Kondo-Ikemura, Posada and Richters (1991), and was proposed to be the last of eight phases of attachment. Koehn and Kerns (2015) proposed and tested a three-component conceptualization, and found preliminary support for the existence of the three components: availability and accessibility of the attachment figure, willingness to communicate about plans, goals, and life experiences, and mutual recognition of others' rights in decision making. Koehn and Kerns (2015) used a large, pre-existing data set, and were therefore only able to approximate the measurement of the three components, and only with self-report questionnaires. In the present study, I measured the supervision partnership by both interview and self-report questionnaire methods in a sample of 10 to 14 year-olds, and tested whether the three components belong to the same higher-order construct of attachment. I also tested the supervision partnership by examining associations with other theoretically related constructs, including parental responsiveness and autonomy support, friendship quality and peer competence, and to other measures of attachment, specifically narrative coherence. I also evaluated discriminant validity by examining the associations between the supervision partnership and temperament and verbal intelligence, two constructs not expected to be highly related to attachment.

Attachment: Core Concepts

Attachment theory was introduced to describe and explain the bond between children and their primary caregivers (Bowlby, 1969/1982). Early research focused on the development of this bond between infants and their caregivers. Bowlby described attachment as a behavioral system, a fundamental function of many species. When the attachment behavioral system is activated, the

infant displays attachment behaviors (such as crying), which functions to maintain proximity to or to attain the attention and comfort of the caregiver. The infant's attachment behavior is thought to have evolved through natural selection, as it helps keep the child alive by eliciting caregiving and protecting behavior from the attachment figures (Ainsworth, 1989). At first, the infant displays attachment behavior indiscriminately, but over time begins to differentiate the primary caregiver(s) from others. Then, as the infant continues to physically develop, the infant develops the ability to move around on his or her own, which allows the infant to maintain proximity to the caregiver. Throughout childhood, the child uses the parent as both a safe haven, seeking comfort in times of distress, and as a secure base, seeking support while exploring the world.

As the caregiver continues to interact with the child, and as the child develops cognitively, the child forms "working models" (i.e. cognitive representations) of the attachment relationship based on the pattern of the caregiver's behavior, the child's own behavior, and the interactions between child and caregiver (Bowlby, 1973). The child develops expectations for the caregiver's behavior and for typical interactions based on past experiences, and the working models continue to develop with the child as new experiences are integrated in with the old. These internal working models are then used to help the child interpret new situations, and to guide the child in interactions with others. Bowlby's description of internal working models is similar to the description of schemas and scripts in cognitive psychology, in that these cognitive structures produce expectations and organize behavior (Bretherton, 1990; Sirigu, Zalla & Pillon, 1995). Modern research has focused on attachment as a script for secure base behavior, as past experiences of consistent and coherent secure base support create a script or schema that is activated in current secure base interactions (Waters & Waters, 2006).

Research on parent-child attachment soon turned to the investigation of individual differences. Mary Ainsworth and colleagues (1978) studied many children and their caregivers in Baltimore and Uganda, and classified children into three categories: secure, insecure- avoidant, and insecure- resistant or ambivalent. She concluded that securely attached infants seek comfort from their caregivers when distressed, and are more likely to have received responsive and sensitive caregiving from caregivers than insecurely attached infants. Ainsworth originally identified two categories of insecure attachment patterns, avoidant and resistant. Children with avoidant attachment are reluctant to seek comfort from caregivers, and have been found to be more likely to have experienced rejection from their caregivers. Children with resistant or ambivalent attachment are likely to seek comfort but to resist the comfort when offered, and are likely to have experienced inconsistently responsive and unresponsive care. After realizing that many children's behavior did not fit neatly into one of the original three categories, a fourth category was added and labeled disorganized attachment (Main & Solomon, 1986). Children with disorganized attachment are likely to have difficulty maintaining behavioral and attentional organization toward the caregiver, and are more likely to have caregivers who are extremely non-responsive, harsh, and insensitive to the child's needs (George & Solomon, 1989). Many studies have supported this four-pattern structure.

Although this four-pattern structure has been extensively replicated in the infant attachment literature, there are advantages for exploring parent-child attachment on a single dimension of security in older children. While the descriptions of the insecure attachment patterns remain fairly stable throughout the child and adult attachment literatures (Bakstrom & Holmes, 2007), the definition of attachment security may shift to reflect developmental changes across time. This is reflected in Bowlby's description of the four phases of attachment, and

Waters and colleagues' (1991) expanded eight phases of attachment, which describe developmental changes in secure attachment. Similarly, the supervision partnership takes into account developmental changes that occur during the transition from middle childhood to adolescence, by considering the child's growing autonomy. Therefore, this project focuses on elaborating the concept of secure attachment rather than the insecure patterns.

Attachment in Middle Childhood

Much of the research on parent-child attachment has focused on early childhood, but research on attachment in middle childhood has been a growing area of study in the past two decades. Kerns and Brumariu (2016) suggest there are four defining characteristics of attachment in middle childhood. First, the primary goal of the attachment behavior system changes from maintaining proximity to the attachment figure in early childhood to perceiving the availability of the attachment figure in middle childhood, as was first suggested by Bowlby (1987; cited in Ainsworth, 1990). As children gain autonomy and are spending increasingly longer periods of time away from home due to school and extracurricular activities and sports, they begin to rely less on being physically near the attachment figure, as long as they know that contact with the caregiver is possible, and that they can reunite with the caregiver if necessary (Kerns & Brumariu, 2016).

The second defining feature of attachment in middle childhood is that parents remain the principal attachment figures for children. Many studies have found that while peers replace parents for companionship in middle childhood (Kerns, Tomich, & Kim, 2006; Seibert & Kerns, 2009), parents remain as the primary attachment figures in a variety of situations when the attachment behavior system is activated (Kerns & Seibert, 2015; Vandevivere, Braet, &

Bosmans, 2016). Peers gain importance as support figures as children continue to develop, and are recognized as attachment figures in late adolescence (Allen & Tan, 2016).

The third defining feature is that a collaborative alliance forms between the child and the parent, in which they begin to share the responsibility for maintaining secure base contact and problem solving. This idea was first suggested by Waters and colleagues (1991), who theorized that parent-child attachment has eight phases throughout early and middle childhood (as opposed to the four phases introduced by Bowlby; 1969/1982), the last of which was termed the "supervision partnership." Koehn and Kerns (2015) proposed and found evidence to support a three-component construct of the supervision partnership, which includes the perceived accessibility and availability of the caregiver, the dyad's willingness to communicate with each other, and a mutual recognition of the other's rights in decision-making.

The fourth and final defining feature of parent-child attachment in middle childhood is that parents continue to serve as both a safe haven and a secure base, to comfort the child in times of distress and to support the child's exploration of the world. Although many attachment assessments in middle childhood focus solely on the safe haven construct, evidence has shown that parents continue to function in the secure base role, as the child's social world expands (Kerns & Brumariu, 2016; Kerns, Mathews, Koehn, Williams, & Siener-Ciesla, 2015). In this age range, parents can serve as a secure base by showing confidence in the child's abilities and by encouraging them to tackle new challenges.

Attachment in Adolescence

During adolescence, exploratory behavior becomes increasingly more important, and safe haven behavior shifts into a less important role (Allen & Tan, 2016). However, parents remain as attachment figures into young adulthood, and the attachment behavior system continues to be

activated in times of danger or separation distress throughout adolescence (Rosenthal & Kobak, 2010). Allen and Tan suggest that during the course of adolescence, the threshold at which the attachment system is activated changes, so that as adolescents strive to depend less on their parents to meet attachment needs, it takes increasingly higher levels of distress before they will turn to their parents. Kobak & Duemmler (1994) suggested that the goal of the goal-corrected partnership shifts in adolescence, from the parent meeting most or all of the child's attachment needs, to the parent helping the adolescent learn to meet attachment needs autonomously, decreasing the need to depend on the caregiver. Therefore, balance between safe haven and secure base shifts from a relatively even balance in middle childhood to a balance more heavily emphasizing the secure base support in adolescence.

Another change in the attachment system in adolescence is the balance between the adolescent's struggle for behavioral autonomy and the parents' struggle for behavioral control. During this time, the adolescent struggles not only against the primary caregivers, but also against habit and the behavioral system, which encourage a continued dependency on the attachment figures. This struggle is reminiscent of a similar struggle in early toddlerhood, when young children strive for more autonomy in exploring their environment. Although the goal-corrected partnership in infancy has been described as a *coordinated effort*, the partnership in adolescence between parents and teens is more of a *negotiated effort*, as the teen negotiates for more freedom (Allen & Tan, 2016).

Another change in attachment in adolescence is a change in the hierarchy of attachment figures. First peers, then romantic partners, gradually emerge in adolescence as attachment figures. During distressing events involving peer-related stressors, peers and romantic partners can temporarily replace parents as the primary attachment figure (Markiewicz, Lawford, Doyle,

& Haggart, 2006). By late adolescence, long-term relationships with friends and/or romantic partners serve as fully functioning attachment relationships (Hazan & Shaver, 1987). Attachments with both friends and romantic partners develop gradually over long periods of time, with the emergence of attachments to friends increasing in primacy from early to later adolescence, followed by attachments to long-term romantic partners (Rosenthal & Kobak, 2010). Throughout this time, however, parents (and particularly mothers) are likely to remain at the top of the attachment hierarchy, even into early adulthood (Rosenthal & Kobak, 2010).

The Supervision Partnership: A Transition Phase in Early Adolescence

The current study aimed to validate the construct of the *supervision partnership*, initially proposed by Waters et al. (1991), and preliminarily tested by Koehn and Kerns (2015). This construct spans the transition period between late middle childhood and early adolescence, a time when the parent-child relationship undergoes many changes, particularly in regards to attachment. The supervision partnership takes into account the child's autonomy that develops during this time frame, thereby serving as a middle ground between the established understanding of attachment in middle childhood and adolescence.

Koehn and Kerns (2015) tested a three-component conceptualization of the supervision partnership construct using the NICHD data set. The first of the three components, the perceived availability and accessibility of the parent, is similar to the traditional conceptualization of attachment in middle childhood. For a secure attachment, the child must perceive the parent to be available as a safe haven for comfort when the child is in distress, and to be accessible as a secure base for exploring the world. The second of the three components of the supervision partnership proposed by Koehn and Kerns (2015) is a willingness to communicate about plans, goals, and life events. Open and coherent communication between children and parents has long

been a defining feature of secure attachment (Bretherton, 1990), and is especially important during this transition period from childhood to adolescence, when the child and parent begin to work collaboratively to address the child's concerns. The securely attached child is willing to discuss important matters with his or her parents, and perceives the parents as willing to communicate openly in return. Finally, the third proposed component of the supervision partnership is a willingness to negotiate and recognize that both parent and child have a right to contribute to the decision-making process (Koehn & Kerns, 2015). During this time of growing autonomy, for a secure attachment relationship, the parents must recognize the child's autonomy in some aspects of life, and the child must also recognize that they are not yet fully independent, and must defer to their parents' authority in some matters. Perhaps most importantly, the securely attached child perceives an agreement between the parent and child on whose responsibility it is to make various decisions.

Koehn and Kerns (2015) found preliminary support for the supervision partnership using data collected as part of a longitudinal study (NICHD Study of Early Child Care and Youth Development). The three components of the supervision partnership, assessed in 5th and 6th grades, were found to be modestly related to each other, and were also significantly related to attachment measured in preschool and adolescence. The supervision partnership was also found to be related to concurrent maternal sensitivity. One of the limitations of the study is that due to the use of an existing data set, the measures for the willingness to communicate and willingness to negotiate components approximated the constructs, but did not address all aspects of the constructs. For example, the measure used to approximate willingness to communicate was a measure of parental monitoring, with the idea that better communication between the child and parent would lead to better monitoring, and the measure used to approximate willingness to

negotiate was a measure of the child's autonomy in decision making, recoded so that decisions made together were scored higher than decisions that the parent or child made alone. Another limitation is that the supervision partnership was only measured in fifth and sixth grades, while the construct is theorized to span seventh and eighth grades as well. Another limitation of the study was that it relied solely on self-report questionnaires to assess the supervision construct components, instead of using a multi-method approach. Finally, the supervision partnership was only assessed in the mother-child relationship, whereas fathers are also important attachment figures in this age range (Verschueren & Marcoen, 1999; Kerns et al., 2015).

In summary, attachment in middle childhood can be characterized by a shift in the primary goal of the attachment behavior system, from maintaining proximity to the attachment figure in early childhood, to perceiving the emotional availability of the attachment figure in middle childhood. Attachment in adolescence can be characterized by a shift from parents serving primarily as a safe haven in times of distress to a secure base from which to explore. During the transition from middle childhood to adolescence, children begin to gain autonomy, and communication with parents becomes critical for the maintenance of a secure attachment. The supervision partnership takes these developmental changes into account, and proposes that attachment consists of the availability and accessibility of the attachment figure, a willingness to communicate both by the parent and the child, and a mutual recognition of the others' rights in the decision making process. In order to further test the supervision partnership, we must first consider how to measure it, by reviewing the multiple methods of attachment measurement in middle childhood and adolescence.

Measurement of Attachment in Middle Childhood and Adolescence

For young children, assessments of attachment focus on the organization of the child's attachment behavior. For example, Mary Ainsworth's Strange Situation, which is the "gold standard" attachment measure for infants and toddlers (Lucassen, et al., 2011), examines how infants respond to parents following a separation from the caregiver. Attachment in infancy, toddlerhood, and the preschool period is also often assessed by another behavioral measure, the Attachment Q-set method (Waters & Deane, 1985). Most studies of attachment in children under the age of four use one of these two methods (De Wolff & van IJzendoorn, 1997). With young children, who are too young to be able to report on their attachments to their parents, coded observational procedures like the Strange Situation and the Q-set are the best ways to identify the attachment processes that are going on within the dyad. However, as children get older and are able to answer questions about their relationships with their parents, there are many other methods available to measure the attachment relationship, such as story stems (Bretherton, 1990) that tap children's attachment representations. In fact, as the child gets older, it becomes much more difficult to use observational procedures, because the length of time necessary for the separation from the parent to be distressing to the child would be much longer, and attachment behaviors can be subtle (Main & Cassidy, 1988).

For middle childhood and adolescence, however, there is no "gold standard" approach to measuring attachment; there are many different types of methodologies used, and many measures available for each type of methodology (Kerns & Seibert, 2015). Kerns and Seibert (2015) provide a detailed summary of the measures available to assess parent-child attachment in middle childhood. For six to eight year olds, there are separation procedures similar to the Strange Situation but modified for older children, that have been completed in labs to assess parent-child attachment (e.g. Main and Cassidy, 1988). For six to twelve year old children, there

are story-telling narratives using dolls, where children are asked to act out attachment system-related stories (e.g. Bretherton, 1990; Kerns, Brumariu & Seibert, 2011), and there are tasks that show children pictures of parent-child separations, and ask for verbal responses to the scenarios (e.g. Klagsbrun & Bowlby, 1976). For nine to twelve year old children, there are also autobiographical interviews (e.g. Steele & Steele, 2005) and self-report questionnaires (e.g. Kerns, Aspelmeier, Gentzler, & Grabill, 2001) that ask children questions about their relationships with their parents.

Attachment to parents in adolescence is generally measured in similar ways as the later middle school years, by interview or self-report questionnaire. Some frequently used self-report questionnaires include the Kerns Security Scale (2001) and the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987). Frequently used interviews include the Child Attachment Interview (CAI; Target, Fonagy, & Shmueli-Goetz, 2003), the Friends and Family Interview (FFI; Steele & Steele, 2005) and the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985).

There is a great deal of variability in the content of available attachment measures in middle childhood and adolescence. Some measures of attachment in middle childhood and adolescence assess attachment security on a continuum from secure to insecure, like the Kerns Security Scale (Kerns et al., 2001), which assesses conscious representations not only of safe haven but also secure base support. Other measures assess attachment patterns (e.g. story stem narratives; Bretherton, 1990), and provide scores on a continuum for each pattern. And yet others measure unconscious representations or linguistic style, such as the AAI (George et al., 1985). With so many different types of measures available, researchers are able to choose a measure

that addresses their particular research question, but this leaves the field with a continued lack of a standard measure or battery of measures.

Self-report questionnaires (such as the Kerns Security Scale, 2001), filled out by children, allow researchers to access the child's perceptions of their relationship with their parents. Self-report questionnaires also take little time to administer, and do not require much time on the part of the researchers to code, unlike interviews and story-stem measures. One issue with using self-report questionnaires to assess attachment security is that children often are unwilling to say anything explicitly negative about their parents, or are unaware of the negative aspects of their relationship with their parents. Interviews (such as the Friends and Family Questionnaire- Steele & Steele, 2005) take longer to administer and even longer to code, but are thought to allow researchers to assess children's attitudes about caregivers that are not reliably assessed by self-report questionnaires (Kerns et al., 2015). Studies that use multiple assessment methods can avoid the faults of relying on only one measurement method. Studies have shown modest but significant correlations between attachment security measured by questionnaire and interview (Granot & Mayseless, 2001; Kerns et al., 2007; Kerns et al., 2015; Psouni & Apetroiaia, 2014).

The first component, the perceived availability and accessibility of the attachment figure as a safe haven and a secure base, can be measured by any attachment measure that assesses both safe haven and secure base support. Although most measures of attachment have traditionally only measured safe haven support, there is a recent trend in the literature to measure both safe haven and secure base support in middle childhood (Kerns et al., 2015). The inclusion of measures of secure base support become increasingly important as children move from late middle childhood to early adolescence, as this is the time when the primary role of the parent shifts from providing safe haven to secure base support (Allen & Tan, 2016). The Kerns Security

Scale provides measures of both safe haven and secure base support, and the revised version of the FFI piloted by Kerns et al. (2015) also measures both safe haven and secure base support for each parent. There are no current attachment measures that assess all three components of the supervision partnership. New questionnaires must be developed to measure the willingness to communicate and mutual recognition of others' rights in the decision-making process components.

Validating Attachment Measures

To validate the supervision partnership construct as a measure of attachment, the measure must meet certain criteria. Solomon and George (2008) proposed four validation criteria for attachment measures. They suggested that all attachment measures should show the following pattern of correlates: 1) Attachment security should be related to the caregiver's behavior, specifically to accessibility and responsiveness; 2) Attachment security should remain relatively stable over time; 3) Attachment security should predict other important aspects of development; and 4) Attachment security can be assessed using similar measures cross-culturally and across attachment figures. Kerns and Seibert (2015) suggested three additional criteria for validating attachment measures: 1) Current attachment assessments should be related to other validated measures of attachment administered close in time; 2) Attachment security should predict secure base behavior in naturalistic contexts; and 3) Current attachment measures should have good discriminant validity.

Koehn and Kerns (2015) have begun the process of validating the supervision partnership as an attachment construct by testing some of the proposed validation criteria. Although effect sizes were small, they showed that the supervision partnership construct was related to concurrently observed maternal sensitivity and responsiveness, and that the supervision

partnership was related to attachment measured in preschool and in adolescence, indicating stability over time. The current study aimed to address additional criteria to further validate the supervision partnership as an attachment construct. First, this study aimed to investigate the relationship between the supervision partnership and parenting behaviors, including responsiveness and other parenting behaviors thought to be important in middle childhood and adolescence, specifically autonomy support and control. Additionally, this study examined the relationship between the supervision partnership and peer competence, as this is one of the aspects of development shown to have the strongest link to attachment security (Kerns & Brumariu, 2016). This study also aimed to investigate the strength of the relationship between the supervision partnership and narrative coherence, a construct shown to be a strong indicator of attachment security in interview measures of attachment (George et al., 1985; Steele & Steele, 2005). Finally, this study aimed to investigate discriminant validity by demonstrating differentiation from both temperament and verbal intelligence scores.

Attachment and Parenting. Bowlby (1969/1982) and Ainsworth (1967) theorized that caregiver behavior, particularly the caregiver's sensitivity in responding to the child's needs, influences the child's developing attachment. As the child grows, the child develops working models of interactions with the caregiver, in which the caregiver's behavior influences the child's behavior, the child's behavior influences and reinforces the caregiver's behavior, and the pattern of the interaction contributes to attachment. Maternal sensitivity and responsiveness has been well-documented as the best predictor of mother-child attachment in early childhood (De Wolff & van IJzendoorn, 1997; Nievar & Becker, 2008). Compared to early childhood, in middle childhood and adolescence, there are fewer studies that examine the link between attachment and parenting, and those that do focus on a wider variety of parenting behaviors than just sensitivity

and responsiveness. Research has found evidence that parental responsiveness remains an important predictor of attachment in middle childhood (Brenning, Soenens, Braet, & Bal, 2012a, Brenning et al., 2012b; George, Cummings & Davies, 2010; Kerns et al., 2000; Koehn & Kerns, 2015b).

As children develop and become increasingly independent, a shift in the parent's balance occurs, from a relatively even balance of comfort and exploration in infancy, to a greater emphasis on supporting autonomy and exploration, while still maintaining relatedness in middle childhood and adolescence (Becker-Stoll, Fremmer-Bombik, Wartner, Zimmermann, & Grossmann, 2008). George & Solomon (1989) also emphasized the parents' role in encouraging self-regulation and teaching skills as children get older. These behaviors are similar to those of a parent's role as a secure base for exploration, one of the major functions of attachment. Research has emphasized the importance of the secure base function of attachment in middle childhood and adolescence (Waters & Cummings, 2000), which indirectly stresses the importance of the parents' support of autonomy at these ages in relation to attachment. Multiple studies have found evidence to support the link between parents' support of autonomy or willingness to serve as a secure base and the child's attachment security in middle childhood and adolescence (Brenning et al., 2012a, 2012b; George & Solomon, 1989; Karavasilis, Doyle, & Markiewicz, 2003; Kerns et al, 2000).

Attachment and Peer Competence. One of the core tenets of attachment theory, according to Bowlby (1969/1982), is that the child's attachment security is linked to the child's interpersonal relationships as they get older. Bowlby proposed that the internal working models that are developed in early childhood in regards to patterns in the child's interactions with caregivers will affect how the child responds to social situations with peers. For example,

children learn socially competent interaction styles from their relationships with responsive caregivers (Kerns, Klepac & Cole, 1996), which translates to their interactions with peers. Children with secure attachments to caregivers may also be more motivated and interested in engaging in social interactions with peers (Sroufe, Egeland & Carlson, 1999). This link between attachment security and peer relationships may also be partially explained by securely attached children's more adaptive emotion regulation capacities (Contreras et al., 2000), as the ability to control one's emotions becomes increasingly important for successful peer interactions in middle childhood (Kerns & Brumariu, 2016).

The relationship between attachment security and peer competence has been a major focus of research in recent decades, with a wide variety of peer relation constructs investigated (Schneider et al., 2001). The peer competence constructs that have been studied in relation to attachment include peer-directed aggression, peer-directed withdrawal, friendship quality, popularity, and sociability/leadership. Many measurement methods have been used to study peer competence, including sociometrics, observations, peer reports, and parent, teacher, and self-report questionnaires.

Multiple meta-analyses have examined the relationship between peer relations and early child-parent attachment. Schneider et al. (2001) found an overall effect size of $r = .20$ in a sample of 63 studies. They also found larger effect sizes for peer relations measured in middle childhood and adolescence than in early childhood, and found larger effect sizes for studies that assessed friendship quality than for studies that examined other peer relation constructs. Subsequent meta-analyses (Groh et al., 2014; Pallini et al., 2014) found similar overall effects as Schneider et al. (2001), but did not find similar moderating effects. Pallini et al. (2014) ran similar analyses to those used by Schneider et al. (2001), and included all studies published after

1998, and did not find significant moderating effects for age or friendship quality. Groh et al. (2014) focused only on attachment measured in early childhood, and found similar overall effects to the other meta-analyses, but also looked at insecure attachment patterns. They found that avoidance, resistance, and disorganization were all significantly associated with lower peer competence. Groh et al. (2014) found no significant moderation for age of peer competence assessment, but found larger effect sizes in studies looking at peer competence to non-friends, compared to studies assessing competence with friends, which contradicts the findings by Schneider et al. (2001) although the overall effect size was significant for both non-friends and friends. Thus, both friendship quality and peer competence have been found to relate significantly with child-parent attachment.

Narrative Coherence. Another validity criterion assessed in the present study is whether the supervision partnership relates to other valid measures of attachment. Interview measures of attachment, like the Friends and Family Interview (Steele & Steele, 2005), measure attachment not only by asking about the child's experiences with parents, but also by gauging the narrative coherence with which the child discusses experiences with parents. Narrative coherence describes the child's ability to talk about his or her attachment experiences in a clear, orderly, truthful way by providing evidence for what is said, while remaining relevant to the topic, and speaking succinctly yet completely (Hesse, 2008; Kerns et al., 2015). Narrative coherence has been conceptualized as a central component of attachment security (Beijersbergen, Bakermans-Kranenburg, & van IJzendoorn, 2006; Steele & Steele, 2005). Although some argue that narrative coherence is distinct from positive parenting experiences, as someone can demonstrate coherence while describing a painful experience with a caregiver (de Haas, Bakermans-Kranenburg & van IJzendoorn, 1994; Fonagy, Steele, & Steele, 1991; Steele & Steele, 2005),

studies with both children and adults have demonstrated that attachment security is strongly related to narrative coherence, with correlations ranging from .40 to .60 (de Haas et al., 1994; Fonagy et al., 1991; Kerns et al., 2015; Psouni & Apetroaia, 2014; Steele & Steele, 2005). While narrative coherence is scored simultaneously with other indicators of attachment security in some measures, in autobiographical interviews like the FFI, narrative coherence is scored as a separate indicator of attachment security, along with other indices of secure attachment. The supervision partnership's relationship to narrative coherence would provide further validation of the construct.

Temperament and Verbal Intelligence. To demonstrate discriminant validity, the relationship between the supervision partnership and both temperament and verbal IQ were explored. The relationship between temperament and attachment has been controversial (Vaughn et al., 1992). The core of the controversy hinges on the dispute about whether the factors responsible for regulating the expression of affect are intrinsic to the child (temperament) or properties that emerge from the parent-child relationship (attachment). The assessment of temperament and attachment are often impure, as parent reports of temperament will be affected by the parent-child relationship, and assessments of attachment are often influenced by the child's general demeanor (Vaughn et al., 1992). Research suggests that attachment and the temperament characteristics of negative reactivity and affective activation overlap modestly, but are not redundant (Vaughn et al., 1992), and many studies have found that temperament and parent-child attachment contribute differentially to predicting peer competence (Lickenbrock, Braungart-Rieker, Ekas, Zentall, Oshio, & Planalp, 2013; Rispoli, McGoey, Koziol, & Schreiber, 2013; Szewczyk-Sokolowski, Bost, & Wainwright, 2005). Therefore, we expect that the supervision partnership would not be significantly related to temperament.

Children may provide consistent, coherent examples of experiences with parents due to a pattern of positive experiences with parents, therefore enabling them to communicate openly and freely about their attachment experiences. Alternatively, children's ability to talk coherently about their attachment experiences may be influenced by verbal intelligence. That is, children may provide consistent, coherent examples of experiences with parents due to their ability to detect and avoid logical inconsistencies, and their ability to use sophisticated language through usage of analogies and metaphors (Bakermans-Kranenburg & van IJzendoorn, 1993). Despite the speculations, some research has demonstrated discriminant validity between the AAI (an autobiographical attachment interview) and measures of verbal intelligence, indicating that there is no significant relationship between the two constructs (Bakermans-Kranenburg & van IJzendoorn, 1993). A review of the literature suggests equivocal conclusions in childhood, that some studies have found significant relationships between verbal intelligence and attachment, while others have found no significant relationship (West et al., 2013). We expected to find low correlations between verbal intelligence and the supervision partnership.

Study Aims and Hypotheses

The goal of the present study was to test and validate the proposed three-component conceptualization of the supervision partnership in a sample of 10 to 14 year-old children. The study includes new measures of both interview and questionnaire methods to assess attachment constructs. The first aim was to examine the reliability and validity of the measures used to assess the supervision partnership, as both the Friends and Family Interview and self-report questionnaires used have been revised to more fully assess the construct. The next aim was to test whether the three components of the supervision partnership are part of the same higher-order latent construct, using structural equation modeling and confirmatory factor analysis

techniques. I also aimed to validate the supervision partnership as an attachment construct by testing whether the supervision partnership is related to the same constructs that attachment is known to be related to, including parenting behaviors, friendship quality and peer competence, and narrative coherence, but is not highly related to temperament or IQ. I also aimed to test the supervision partnership separately for both mothers and fathers.

The first hypothesis is that the measures used will demonstrate acceptable reliability, and the supervision partnership will demonstrate discriminant validity by not significantly relating to temperament or verbal intelligence.

The second hypothesis is that the three components of the supervision partnership (availability and accessibility, willingness to communicate, and mutual recognition of others' rights), as measured by questionnaire and interview, would correlate with each other and belong to the same higher-order construct of attachment.

The third hypothesis is that the supervision partnership would be positively related to parenting constructs such as parental responsiveness and support of the child's autonomy.

The fourth hypothesis is that the supervision partnership would be positively related to friendship quality and peer competence.

The fifth hypothesis is that the supervision partnership would be related to narrative coherence, as measured during the Friends and Family Interview.

Finally, the sixth hypothesis is that the willingness to communicate and mutual recognition of others' rights components would contribute unique variance in the dependent variables. This would provide further evidence for the benefit of expanding current attachment assessment approaches in 10 to 14 year-olds from a focus on availability and accessibility to include the other two proposed components of the supervision partnership.

Method

Participants

Participants were recruited from local Northeast Ohio communities. To recruit participants, letters were sent home with children in grades 5-8 at local schools and a summer camp. The letter explained the study, and provided parents with a phone number to contact the research team for more information. Graduate students called each interested family, answered questions about the study, and scheduled an appointment for one parent (mother if available) and the target child to come to the lab.

Participants were 93 children between 10 and 14 years old, and one of their parents. One family was excluded because the child was only able to fill out the first three questionnaires and complete the interview within the three-hour lab visit, resulting in a final sample size of 92. Out of the 92 participants, 81 were accompanied by their mothers to the lab visit, and 11 were accompanied by their fathers. More than half of our sample was male (63%). Our sample consisted mostly of Caucasian participants (82.6%), with 10.9% identifying as mixed/other, and 1-2% each identifying as African American, Hispanic, American Indian or Asian. Parental education levels varied; 6.5% of mothers and 18.5% of fathers had a high school diploma or fewer years of education, 10.9% of mothers and 12% of fathers had some college (an associate's degree or less), 41% of mothers and 27.2% of fathers had a bachelor's degree, and 35.9% of mothers and 32.6% of fathers attended 1-4 years of graduate education. About 75% of children came from intact families, and 25% of children had parents who were divorced. One child came from a family with lesbian parents. In this case, the child reported information on both mothers,

but only information about the mother who attended the lab session was used in analyses. Families also reported whether they qualify for food stamps or reduced school lunches; 9.8% did qualify for food stamps, while 13% did qualify for reduced school lunches.

Procedure

One graduate student and one undergraduate student were present in the lab for each family visit. When the parent and child arrived at the lab, the graduate student explained the procedure, including videotaping, and obtained informed consent from the parent, and assent from the child. After the consent procedure, the child and parent were separated into different rooms, to ensure that they would not hear or see the others' responses to interview or questionnaire questions. The graduate student administered a few questionnaires and the revised Friends and Family Interview. This interview was videotaped for the ease of transcribing and coding the interview. After the interview, the graduate student assisted the child in filling out remaining questionnaires, and administered a computerized verbal IQ task. Meanwhile, the undergraduate research assistant was available to answer questions while the parent filled out questionnaires in another room in the lab. The family was given a packet of questionnaires to take home for the absent parent to fill out (when applicable), with a postage-paid envelope to mail back to the research team. Of the 81 children who participated with their mothers, we received data from 31 fathers, and of the 11 children who participated with their fathers, we received data from 5 mothers. Therefore, we have parenting data from 86 mothers and 42 fathers. Finally, the parent and child were given $25 each for participation.

At the lab visit the child was also asked to nominate two teachers who know them best, to provide information about their behavior at school. Teachers were contacted by the research team to fill out questionnaires about the child. Teachers who agreed to participate were sent a

consent form with questionnaires, along with a postage paid envelope to return the study materials back to the research team. One child attended online school and another was homeschooled, and therefore did not have any teachers for us to contact. Therefore, teachers for 90 participants were contacted. Teachers for 64 participants agreed to participate. Teachers for five participants declined to participate after receiving the packet, and one teacher declined to participate when originally contacted. Multiple attempts were made to contact the remaining teachers, but no response was received. At least one teacher packet was returned for 57 participants. If both teachers for one participant provided data, their scores were averaged.

Measures

Table 1 provides descriptive information for the main study variables.

Attachment: Supervision Partnership. The Friends and Family Interview (FFI; Steele & Steele, 2005) was administered to assess the three components of the supervision partnership. The original version of the FFI, developed by Steele & Steele (2005), focuses on safe haven support from parents, and also asks about relationships with siblings and peers. The version of the FFI used in this study was based on an adaptation of the interview used in Kerns et al. (2015), which added a question assessing secure base behavior, and only asks about the child's attachment to mother and father (i.e. omitted questions about friends, school, and siblings). Questions from the original FFI that were included in the revised version include questions about the self, what the child does when upset, and questions about relationships with parents and how they have changed. For each question the interviewer asks the child in the FFI, the child is asked to provide specific examples supporting their statements. This version of the FFI (see appendix A for the complete interview) assessed availability and accessibility by inquiring about whom the child turns to when he/she is upset and what they do when they are getting ready to do

something difficult (the secure base question added in Kerns et al., 2015). In the FFI, the interviewer also asks the child to describe their relationships with each of their parents, and this additional information also informs the coders' ratings of availability and accessibility which are coded separately for each parent. For this study, new questions have been added to the FFI to assess willingness to communicate and mutual recognition of others' rights. For willingness to communicate, the three questions added were "How do you tell others about your plans for the day, and what do you do if your plans change?" "How do you decide about your goals for the future?" and "What do you do when important things happen to you?" We also added two questions to assess mutual recognition of others' rights: "How does your family figure out who gets to make decisions or rules?" and "What happens if you and your parents disagree about who should make decisions?"

The author and advisor independently coded all interviews. Coders separately rated the mother-child and father-child relationship for each of the three components of the supervision partnership on a four-point scale. Availability and accessibility was scored by aggregating scores on the Safe Haven Availability and Secure Base Support ratings. The Safe Haven Availability rating was taken from the Steeles' coding manual (called "secure base support" in the manual), and the Secure Base Support rating was taken from procedures used by Kerns et al., 2015. Higher scores on Availability and Accessibility reflected the parent's availability to support the child emotionally and/or instrumentally when the child was upset or experienced a problem, and the parent's accessibility to support the child's exploration by encouraging the child, showing confidence in the child's abilities, and supporting the child's individuality. I created the Willingness to Communicate rating scale, with high scores reflecting that the child and parent talk about plans for the day, goals for the future, and life experiences and events. I also created

the Mutual Recognition of Others' Rights rating scale, with high scores reflecting the ability of the parent and child to negotiate and come to an agreement on which party is responsible for making different decisions in the child's life. Observer agreement, reported using intraclass correlations, range from .81 to .92 (see Table 1). The FFI has demonstrated good construct validity (Psouni & Apetroaia, 2014; Steele & Steele, 2005; Stievenart, Casonato, Muntean, & van de Schoot, 2012).

The three components of the supervision partnership were also assessed by questionnaire methods. For availability and accessibility, a revised version of the Security Scale was used (Appendix B). This measure assesses the child's perception of safe haven and secure base support, with separate questionnaires for each parent. For this study, the 21 items of the Security Scale used by Kerns et al. (2015) was used, with the addition of three new items to supplement the secure base scale, for a total of 24 questions. The Security Scale uses the "Some kids… Other kids…" format introduced by Susan Harter (1982), in which the participant has two choices about which group of kids is more like them, and then chooses whether the statement they chose is "really true" or "sort of true" for them. For example, a participant would choose one of two statements: "Some kids like to tell their mom what they are thinking or feeling" or "Other kids don't like to tell their mom what they are thinking or feeling," and then they choose whether the statement he/she chose is "really true" or "sort of true" for him/her. Each item is scored on a 4-point scale, with the "really true" secure item receiving a score of 4 points, "sort of true" secure item receiving 3 points, "sort of true" insecure item receiving 2 points, and "really true" insecure item receiving 1 point (Kerns et al., 1996). Although this measure typically is used to measure safe haven and secure base support separately, to reflect the single component of availability and accessibility, a mean score based on all 24 items was calculated for each participant, resulting in

a continuous measure of perceived availability and accessibility of the attachment figure with higher scores reflecting a more secure attachment (correlations between the two subscales were $r = .64$, $p < .001$ for mothers and $r = .73$, $p < .001$ for fathers). The Security Scale has demonstrated high internal consistency (typically .80 or higher; Kerns et al., 2005) and construct validity (see Kerns & Seibert, 2015). Cronbach's $\alpha = .88$ for mothers and .93 for fathers in this sample.

Willingness to communicate was assessed using a 15-item measure developed specifically for this study based on Stattin and Kerr's Parental Monitoring questionnaire (2000). This questionnaire consists of a single scale designed to cover many aspects of communication, including communication about plans, goals, and life experiences. The child filled out separate questionnaires for each parent, and reported on the frequency that they talk to each parent about a variety of topics, and the frequency that each parent asks about certain topics (see Appendix C for complete questionnaire). Items adapted from Stattin and Kerr's measure were re-worded to ask "Do you talk to your parents about…" instead of asking the parent "Do you know about…" (sample item includes "Do you tell your mom what you do during your free time?"). Some topics covered in Stattin and Kerr's measure were excluded due to redundancy in content and inappropriateness for the current age range. Some new items were written to specifically address a wider variety of topics of communication than were covered by Stattin and Kerr, including "Do you tell your mom/dad what you want to be when you grow up?" Children rated each item on a 4-point scale indicating the frequency that each topic is discussed, from 1 = almost never to 4 = almost always. One score was created by calculating a mean of all items, with higher scores indicating more open communication between child and parent. Stattin and Kerr's Parental

Monitoring questionnaire has demonstrated good reliability and validity (Stattin & Kerr, 2000). Cronbach's $\alpha = .88$ for mothers and .91 for fathers in this sample.

Finally, mutual recognition of others' rights in decision making was assessed using items from the Family Decision Making Scale (Dornbusch, Carlsmith, Bushwall, Ritter, Leiderman, Hastorf, & Gross, 1985; Smetana, Campione-Barr, & Daddis, 2004) and the Making Decisions Questionnaire (Brody, Moore, & Glei, 1994; Eccles, Buchanan, Flanagan, Fuligni, Midgley, & Yee, 1991). Four items were deleted from the 20-item Family Decision Making Scale due to content inappropriate or rare for the current age range (e.g. questions about smoking, drinking, sex, and drugs). Two items were selected from the Making Decisions Questionnaire to add more questions with appropriate content (which after-school activities you take part in and whether you take part in religious training or education). The remaining items on the Making Decisions Questionnaire are similar in content to the items from the Family Decision Making Scale. The resulting 18 item questionnaire can be found in Appendix D. Both the child and the parents (both in-lab and at-home) filled out a questionnaire that asks "In your family, who should be responsible for making decisions about the following topics?" This is a slight deviation from the original Family Decision Making Scale, which asks "In your family, how do you make most of the decisions about the following topics?" Both the child and parents circled 1 for parents decide, 2 for parents decide after discussing it with child, 3 for parents and child decide together, 4 for child decides after discussing it with parents, and 5 for child decides alone. To capture the mutual recognition of others' rights construct, which emphasizes that secure attachment is reflected in parents and child coming to an agreement about who should make decisions about each topic, a difference score was calculated between the parent's responses and child's responses to each question (separate for mothers and fathers). Thus, the questionnaire measure

and the FFI measure of mutual recognition of others' rights differed in that the questionnaire assessed agreement about decision making rather than a recognition that the other has rights to contribute to the decision making process. Smaller difference scores reflect more agreement and therefore higher attachment security, whereas larger difference scores reflect more disagreement about who should make decisions, and therefore more attachment insecurity. This was calculated separately for each parent, when applicable, as both the parent present for the lab visit and the absent parent were asked to fill out this questionnaire. As we only received data for 42 fathers, we did not have a large enough sample to calculate difference scores for fathers; therefore, this variable was only calculated for mothers. The Family Decision Making Scale has demonstrated reliability and validity (Dornbusch et al., 1985; Dornbusch, Ritter, Mont-Reynaud, & Chen, 1990), and is a widely used measure of adolescent decision-making autonomy (Smetana et al., 2004). Cronbach's $\alpha = .82$ for child report and .82 for mother report in this study.

Parenting. To assess parenting, the child, the parent present in the lab, and a second parent at home (if applicable) were administered questionnaires inquiring about parental responsiveness and autonomy support. Parents reported only about their own (and not their partners') parenting. To assess responsiveness, the child and parent were administered a 10-item version of the acceptance subscale from the revised Child Report on Parenting Behavior Inventory (CRPBI; Barber, Stolz, Olsen, Collins, & Burchinal, 2005; Schaefer, 1965). Sample items include "My mother is able to make me feel better when I am upset" for the child report and "I am able to make my child feel better when my child is upset" for the parent report (see Appendix E for complete questionnaire). This ten-item scale has been used as a valid and reliable measure of parental responsiveness, both by parent and child report (Barber et al., 2005; Brenning et al., 2012a, Soenens, Vansteenkiste, Luyckx & Goossens, 2006). We did not receive

data from enough fathers to use fathers' self-reported parenting in analyses. Cronbach's α for mother report = .77, child report for mothers = .71, and child report for fathers = .85.

To assess parental autonomy support, both parents and child were administered the 7-item 'autonomy support' subscale from the Perceptions of Parents Scale (POPS; Grolnick, Ryan & Deci, 1991) and the 8-item Autonomy Granting scale (Silk, Morris, Kanaya, & Steinberg, 2003; Soenens, Vansteenkiste, Lens, Luyckx, Goossens, Beyers, & Ryan, 2007; See Appendix F for complete questionnaire). Soenens et al. (2007) determined that the 8 items from the Silk et al. (2003) study measured "promotion of independence" and that the 7 items from the POPS measure "promotion of volitional functioning," which they describe as two subscales of autonomy support. After extensive study on these measures, Soenens et al. (2007) found that two items from the original 17-item scale were decreasing the overall alpha score, and they recommended not retaining these items in future research; therefore, these items were not used in this study, resulting in a 15-item scale. These subscales were combined for a total autonomy support score for this study. Items are scored on a 5-point Likert scale from 1= strongly disagree to 5= strongly agree. Sample items include "My mother/father, whenever possible, allows me to choose what to do" from the child report and "Whenever possible, I allow my child to choose what to do" from the parent report questionnaire. Some researchers (Brenning et al., 2012a, b) have also included a reverse-scored measure of psychological control (Barber et al., 2005) as a measure of autonomy support, in addition to the Grolnick and Silk questionnaires. After inspecting the psychological control items, it was determined that these items do not reflect an absence of autonomy support, so these items were not included in this study. The reliability and validity of the POPS and Autonomy Granting scale have been well established, for both the parent- and child-report versions of the measure (Grolnick et al., 1991; Silk et al., 2003; Soenens

et al., 2007). Cronbach's α for mother report = .67, child report of mothers = .74, and child report of fathers = .77 in this sample. Child's report of mothers and fathers were significantly correlated $r = .62$, $p < .001$, but the correlations between the mother report and the child's report were not significant, $r = .15$.

Peer Competence. Peer competence were assessed by children's self-reports of friendship quality, parent reports of friendship quality, and teacher and parent reports of the child's social skills with peers. Self-reported Friendship Quality was assessed using the Friendship Quality Questionnaire (Parker & Asher, 1993), a 38-item questionnaire that asks the child to nominate a same-sex "best friend" and answer the remaining questions about the relationship with that friend (See Appendix G for complete questionnaire). Items are scored on a 5-point scale from 0 = not true at all to 4 = really true; sample item: "My friend and I make each other feel important and special." After reverse-scoring conflict items, a "positive friendship quality" score was calculated by creating a mean score of all items. This questionnaire has demonstrated good reliability and validity (Parker & Asher, 1993). Cronbach's α = .91 in this study. Parent reports of the child's friendship quality were assessed using the Quality of Child's Friendship Questionnaire (Clark & Ladd, 2000), a 20-item measure that asks parents to answer questions about the child and the child's best friend (Appendix H). Items are scored on a 4-point scale from 1 = strongly disagree to 4= strongly agree. Sample items include "My child and my child's very best friend work well together" and "My child and my child's very best friend negotiate peacefully to settle issues." A "positive friendship quality" subscale can be calculated by creating a mean of 12 items. This questionnaire has demonstrated good reliability and validity (Clark & Ladd, 2000) with a Cronbach's α = .87 in this study. Peer social skills were measured by teacher report using the 8-item peer social skills subscale of the Teacher-Child Rating Scale

version 2.1 (T-CRS 2.1; Perkins & Hightower, 2002) and by both teacher and parent report using the 5-item reverse-scored peer problems subscale of the Strengths and Difficulties Questionnaire- Teacher Version (SDQ; Goodman, 1997). Teachers rated each item on the T-CRS on how well each item describes the child from 1 = not at all to 5 = very well. Sample item includes "Child is friendly toward peers" (See Appendix I for list of items from this subscale). The T-CRS 2.1 has demonstrated good reliability and validity (Hightower, 1986; Perkins & Hightower, 2002). Cronbach's α = .93 in this study. The peer problems subscale of the SDQ asks teachers and parents to rate whether each item is "not true," "somewhat true," or "certainly true" for the child. Sample item includes "child has at least one good friend" (See Appendix J for list of items from this subscale). The pro-social subscale of the SDQ was not used because it asks about children's social skills with adults, not specifically to peers. The SDQ has well established validity and reliability (Goodman, 1997; Goodman, 2001). Cronbach's α for teacher report = .84, for parent report = .58 in this study.

Narrative Coherence. Narrative coherence was scored from the FFI attachment interview using the procedures outlined in the FFI manual (Steele, Steele, & Kriss, 2009). Trained coders coded the interviews for truth, economy, relevance and manner, and then made an overall rating of coherence. Narrative coherence has been interpreted as an index of attachment security (Beijersbergen et al., 2006; Steele & Steele, 2005), and should correlate modestly with other indices of attachment (Kerns et al., 2015). Narrative coherence is an established valid indicator of secure attachment (Steele & Steele, 2005). Observer agreement, reported using intraclass correlations, was .89.

Temperament. Child temperament was assessed by the School-age Temperament Inventory (SATI; McClowry, 1995). Parents answered 21 items about how often their child's

behavior is like the behavior described in each item. Items were scored on a 5-point scale, from 1 = never, to 5 = always. The measure has two subscales, negative reactivity (12 items) and approach/withdrawal (9 items). High scores for negative reactivity indicate that a child is highly reactive with negative emotions, sample item, "Gets mad when mildly criticized." Cronbach's alpha for negative reactivity = .94 in this sample. High scores for withdrawal indicate that a child tends to withdraw in new situations. Sample item "seems nervous or anxious in new situations" (See Appendix K for complete questionnaire). Cronbach's α for withdrawal = .89 in this sample. The SATI has demonstrated good reliability and validity (McClowry, 1993, 1995; McClowry, Halverson, & Sanson, 2003).

Verbal Intelligence. Verbal intelligence was assessed using a computerized task from the NIH Toolbox called the Picture Vocabulary Test. In this task, the child is presented with an audio recording of a word and four images. The participant is then instructed to select the picture that is most appropriate for the spoken word. This task uses a computerized adaptive format, in which the next question is selected depending on the previous answer. This task is normed by age, and is valid for participants ages 3 to 85. The task provides Age-Adjusted scores, in which a score of 100 indicates average verbal intelligence, with a standard deviation of 15. The task takes an average of five minutes to administer. The Picture Vocabulary Test has demonstrated reliability and convergent and divergent validity, and has met the rigorous NIH standards (Weintraub et al., 2013).

Demographic Information. In-lab parents were asked to fill out a questionnaire providing demographic information about the family (Appendix L). The demographic information addressed includes: child's date of birth, gender, ethnicity; parents' number of years

of education, parents' marital status; does the family qualify for food stamps or free or reduced school lunches.

Table 1.

Information on all measures used

Measure/Subscale	Who reported	Scoring	Internal Consistency/ Observer Agreement	Mean (SD)
FFI- Accessibility and Availability	Interview with Child	Observer Coding 1-4	Mothers: .92 Fathers: .94	Mother: 2.22 (0.66) Father: 2.07 (0.60)
FFI- Willingness to Communicate	Interview with Child	Observer Coding 1-4	Mothers: .86 Fathers: .92	Mother: 2.56 (0.68) Father: 2.12 (0.69)
FFI- Mutual Recognition	Interview with Child	Observer Coding 1-4	Mothers: .81 Fathers: .89	Mother: 2.42 (0.60) Father: 2.19 (0.71)
FFI- Coherence	Interview with Child	Observer Coding 1-4	.89	2.48 (0.73)
Security Scale	Child SRQ	1-4	Mothers: .88 Fathers: .93	Mother: 3.31 (0.37) Father: 3.16 (0.53)
Parental Monitoring	Child SRQ	1-4	Mothers: .88 Fathers: .91	Mother: 3.25 (0.52) Father: 2.93 (0.63)
Making Decisions	Child, Parent in lab, Parent at home	1-5, difference scores, low = better agreement	Child report: .82 Mother report: .82	Difference scores |Mother – Child| 1.28 (0.44)
CRPBI/ Responsiveness	Child, Parent in lab, Parent at home		Mother report: .77 Child (mother): .71 Child (father): .85	MSR: 2.80 (0.24) C (m): 2.69 (0.27) C (f): 2.49 (0.40)
POPS- Autonomy Support	Child, Parent in lab, Parent at home	1-5	Mother report: .67 Child (mother): .74 Child (father): .77	MSR: 4.09 (0.35) C(m): 3.76 (0.27) C(f): 3.66 (0.55)
Friendship Quality Questionnaire	Child SRQ	0-4	.91	2.91 (0.56)
Quality of Child's Friendships	Parent in lab	1-4	.87	3.30 (0.39)
Strengths & Difficulties Questionnaire/ Peer problems	Parent in lab, Teachers	0-2	Parent: .58 Teacher: .84	PR: 0.40 (0.37) TR: 0.34 (0.35)
TCRS 2.1/Peer Social Skills	Teachers	1-5	.93	4.09 (0.88)

School Age Temperament Inventory/ withdrawal, negative reactivity	Parent in lab	1-5	Negative Reactivity: .94 Withdrawal: .89	Negative Reactivity: 2.88 (0.86) Withdrawal: 2.77 (0.79)
Picture Vocabulary Test	Child	Computerized	Not provided	111.51 (12.50)

Note: MSR = Mother self-report, C(m) = child report on relationship with mother, C(f) = child report on relationship with father, PR = parent report, TR = teacher report

Analytic Plan

Preliminary Analyses

Power analyses were conducted to determine the sample size needed to obtain power of .80. For bivariate correlations, a sample size of 82 is necessary to obtain a power of .80. For regressions with three demographic variables being controlled for and three main variables (the three supervision partnership components, either measured by FFI or self-report questionnaires), a sample size of 98 is required to detect the omnibus R^2, and a sample size of 77 to detect a change in R^2, both for a power of .80. For the structural equation model, it is suggested that a minimum sample size is ten participants for each parameter in the model. The model we aimed to test had 9 parameters, which suggests a sample size of 90.

Prior to analyzing the data to address the main hypotheses, correlations were calculated between the demographic variables and all variables included in the main analyses. For each significant correlation between a demographic variable and a main variable, the demographic variable was controlled for in each regression analysis that used the main variable. This reduces the probability that any significant results in the main analyses are the result of significant relationships with other variables outside the relationship being tested. Violations of statistical assumptions (e.g. normality, linear relationship, homoscedasticity) were explored, but no significant violations were found. Therefore, all variables are based on the scaling of the raw data and no transformations were used.

As many of the measures used were modified from their original forms, construct validity and internal consistency of each scale was investigated prior to including these variables in

primary analyses. To test whether the supervision partnership demonstrated discriminant validity, correlations between the supervision partnership and temperament and verbal intelligence were explored.

Primary Analyses

Each analysis was performed twice, once with data regarding mothers, and again with data regarding fathers, except for cases where data for fathers was missing. A confirmatory factor analysis was conducted to explore whether the components of the supervision partnership are part of the same higher order construct of attachment. To test hypotheses regarding the relationship between the supervision partnership and parenting, peer competence, and narrative coherence, correlations were performed before regression analyses to explore the relationships between variables. Separate multiple linear regressions were computed for indicators of the supervision partnership measured by the Friends and Family Interview (FFI) and self-report questionnaires. Each regression analysis controlled for demographic variables related to any of the variables used in the analysis by including relevant demographic variables in step one of the multiple regression, followed by indicators of availability and accessibility, willingness to communicate and mutual recognition of others' rights in the second step.

Results

Preliminary Analyses

The demographic variables included were age, gender, race (Caucasian or minorities), household type (intact family or not), and whether the family is eligible for food stamps (see Table 2). We found that older children had lower ratings of availability and accessibility for both mothers and fathers, lower ratings of child reported maternal and paternal responsiveness, and higher parent ratings of problems with peers compared to younger children. Gender was only related to children's self-report of recognition of other's rights, with girls rating higher than boys. Race was only related to self-reported accessibility and availability for fathers and parent reported peer problems, with Caucasian children reporting higher scores on accessibility and availability for fathers and parent reported peer problems. We also found that children from non-intact families had lower ratings of both interview and self-report measures of all indicators of the supervision partnership for fathers. Children from non-intact families also reported lower ratings of paternal responsiveness and had higher parent and teacher ratings of peer problems than children from intact families. We also found that children whose families were eligible for food stamps were rated as more temperamentally withdrawn, having higher quality friendships, and more peer problems by their parents.

Thus, 19 of the 105 correlations for the demographic variables were significant, with age and family status showing the most consistent associations. To control for significant relationships between demographic variables and main variables, we included each relevant

Table 2

Correlations between demographic variables and main variables of interest

	Age	Gender	Race	Household Type	Food Stamps
FFI Accessibility and Availability-Mother[a]	-.11	.16	.04	-.16	-.07
FFI Communication-Mother[a]	-.11	.16	.06	-.16	-.01
FFI Recognition-Mother[a]	-.11	-.03	.12	-.12	-.11
SRQ Accessibility and Availability-Mother[a]	-.23*	.16	.10	.15	-.04
SRQ Communication-Mother[a]	-.05	.15	.14	-.01	-.08
SRQ Recognition-Mother[b]	.04	.22*	-.15	-.05	.01
CR Maternal Responsiveness[a]	-.21*	.06	-.03	-.11	-.03
CR Maternal Autonomy Support[a]	.02	-.05	-.00	-.04	-.07
MR Maternal Responsiveness[b]	-.14	-.16	-.03	-.01	-.10
MR Maternal Autonomy Support[b]	.03	.03	.20	-.08	.08
FFI Accessibility and Availability- Father[b]	-.06	.02	.12	-.27*	.00
FFI Communication-Father[b]	-.06	-.07	.08	-.28**	-.04
FFI Recognition-Father[b]	-.03	.01	.10	-.54***	-.07
SRQ Accessibility and Availability-Father[b]	-.29**	-.10	.23*	-.32**	-.12
SRQ Communication-Father[b]	-.07	-.01	.18	-.23*	-.07
CR Paternal Responsiveness[b]	-.25*	.00	.08	-.24*	-.04
CR Paternal Autonomy Support[b]	-.04	-.09	.09	-.21	-.13

CR Friendship Quality[a]	-.17	.13	-.05	-.10	-.20
PR Friendship Quality[a]	-.01	.16	.06	.03	.24*
PR Peer Problems[a]	.22*	.04	.23*	.37***	.28**
TR Peer Problems[c]	.02	-.15	.13	.28*	.17
TR Peer Social Skills[c]	-.07	.21	-.05	-.26	-.15
FFI Coherence[a]	-.07	.06	.07	-.15	-.13
PR Negative Reactivity[a]	.07	.04	-.06	.05	.12
PR Withdrawal[a]	.12	.12	-.16	-.01	.24*

Note: * p < .05, ** p < .01, *** p < .001; [a] *n* = 89 to 92, [b] *n* =83 to 88, [c] *n* = 55 to 57; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview, SRQ = Self-Report Questionnaires, CR = Child Reported, MR = Mother Reported, PR = Parent (in-lab) Reported, TR = Teacher Reported

demographic variable (i.e., those significantly related with an outcome) in step one of each regression analysis, and the supervision partnership variables in step two. This procedure allows us to assess whether the supervision partnership variables predict significant variance in the dependent variable, while controlling for the effects of the relevant demographic variables.

Next, correlations between dependent variables were examined, to assess whether any variables were highly related to each other, and should therefore be aggregated in main analyses. For parenting variables (Table 3), we had child reports for responsiveness and autonomy support for both mothers and fathers. We also have mother reports of their own responsiveness and autonomy support (we were unable to analyze father reports due to low sample size). None of the parenting variables were highly related to any other parenting variables, and were therefore kept as separate variables in all main analyses.

Table 3

Correlations between parenting variables

	CR Maternal Responsiveness	CR Maternal Autonomy Support	MR Maternal Responsiveness	MR Maternal Autonomy Support	CR Paternal Responsiveness
CR Maternal Responsiveness	-				
CR Maternal Autonomy Support	.38*** (92)	-			
MR Maternal Responsiveness	.14 (86)	.03 (86)	-		
MR Maternal Autonomy Support	-.10 (86)	.15 (86)	.17 (86)	-	
CR Paternal Responsiveness	.41*** (84)	.29** (84)	.08 (78)	.09 (78)	-
CR Paternal Autonomy Support	.22* (84)	.62*** (84)	-.03 (78)	.15 (78)	.56*** (84)

Note: * p < .05, ** p < .01, *** p < .001; (*n*); CR = Child Reported, MR = Mother Reported

Table 4

Correlations between peer competence variables

	CR Positive Friendship Quality	PR Positive Friendship Quality	PR Peer Problems	TR Peer Problems	TR Peer Social Skills
CR Positive Friendship Quality	-				
PR Positive Friendship Quality	.16 (89)	-			
PR Peer Problems	-.18 (90)	-.03 (91)	-		
TR Peer Problems	-.03 (55)	.07 (56)	.52*** (57)	-	
TR Peer Social Skills	.03 (55)	-.11 (56)	-.52*** (57)	-.87*** (57)	-
TR Peer Competence	.03 (55)	-.09 (56)	-.53*** (57)	-.96*** (57)	.98*** (57)

Note: * p < .05, ** p < .01, *** p < .001; (*n*); CR = Child Reported, MR = Mother Reported, PR = Parent (in-lab) Reported, TR = Teacher Reported; TR Peer Competence is a composite of TR Peer Problems and TR Peer Social Skills, with TR Peer Problems reverse scored

For peer competence variables, we had child and parent reports of friendship quality, parent and teacher reports of peer problems, and teacher reports of peer social skills. We examined correlations between these peer competence variables (Table 4), and found a large negative correlation between teacher reported peer problems and peer social skills ($r = -.87$, $p < .001$). Therefore, we reverse-scored the teacher reported peer problems subscale and aggregated it with the teacher reported peer social skills subscale to create a teacher reported peer competence variable, which was used in all main analyses. All other within-rater and between-rater correlations for peer competence variables were too small to justify aggregating, and were therefore left as separate variables in all main analyses.

Supervision Partnership Measures: Reliability and Validity

To test the hypothesis that the revised supervision partnership measures would demonstrate acceptable reliability, observer agreement measured by intraclass correlations for the Friends and Family Interview and Cronbach's alpha for self-report questionnaires were examined. As shown in Table 1, intraclass correlations for the FFI variables were well within the acceptable range, from .81 to .92. Intraclass correlations for the two new scales, willingness to communicate and mutual recognition of others' rights were within the same range as the intraclass correlations for the remainder of the validated FFI Scales. The Security Scale (Kerns et al., 2001) included three new items, intended to supplement the secure base subscale. For the full 24-item measure, which assesses our component Availability and Accessibility, Cronbach's α = .88 for mothers, and .93 for fathers. To assess willingness to communicate, we revised Stattin and Kerr's (2000) Parental Monitoring measure by deleting some items due to redundancy and inappropriate content, and added some items to assess a wider range of topics for communication. This measure also demonstrated good reliability (Cronbach's α = .88 for

mothers, and .91 for fathers). Finally, to assess mutual recognition of others' rights, we combined items from the Family Decision Making Scale (Dornbush et al., 1985) and the Making Decisions questionnaire (Brody et al., 1994; Eccles et al., 1991), and altered the wording to administer to both the children and their parents. The resulting questionnaire also demonstrated acceptable reliability (Cronbach's $\alpha = .82$ for children, and .82 for mothers). Therefore, all indicators of the supervision partnership, both measured by interview and self-report questionnaires, demonstrated good reliability.

As part of this hypothesis, we also predicted that the supervision partnership would demonstrate discriminant validity by not significantly correlating with temperament and verbal intelligence. To test this hypothesis, Pearson's correlations were conducted for both mothers and fathers (Table 5). None of the indices of the supervision partnership, for either mothers or fathers, were significantly correlated with temperamental withdrawal or negative reactivity. However, we found that most of the indices of the supervision partnership were moderately related to verbal intelligence, both for mothers and fathers, with small to medium effect sizes. Therefore, we included verbal intelligence as a demographic variable, and controlled for it in all main regression analyses.

Supervision Partnership Components as Factors of the Same Latent Construct

To test my second hypothesis, that the three components of the supervision partnership will belong to the same higher-order latent construct of attachment, I first investigated correlations between the indices. I expected the three components of the supervision partnership to be significantly correlated with one another, within a relationship and across measurement method. Correlations were calculated between the three indices of the supervision partnership as measured by the Friends and Family Interview (FFI) for both mothers and fathers, all three

indices as measured by self-report questionnaire for mothers, and two of three indices measured by self-report questionnaire for fathers (all except mutual recognition, which could not be calculated for fathers).

Most correlations between the three indices of the supervision partnership, as measured by the FFI and by self-report questionnaires filled out by the child, were significant for both mothers and fathers (Table 6). However, the child report of the mutual recognition of others' rights for mothers was only significantly related to one other index of the supervision partnership, mutual recognition of other's rights measured by the FFI. For mothers, correlations for the three components ranged between .65 and .86 for the FFI, .14 to .58 for the self-report questionnaires, and .16 to .46 when examining correlations across the methods. For fathers, correlations for the three components correlated between .60 and .76 for the FFI, .61 for the self-report questionnaires, and .42 to .61 when examining correlations across the methods. The three components of the supervision partnership as measured by the FFI are more highly related to one another than when these characteristics were measured with questionnaires.

To test whether the three components of the supervision partnership belong to the same higher-order latent construct of attachment, a confirmatory factor analysis (CFA) was computed separately for mothers and fathers using structural equation modeling. The CFA model for mothers includes the three indicators of the supervision partnership measured by the FFI, and verbal intelligence as a control (models not tested with questionnaire data due to smaller correlations between variables for mothers and missing information for fathers). In assessing model fit for mothers, the chi-square test was not significant, χ^2 (2) = 3.77, p = .15, indicating no discrepancy between the obtained and proposed model. Other model fit indices indicate good to

Table 5

Correlations between the supervision partnership and child temperament and verbal IQ

	Withdrawal	Negative Reactivity	Verbal IQ
FFI Accessibility and Availability- Mothers	-.05	.10	.23*
FFI Communication- Mothers	.03	.16	.20
FFI Recognition- Mothers	-.11	.09	.31**
SRQ Accessibility and Availability- Mothers	-.20	-.13	.12
SRQ Communication- Mothers	-.15	.12	.21*
SRQ Recognition-Mothers	.02	.16	.22*
FFI Accessibility and Availability- Fathers	-.16	.03	.07
FFI Communication- Fathers	-.04	.05	.13
FFI Recognition- Fathers	-.03	.09	.31**
SRQ Accessibility and Availability- Fathers	-.20	-.08	.19
SRQ Communication- Fathers	-.20	.09	.24*

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview, SRQ = Self-Report Questionnaires; Sample sizes varied between all analyses—for FFI and SRQ accessibility and availability and willingness to communicate for mothers and temperamental withdrawal and negative reactivity $n = 92$, for verbal IQ $n = 91$; for mutual recognition of others' rights SRQ for mothers, $n = 86$; for FFI for fathers and temperament $n = 87$, for verbal IQ $n = 86$; for SRQ accessibility and availability for fathers and temperament $n = 84$, for verbal IQ $n = 83$; for SRQ willingness to communicate for fathers and temperament $n = 85$ for verbal IQ $n = 84$

Table 6

Correlations between the indicators of the Supervision Partnership

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. FFI Accessibility and Availability- Mothers	**-**									
2. FFI Communication- Mothers	**.86*** **	**-**								
3. FFI Recognition- Mothers	**.67*** **	**.65*** **	**-**							
4. SRQ Accessibility and Availability- Mothers	**.39*** **	**.35** **	**.30** **	**-**						
5. SRQ Communication- Mothers	**.46*** **	**.42*** **	**.37*** **	**.58*** **	**-**					
6. SRQ Recognition- Mothers	**.18**	**.16**	**.27***	**.14**	**.17**	-				
7. FFI Accessibility and Availability- Fathers	.48***	.52***	.46***	.04	.21	.13	**-**			
8. FFI Communication- Fathers	.38***	.55***	.44***	.06	.25*	.14	**.76*** **	**-**		
9. FFI Recognition- Fathers	.39***	.46***	.65***	.07	.24*	.13	**.60*** **	**.63*** **	**-**	
10. SRQ Accessibility and Availability- Fathers	.10	.20	.19	.33**	.24*	-.02	**.42*** **	**.51** **	**.53** **	**-**
11. SRQ Communication- Fathers	.37***	.40***	.47***	.30**	.67***	.23*	**.55*** **	**.61*** **	**.58*** **	**.61*** **

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; bolded correlations = within relationship correlations; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview, SRQ = Self-Report Questionnaires; Sample sizes varied between all analyses—for correlations between all FFI and Accessibility and Availability and Willingness to Communicate for mothers, $n = 92$; for all mother analyses for SRQ mutual recognition of others' rights for mothers, $n = 86$; for all father analyses with mutual recognition of others' rights for mothers, $n = 78$ to 81; for father FFI analyses with mother FFI and SRQ analyses, $n = 87$; for father SRQ $n = 84$ to 85

moderate model fit, including root mean square error of approximation (RMSEA) = 0.09, 90% confidence interval (CI) = [0.00, 0.25]; comparative fit index (CFI) = 0.99; standardized root mean square residual (SRMR) = 0.04 (note that a good fit is determined by a not significant chi-square statistic, an RMSEA value close to zero, the RMSEA CI not exceeding 0.10, a CFI value close to 1.00, and a SRMR value close to zero; Kline, 2011). Standardized path estimates for this model are reported in Figure 1, and demonstrate strong path estimates for availability and accessibility and willingness to communicate, a moderate but significant path estimate for mutual recognition of others rights, and a significant path for verbal intelligence. For fathers, model fit indices indicate moderate to poor model fit, χ^2 (2) = 8.96, p = .01, root mean square error of approximation (RMSEA) = 0.19, 90% confidence interval (CI) = [0.08, 0.33]; comparative fit index (CFI) = 0.95; standardized root mean square residual (SRMR) = 0.06. Standardized path estimates for this model are reported in Figure 2, and indicate strong path estimates for availability and accessibility and willingness to communicate, a moderate but significant path estimate for mutual recognition of others' rights, and a non-significant path for verbal intelligence. As with the correlations, effect sizes are stronger for mothers than for fathers.

Supervision Partnership and Parenting

To test the third hypothesis that the supervision partnership would be related to parental responsiveness and autonomy support, Pearson's correlations (Table 7) and linear regressions (Tables 8 - 13) were conducted for both mothers and fathers. All indicators of the supervision partnership for mothers, measured by both the FFI and self-report questionnaires, were significantly correlated with child-reported maternal responsiveness, except for self-reported recognition of others' rights. As shown in Table 8, the three indicators of the supervision

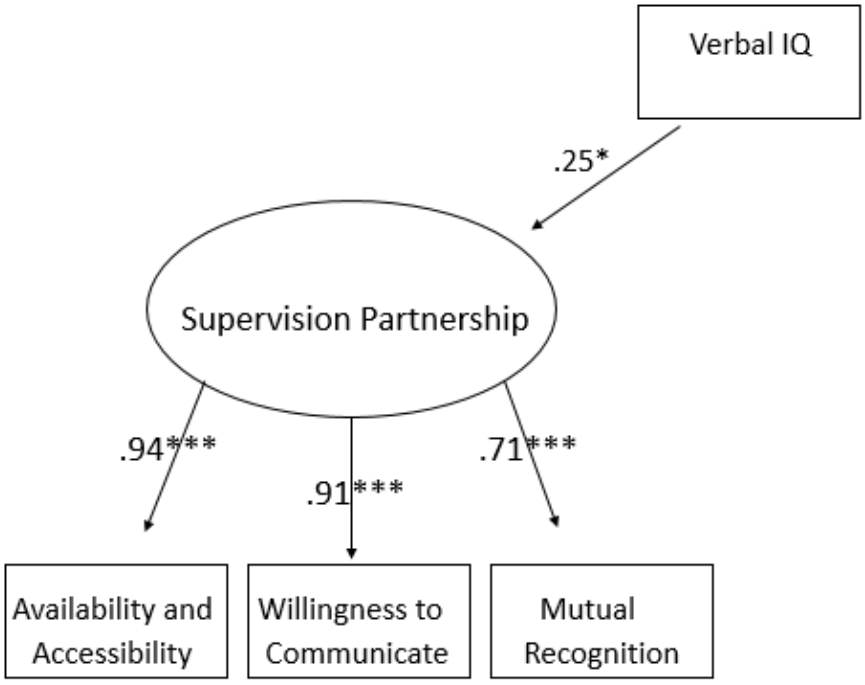

Figure 1.

The supervision partnership measured by the FFI confirmatory factor analysis model for mothers

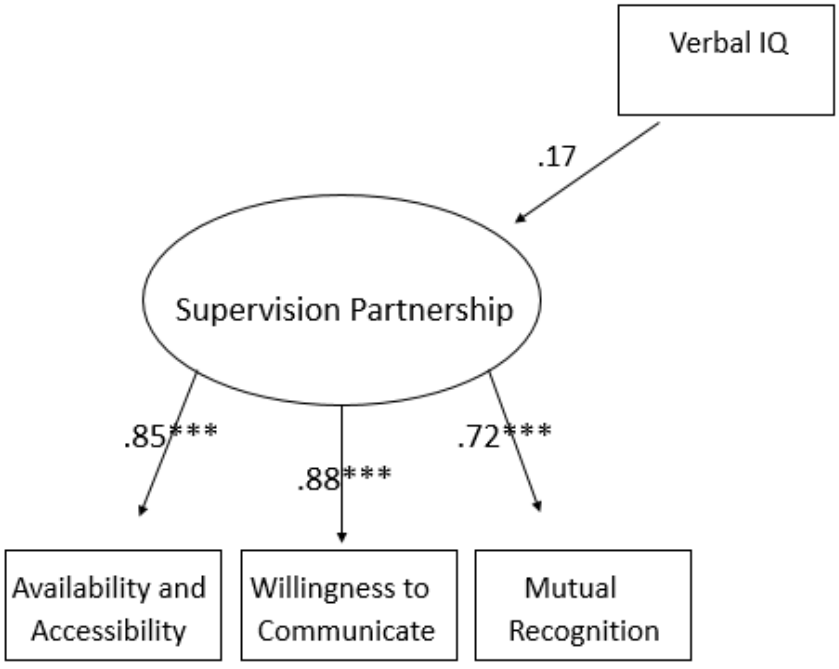

Figure 2.

The supervision partnership measured by the FFI confirmatory factor analysis model for fathers

partnership as measured by the FFI significantly predicted child reports of maternal responsiveness ($F[5,85] = 4.29$, $p = .002$), accounting for 20% of variance. Similarly, the three indicators of the supervision partnership measured by self-report questionnaires also significantly predicted child reports of maternal responsiveness ($F[6,79] = 9.57$, $p < .001$), and accounted for 42% of variance.

For fathers, all three indices of the supervision partnership measured by the FFI, and accessibility and availability and willingness to communicate measured by self-report questionnaires were significantly correlated with child reports of paternal responsiveness (see Table 5). As shown in Table 9, the three indices of the supervision partnership for fathers, when measured by the FFI, together significantly predicted child reported paternal responsiveness, ($F[6,75] = 6.97$, $p < .001$) accounting for 24% of variance. The supervision partnership as measured by self-report questionnaires (without mutual recognition) also significantly predicted child reported paternal responsiveness ($F[6,75] = 18.34$, $p < .001$) and accounted for 47% of the variance.

Similarly, all indicators of the supervision partnership for mothers were significantly correlated with child reported maternal autonomy support, except for willingness to communicate measured by the FFI. As shown in Table 10, for child reported maternal autonomy support and the supervision partnership measured by FFI, significant variance was explained by all three indicators together ($F[4,86] = 6.73$, $p < .001$), and accounted for 17% variance. The three indicators of the supervision partnership for mothers measured by self-report questionnaires also significantly predicted child reported maternal autonomy support ($F[6,79] = 5.80$, $p < .001$) and accounted for 21% variance.

The supervision partnership for fathers (see Table 11) measured by the FFI significantly predicted child reported paternal autonomy support ($F(5,76) = 5.94$, $p < .001$), and accounted for 16% variance. Two of the three indicators of the supervision partnership measured by self-report questionnaires also predicted child reported paternal autonomy support ($F[6,75] = 7.30$, $p < .001$), accounting for 26% variance. ($F[6,73] = 3.51$, $p = .004$), and explains 20% variance. Mother reported maternal responsiveness and autonomy support were not significantly correlated with any indicators of the supervision partnership. No regressions for mother reported maternal responsiveness and autonomy support yielded significant results (see Tables 12-13).

In summary, the supervision partnership was related to child reported parental responsiveness and autonomy support for both mothers and fathers, but was not related to mother reports of maternal responsiveness or autonomy support.

Supervision Partnership and Peer Competence

To test the fourth hypothesis that the supervision partnership would be related to peer competence, Pearson's correlations (Table 14) and linear regressions (Tables 15-22) were conducted. Child reported positive friendship quality was significantly correlated with all indicators of the supervision partnership for mothers, both from the FFI and self-report questionnaires, except for the self-report of mutual recognition of others' rights. As shown in Table 15, the indicators from the FFI for mothers predicted child reported positive friendship quality ($F[4,84] = 5.30$, $p = .001$), and explained 19% of variance. For the indicators from self-reports of the supervision partnership for mothers, the three indicators together also significantly predicted child reported friendship quality ($F[6,77] = 3.76$, $p = .002$) and explained 17% of variance.

Table 7

Correlations between the supervision partnership and parenting

	CR Responsiveness	CR Autonomy Support	MR Responsiveness	MR Autonomy Support
Mother-Child Relationship				
FFI Accessibility and Availability- Mothers	.40***	.32**	.03	-.08
FFI Communication- Mothers	.36***	.20	.04	.01
FFI Recognition- Mothers	.36***	.43***	.07	-.01
SRQ Accessibility and Availability-Mothers	.65***	.43***	-.02	-.01
SRQ Communication- Mothers	.45***	.33**	-.01	-.03
SRQ Recognition-Mothers	.19	.37***	.04	-.04
Father-Child Relationship				
FFI Accessibility and Availability- Fathers	.47***	.32**		
FFI Communication- Fathers	.42***	.40***		
FFI Recognition- Fathers	.50***	.47***		
SRQ Accessibility and Availability- Fathers	.75***	.54***		
SRQ Communication- Fathers	.52***	.47**		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview, SRQ = Self-Report Questionnaires, CR = Child Reported, MR = Mother Reported; Sample sizes varied between all analyses—for FFI and SRQ for mothers and child reported parenting, $n = 92$; for FFI and SRQ for mothers and mother reported parenting, $n = 86$; for FFI for fathers and child reported parenting, $n = 87$; for SRQ for fathers and child reported parenting, $n = 84$ to 85

Table 8

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Child Reported Maternal Responsiveness

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Age	-.04	.02	-.19	-1.81	-.03	.02	-.16	-1.60
Verbal IQ	.00	.00	.16	1.56	.00	.00	.06	0.63
Accessibility/ Availability					.12	.08	.29	1.43
Communication					.00	.08	.00	0.02
Recognition					.05	.06	.12	0.85
R^2 Change			.07*				.13**	
Total F			3.30*				4.29***	
SRQ (Mother)								
Age	-.04	.02	-.19	-1.78	-.01	.02	-.05	-0.56
Gender	.01	.06	.01	0.13	-.02	.05	-.03	-0.35
Verbal IQ	.00	.00	.19	1.77	.00	.00	.09	1.01
Accessibility/ Availability					.39	.08	.54	4.87***
Communication					.05	.06	.09	0.89
Recognition					-.04	.05	-.08	-0.82
R^2 Change			.08				.34***	
Total F			2.41				9.57***	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 90, for SRQ analysis, *n* = 85

Table 9

Summary of Hierarchical Regression Analyses for Father Variables Predicting Child Reported Paternal Responsiveness

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Age	-.08	.04	-.25	-2.31*	-.08	.03	-.24	-2.55*
Intact Family	-.26	.11	-.24	-2.27*	-.02	.12	-.02	-0.16
Verbal IQ	.00	.00	.03	0.25	-.00	.00	-.04	-0.45
Accessibility/ Availability					.19	.10	.28	1.87
Communication					-.00	.09	-.01	-0.05
Recognition					.19	.08	.33	2.30*
R^2 Change			.12*				.24***	
Total F			3.66*				6.97***	
SRQ (Father)								
Age	-.08	.04	-.25	-2.30*	-.02	.03	-.05	-0.69
Ethnicity	.07	.12	.06	0.59	-.11	.08	-.10	-1.33
Intact Family	-.25	.12	-.24	-2.22*	-.01	.08	-.01	-0.12
Verbal IQ	.00	.00	.03	0.23	-.00	.00	-.09	-1.17
Accessibility/ Availability					.53	.08	.69	6.87***
Communication					.09	.06	.14	1.46
R^2 Change			.13*				.47***	
Total F			2.81*				18.34***	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 81, for SRQ analysis, *n* = 81

Table 10

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Child Reported Maternal Autonomy Support

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Verbal IQ	.01	.00	.26	2.56*	.01	.00	.14	1.41
Accessibility/ Availability					.28	.15	.36	1.88
Communication					-.29	.14	-.40	-2.11*
Recognition					.33	.11	.39	2.95**
R^2 Change			.07*				.17**	
Total F			6.55*				6.73***	
SRQ (Mother)								
Age	.01	.04	.02	0.21	.04	.04	.11	1.11
Gender	-.12	.11	-.11	-1.08	-.10	.10	-.10	-0.99
Verbal IQ	.01	.00	.29	2.76**	.01	.00	.19	1.90
Accessibility/ Availability					.45	.17	.33	2.73**
Communication					.06	.12	.06	0.50
Recognition					-.29	.11	-.26	-2.59*
R^2 Change			.10*				.21***	
Total F			2.99*				5.80***	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 90, for SRQ analysis, *n* = 85

Table 11

Summary of Hierarchical Regression Analyses for Father Variables Predicting Child Reported Paternal Autonomy Support

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Intact Family	-.26	.16	-.18	-1.67	.04	.17	.03	0.24
Verbal IQ	.01	.01	.25	2.31*	.01	.01	.16	1.56
Accessibility/ Availability					-.03	.15	-.04	-0.23
Communication					.16	.13	.21	1.29
Recognition					.27	.12	.34	2.21*
R^2 Change			.11*				.16**	
Total F			4.66*				5.59***	
SRQ (Father)								
Age	-.01	.05	-.02	-0.22	.05	.04	.11	1.09
Ethnicity	.10	.16	.06	0.60	-.09	.14	-.06	-0.61
Intact Family	-.26	.16	-.18	-1.61	-.01	.14	-.01	-0.07
Verbal IQ					.01	.01	.15	1.60
Accessibility/ Availability					.47	.13	.45	3.57***
Communication					.16	.10	.19	1.58
R^2 Change			.11				.26	
Total F			2.38				7.30***	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 81, for SRQ analysis, *n* = 81

Table 12

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Mother Reported Maternal Responsiveness

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Verbal IQ	.00	.00	.15	1.38	.00	.00	.15	1.27
Accessibility/ Availability					-.04	.09	-.10	-0.42
Communication					.02	.08	.06	0.29
Recognition					.02	.06	.05	0.30
R^2 Change			.02				.00	
Total F			1.91				0.52	
SRQ (Mother)								
Age	-.02	.02	-.12	-1.11	-.03	.02	-.14	-1.19
Gender	-.08	.05	-.16	-1.47	-.09	.06	-.18	-1.59
Verbal IQ	.00	.00	.13	1.19	.00	.00	.15	1.36
Accessibility/ Availability					-.04	.09	-.07	-0.47
Communication					.01	.07	.03	0.21
Recognition					.06	.06	.11	0.95
R^2 Change			.06				.01	
Total F			1.79				1.08	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 85, for SRQ analysis, *n* = 85

Table 13

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Mother Reported Maternal Autonomy Support

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Verbal IQ	.00	.00	.07	0.61	.00	.00	.09	0.80
Accessibility/ Availability					-.23	.12	-.43	-1.85
Communication					.17	.11	.33	1.51
Recognition					.03	.09	.05	0.32
R^2 Change			.00				.04	
Total F			0.37				0.97	
SRQ (Mother)								
Age	.01	.03	.04	0.32	.01	.03	.04	0.31
Gender	.02	.08	.03	0.30	.04	.08	.05	0.42
Verbal IQ	.00	.00	.07	0.65	.00	.00	.07	0.62
Accessibility/ Availability					.02	.14	.02	0.15
Communication					-.05	.10	-.07	-0.46
Recognition					-.04	.09	-.05	-0.38
R^2 Change			.01				.00	
Total F			0.19				0.15	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 85, for SRQ analysis, *n* = 85

All three indices of the supervision partnership measured by the FFI for fathers, and willingness to communicate for fathers measured by self-report questionnaire were related to child reports of positive friendship quality (only self-report of accessibility and availability was not significantly related, as mutual recognition was unable to be assessed by self-report questionnaires for fathers). As shown in Table 16, the supervision partnership for fathers measured by the FFI did not predict significant variance in child-reported positive friendship quality in the overall model ($F[5,77] = 2.04$, $p = .08$), although the supervision partnership did explain a significant amount of variance ($\Delta R^2 = .11$, $p = .02$). When the supervision partnership for fathers is measured by self-report questionnaires, the overall model ($F[6,73] = 3.51$, $p = .004$) is significant, and explains 20% variance.

Parent report of child positive friendship quality only significantly correlated with willingness to communicate for mothers, measured by the FFI. For regressions exploring parent-reported positive friendship quality (see Table 17), the supervision partnership indicators for mothers measured by the FFI together predicted 11% variance ($F[5,83] = 4.32$, $p = .002$). The regression predicting parent reported positive friendship quality by the self-reported indices of the supervision partnership for mothers yielded no significant results. There were no significant correlations between the supervision partnership for fathers and parent reported positive friendship quality, and the regression analyses yielded no significant results (see Table 18).

For correlations with the supervision partnership for mothers, the parent reported peer problems variable was only significantly related to the mutual recognition indicator for mothers from the FFI, with a negative correlation that indicated that children with higher scores on mutual decision making had lower peer problems. For parent reported peer problems (Table 19), the overall model was significant when the three indices of supervision partnership for mothers

were measured by the FFI ($F(8,81) = 3.67$, $p = .001$), but the three indices only predicted 3% of variance, indicating that demographic variables accounted for the significant variance explained in the overall model. The supervision partnership for mothers also significantly predicted parent reported peer problems when measured by self-report questionnaires ($F(9,75) = 3.87$, $p < .001$), but only accounted for 3% of variance.

All five indices of the supervision partnership for fathers were significantly related to parent reported peer problems. For parent-reported peer problems and the supervision partnership for fathers (Table 20), the overall model was significant for the indices measured by the FFI ($F[7,77] = 4.28$, $p < .001$), and it accounted for 14% of variance, but there were no significant results when measured by self-report questionnaires after accounting for demographic variables.

Teacher reported peer problems and peer social skills were combined into one variable of peer competence. Teacher reported peer competence was not related to any indicators of the supervision partnership for mothers. No regression analyses with teacher reported measures of peer competence and the supervision partnership for mothers were significant (Table 21). For fathers, teacher reported peer competence was significantly correlated with availability and accessibility measured by the FFI. No other correlations with teacher-reported variables were significant. There were no significant regression analyses for teacher-reported peer relationship variables and the supervision partnership for fathers (Table 22).

In summary, the supervision partnership for both mothers and fathers significantly predicted child reports of friendship quality for both questionnaire and interview measures of the supervision partnership. Parent reports of friendship quality were only related to the supervision partnership for mothers in one of two analyses, and were not related to the supervision

partnership for fathers. Parent reports of peer problems were significantly related to the supervision partnership for both mothers and fathers in regression analyses, although correlations were stronger for fathers than for mothers. Although there are a couple significant correlations between teacher reports of peer competence and the supervision partnership for fathers, there were no significant regression results between teacher reported peer competence and the supervision partnership for mothers or fathers.

Supervision Partnership and Narrative Coherence

To test my fifth hypothesis that the supervision partnership would be related to narrative coherence, Pearson's correlations (Table 23) and linear regressions (Table 24 for mothers and 25 for fathers) were conducted. For mothers, all of the indicators of the supervision partnership were significantly correlated with narrative coherence, with the exception of mutual recognition self-report. In multiple linear regressions, the three indicators of the supervision partnership for mothers, predicted a significant amount of variance in the overall model when measured by the FFI ($F[4,86] = 59.89$, $p < .001$), and accounted for 70% variance. The supervision partnership for mothers also significantly predicted narrative coherence when measured by self-report questionnaires ($F[6,79] = 4.13$, $p = .001$), and explained 20% of variance. For fathers, all correlations between the five indices of the supervision partnership significantly correlated with narrative coherence, except for availability and accessibility measured by self-report questionnaire. In regression analyses, the overall model was significant when measured by the FFI ($F[5,79] = 10.40$, $p < .001$), and explained 37% of variance. Similarly, the supervision partnership for fathers also predicted narrative coherence when measured by self-report measures ($F(6,75) = 5.18$, $p < .001$), and accounted for 27% variance.

Table 14

Correlations between the supervision partnership and peer social skills

	CR Friendship Quality	PR Friendship Quality	PR Peer Problems	TR Peer Competence
FFI Accessibility and Availability- Mothers	.42***	.19	-.17	.05
FFI Communication- Mothers	.44***	.27**	-.12	.10
FFI Recognition- Mothers	.33**	.00	-.24*	.14
SRQ Accessibility and Availability- Mothers	.30**	.11	-.18	.16
SRQ Communication- Mothers	.44***	.14	-.09	.07
SRQ Recognition- Mothers	.00	.07	.04	.13
FFI Accessibility and Availability- Fathers	.27*	-.01	-.39***	.29*
FFI Communication- Fathers	.26*	.12	-.35**	.26
FFI Recognition- Fathers	.27*	.07	-.29**	.20
SRQ Accessibility and Availability- Fathers	.21	.09	-.33**	.20
SRQ Communication- Fathers	.43***	.01	-.28**	.25

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview, SRQ = Self-Report Questionnaires, CR = Child Reported, MR = Mother Reported, PR = Parent (in-lab) Reported, TR = Teacher Reported; Sample sizes varied between all analyses—for the FFI and SRQ accessibility and availability and willingness to communicate for mothers and child reported positive friendship quality $n = 90$, parent reported positive friendship quality $n = 91$, and parent reported peer problems $n = 92$; for mutual recognition of others' rights SRQ for

mothers and child reported positive friendship quality n = 84, parent reported positive friendship quality n = 85, and parent reported peer problems n = 86; for FFI and SRQ for fathers and child and parent reports of friendship quality and peer problems, n = 82 to 87; for teacher reported peer competence n = 53 to 57 for both mothers and fathers

Table 15

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Child Reported Positive Friendship Quality

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Verbal IQ	.01	.01	.13	1.20	.00	.01	.04	0.36
Accessibility/ Availability					.12	.17	.14	0.73
Communication					.23	.16	.28	1.47
Recognition					.04	.13	.04	0.29
R^2 Change			.02				.19**	
Total F			1.43				5.30**	
SRQ (Mother)								
Age	-.08	.05	-.17	-1.55	-.07	.05	-.16	-1.52
Gender	.13	.13	.12	1.06	.06	.12	.05	0.49
Verbal IQ	.01	.01	.11	1.04	.00	.01	.05	0.49
Accessibility/ Availability					.02	.20	.01	0.10
Communication					.48	.14	.42	3.41**
Recognition					.11	.13	.09	0.84
R^2 Change			.06				.17**	
Total F			1.55				3.76**	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 88, for SRQ analysis, *n* = 83

Table 16

Summary of Hierarchical Regression Analyses for Father Variables Predicting Child Reported Positive Friendship Quality

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Intact Family	-.03	.16	-.02	-0.16	.22	.18	.16	1.23
Verbal IQ	.00	.01	.03	0.29	-.00	.01	-.02	-0.16
Accessibility/ Availability					.14	.16	.15	0.85
Communication					.04	.14	.04	0.25
Recognition					.20	.14	.25	1.46
R^2 Change			.00				.11*	
Total F			0.06				2.04	
SRQ (Father)								
Age	-.04	.05	-.09	-0.82	-.04	.05	-.09	-0.87
Ethnicity	-.09	.18	-.06	-0.51	-.21	.17	-.13	-1.24
Intact Family	-.06	.17	-.04	-0.34	.06	.16	.04	0.39
Verbal IQ	.00	.01	.09	0.75	.00	.01	.01	0.06
Accessibility/ Availability					-.08	.15	-.07	-0.51
Communication					.44	.11	.51	3.91***
R^2 Change			.02				.20***	
Total F			0.41				3.51**	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 82, for SRQ analysis, *n* = 79

Table 17

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Parent Reported Positive Friendship Quality

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Foodstamps	.38	.14	.29	2.75**	.33	.13	.26	2.53**
Verbal IQ	.01	.00	.19	1.81	.01	.00	.20	1.84
Accessibility/ Availability					.01	.12	.02	0.08
Communication					.24	.11	.43	2.18*
Recognition					-.21	.09	-.33	-2.39*
R^2 Change			.09*				.11*	
Total F			4.39*				4.32**	
SRQ (Mother)								
Age	.01	.03	.03	0.24	.01	.04	.04	0.35
Gender	.10	.09	.13	1.14	.06	.09	.07	0.61
Foodstamps	.29	.15	.22	1.95	.31	.15	.24	2.03*
Verbal IQ	.01	.00	.20	1.79	.01	.00	.20	1.66
Accessibility/ Availability					.03	.15	.03	0.18
Communication					.12	.10	.17	1.19
Recognition					.11	.10	.13	1.10
R^2 Change			.09				.04	
Total F			2.04				1.64	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 88, for SRQ analysis, *n* = 83

Table 18

Summary of Hierarchical Regression Analyses for Father Variables Predicting Parent Reported Positive Friendship Quality

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Intact Family	.03	.11	.03	0.29	.05	.13	.05	0.37
Foodstamps	.44	.17	.29	2.60*	.45	.17	.30	2.66*
Verbal IQ	.01	.00	.17	1.56	.01	.00	.14	1.22
Accessibility/ Availability					-.17	.11	-.27	-1.52
Communication					.18	.10	.31	1.76
Recognition					.02	.09	.03	0.18
R^2 Change			.09*				.04	
Total F			2.73*				1.99	
SRQ (Father)								
Age	.01	.04	.04	0.38	.03	.04	.10	0.86
Ethnicity	.04	.12	.04	0.31	.01	.12	.10	0.08
Intact Family	.03	.12	.03	0.28	.06	.13	.05	0.45
Foodstamps	.45	.18	.30	2.54*	.48	.18	.32	2.67**
Verbal IQ	.01	.00	.18	1.56	.01	.00	.18	1.54
Accessibility/ Availability					.16	.12	.22	1.41
Communication					-.08	.09	-.13	-0.89
R^2 Change			.10				.03	
Total F			1.59				1.42	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 83, for SRQ analysis, *n* = 80

Table 19

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Parent Reported Peer Problems

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Age	.05	.03	.18	1.82	.05	.03	.17	1.75
Ethnicity	-.17	.09	-.18	-1.85	-.16	.09	-.16	-1.66
Intact Family	.22	.09	.25	2.45*	.22	.09	.26	2.46*
Foodstamps	.20	.13	.16	1.58	.18	.13	.15	1.39
Verbal IQ	-.00	.00	-.08	-0.83	-.00	.00	-.04	-0.38
Accessibility/ Availability					-.05	.11	-.09	-0.45
Communication					.09	.10	.17	0.86
Recognition					-.13	.08	-.21	-1.53
R^2 Change		.24***				.03		
Total F		5.19***				3.67**		
SRQ (Mother)								
Age	.05	.03	.15	1.59	.03	.03	.10	1.01
Gender	-.03	.08	-.04	-0.37	-.01	.08	-.01	-0.07
Ethnicity	-.17	.10	-.17	-1.68	-.14	.10	-.13	-1.32
Intact Family	.27	.09	.30	2.92**	.32	.10	.35	3.29**
Foodstamps	.27	.14	.21	1.97	.25	.14	.20	1.81
Verbal IQ	-.00	.00	-.10	-0.95	-.00	.00	-.07	-0.68
Accessibility/ Availability					-.20	.13	-.19	-1.51
Communication					-.00	.09	-.00	-0.02
Recognition					-.01	.09	-.01	-0.13
R^2 Change		.29***				.03		
Total F		5.23***				3.87***		

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 89, for SRQ analysis, *n* = 84

Table 20

Summary of Hierarchical Regression Analyses for Father Variables Predicting Parent Reported Peer Problems

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Age	.06	.03	.20	1.92	.05	.03	.18	1.88
Ethnicity	-.14	.10	-.14	-1.36	-.10	.10	-.10	-1.03
Foodstamps	.36	.15	.26	2.39*	.38	.14	.27	2.63*
Verbal IQ	-.00	.00	-.07	-0.62	-.00	.00	-.04	-0.33
Accessibility/ Availability					-.19	.10	-.31	-1.96
Communication					-.03	.08	-.07	-0.41
Recognition					-.01	.07	-.03	-0.19
R^2 Change			.14*				.06	
Total F			3.29*				4.28***	
SRQ (Father)								
Age	.06	.03	.19	1.78	.04	.03	.15	1.34
Ethnicity	-.11	.10	-.11	-1.02	-.05	.10	-.06	-0.52
Intact Family	.16	.10	.17	1.59	.10	.11	.10	0.90
Foodstamps	.35	.15	.25	2.24*	.35	.15	.26	2.33*
Verbal IQ	.00	.00	-.01	-0.10	.00	.00	.04	0.36
Accessibility/ Availability					-.09	.10	-.13	-0.92
Communication					-.09	.07	-.16	-1.23
R^2 Change			.17*				.06	
Total F			3.00*				2.98**	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 84, for SRQ analysis, *n* = 81

Table 21

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Teacher Reported Peer Competence

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Intact Family	-.60	.26	-.30	-2.28*	-.60	.27	-.31	-2.23*
Verbal IQ	-.01	.01	-.18	-1.35	-.01	.01	-.20	-1.46
Accessibility/ Availability					-.25	.35	-.21	-0.72
Communication					.11	.29	.11	0.39
Recognition					.32	.25	.24	1.30
R^2 Change			.11				.04	
Total F			3.12				1.65	
SRQ (Mother)								
Age	-.03	.08	-.05	-0.38	-.01	.08	-.01	-0.10
Gender	.19	.21	.12	0.92	.12	.23	.08	0.50
Intact Family	-.58	.27	-.30	-2.15*	-.57	.28	-.29	-1.99
Verbal IQ	-.01	.01	-.18	-1.28	-.01	.01	-.23	-1.57
Accessibility/ Availability					.45	.37	.21	1.22
Communication					.05	.25	.04	0.20
Recognition					.15	.27	.09	0.57
R^2 Change			.13				.04	
Total F			1.89				1.41	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 54, for SRQ analysis, *n* = 53

Table 22

Summary of Hierarchical Regression Analyses for Father Variables Predicting Teacher Reported Peer Competence

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Intact Family	-.57	.32	-.24	-1.76	-.44	.34	-.19	-1.32
Verbal IQ	-.01	.01	-.16	-1.12	-.01	.01	-.15	-1.05
Accessibility/ Availability					.32	.25	.26	1.31
Communication					.06	.23	.06	0.26
Recognition					-.01	.22	-.01	-0.05
R^2 Change			.09				.09	
Total F			2.25				1.87	
SRQ (Father)								
Age	.02	.09	.03	0.20	.03	.09	.06	0.38
Ethnicity	-.08	.28	-.04	-0.28	-.24	.28	-.13	-0.86
Intact Family	-.46	.36	-.19	-1.28	-.38	.37	-.16	-1.05
Verbal IQ	-.01	.01	-.15	-1.03	-.01	.01	-.21	-1.46
Accessibility/ Availability					.14	.26	.10	0.53
Communication					.34	.23	.27	1.49
R^2 Change			.06				.10	
Total F			0.73				1.42	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 50, for SRQ analysis, *n* = 49

Supervision Partnership: Unique Contributions

Lastly, to test my sixth hypothesis that the willingness to communicate and mutual recognition of others' rights components would predict variance above and beyond that predicted by the availability and accessibility component alone, the results from each of the previous multiple linear regressions were explored. Thirty-two regressions were conducted, and of those, there were 14 regression analyses in which at least one of the components of the supervision partnership contributed unique variance, as assessed by significant beta values. Of the fourteen analyses in which at least one component was a unique predictor, there were three analyses in which the availability and accessibility component was the only unique contributor, four analyses in which the availability and accessibility component along with one of the other components contributed unique variance, and in seven analyses, the willingness to communicate and mutual recognition of others' rights components but not the availability and accessibility component were unique contributors. Therefore, in 10 of 14 (71%) analyses in which at least one component contributed unique variance, at least one of those components was the willingness to communicate or mutual recognition of others' rights component.

The fourteen analyses with at least one unique contributor were spread over analyses of child reported parenting variables for mothers and fathers, child reported friendship quality, and narrative coherence. The four analyses in which the availability and accessibility component was the only unique predictor included the supervision partnership for mothers measured by self-report questionnaires and child reported maternal responsiveness, the supervision partnership for fathers measured by self-report questionnaires and child reported paternal responsiveness, the supervision partnership for fathers measured by self-report questionnaires and child reported paternal autonomy support, and the supervision partnership for fathers measured by the FFI and

Table 23

Correlations between the supervision partnership and narrative coherence

	Coherence	Coherence (controlling for Verbal IQ)
FFI Accessibility and Availability- Mothers	.83***	.83***
	(92)	(88)
FFI Communication- Mothers	.79***	.78***
	(92)	(88)
FFI Recognition- Mothers	.67***	.65***
	(92)	(88)
SRQ Accessibility and Availability- Mothers	.30**	.29**
	(92)	(88)
SRQ Communication- Mothers	.46***	.44***
	(92)	(88)
SRQ Recognition-Mothers	.20	.16
	(86)	(83)
FFI Accessibility and Availability- Fathers	.57***	.57***
	(87)	(83)
FFI Communication- Fathers	.53***	.52***
	(87)	(83)
FFI Recognition- Fathers	.41***	.37**
	(87)	(83)
SRQ Accessibility and Availability- Fathers	.10	.07
	(84)	(80)
SRQ Communication- Fathers	.47***	.45***
	(85)	(81)

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; (*n*); Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview, SRQ = Self-Report Questionnaires

Table 24

Summary of Hierarchical Regression Analyses for Mother Variables Predicting Narrative Coherence

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Mother)								
Verbal IQ	.01	.01	.20	1.95	-.00	.00	-.02	-0.32
Accessibility/ Availability					.56	.13	.51	4.46***
Communication					.25	.12	.24	2.12*
Recognition					.23	.10	.19	2.41*
R^2 Change			.04				.70***	
Total F			3.79				59.89***	
SRQ (Mother)								
Age	-.03	.07	-.05	-0.41	-.01	.06	-.01	-0.12
Gender	.07	.16	.04	0.39	.02	.16	.01	0.10
Verbal IQ	.01	.01	.20	1.81	.01	.01	.09	0.87
Accessibility/ Availability					.03	.26	.02	0.12
Communication					.61	.18	.42	3.35**
Recognition					-.18	.17	-.11	-1.03
R^2 Change			.04				.20***	
Total F			1.26				4.13**	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, $n = 90$, for SRQ analysis, $n = 85$

Table 25

Summary of Hierarchical Regression Analyses for Father Variables Predicting Narrative Coherence

Variables	Model 1				Model 2			
	B	*SE B*	*β*	*t*	*B*	*SE B*	*β*	*t*
FFI (Father)								
Intact Family	-.09	.20	-.05	-0.45	.29	.19	.16	1.53
Verbal IQ	.01	.01	.15	1.31	.01	.01	.11	1.13
Accessibility/ Availability					.51	.17	.42	2.95**
Communication					.22	.15	.21	1.44
Recognition					.09	.14	.09	0.61
R^2 Change			.03				.37***	
Total F			1.09				10.40***	
SRQ (Father)								
Age	.00	.07	-.00	-0.01	-.03	.06	-.04	-0.39
Ethnicity	.05	.23	.03	0.23	-.04	.20	-.02	-0.19
Intact Family	-.02	.22	-.01	-0.11	.08	.20	.04	0.37
Verbal IQ	.01	.01	.15	1.29	.00	.01	.05	0.53
Accessibility/ Availability					-.40	.19	-.29	-2.14*
Communication					.76	.14	.66	5.27***
R^2 Change			.02				.27***	
Total F			0.46				5.18***	

Note: * p < .05, ** p < .01, *** p < .001; Communication = Willingness to Communicate, Recognition = Mutual Recognition of Others' Rights, FFI = Friends and Family Interview; SRQ = self-report questionnaires; For FFI analysis, *n* = 84, for SRQ analysis, *n* = 81

narrative coherence. The three analyses in which the accessibility and availability component, as well as one or both of the other two components, were unique predictors included the supervision partnership for mothers measured by self-report questionnaire and child reported maternal autonomy support (for which availability and accessibility and mutual recognition were both unique predictors), the supervision partnership for mothers measured by the FFI and narrative coherence (for which all three components were unique predictors), and the supervision partnership for fathers measured by self-report questionnaire and narrative coherence (for which availability and accessibility and willingness to communicate were unique predictors). The seven analyses for which willingness to communicate and/or mutual recognition of others' rights were unique predictors were fairly evenly distributed between mother and father analyses (four for mothers and three for fathers), across measurement method (four for FFI and three for self-reports), and across the two components (three for willingness to communicate only, two for mutual recognition only, and two for both). Three of these analyses were with parenting variables, three with friendship quality variables, and one with narrative coherence.

Discussion

The goal of this study was to validate a three-component conceptualization of the supervision partnership construct including accessibility and availability of the attachment figure, willingness to communicate about plans, goals and life events, and mutual recognition of the other's rights. My first hypothesis was partially supported, as the supervision partnership measures demonstrated good reliability and discriminant validity in relation to temperament, but some indices were related to verbal intelligence. My second hypothesis was partially supported. The indices of the supervision partnership were largely related to each other, but in testing whether the components of the supervision partnership were part of the same latent construct, model fit indices were good to moderate for mothers and moderate to poor for fathers. My third hypothesis was partially supported, as the supervision partnership for both mothers and fathers was related to child reports of parenting, but mother reports of maternal sensitivity and autonomy support were not related to the supervision partnership. My fourth hypothesis was also partially supported, as the supervision partnership was related to some aspects of peer competence, and not related to others. All indicators of the supervision partnership for mothers were related to child reported friendship quality, one indicator was related to mother reported friendship quality, and one was related to parent reported peer problems. For fathers, all indices of the supervision partnership were related to child reported friendship quality and parent reported peer problems, and two indices were related to teacher reported peer social skills. My fifth hypothesis was supported as the supervision partnership was related to narrative coherence for both mothers and fathers. My final hypothesis was also partially supported, as the willingness to communicate and

mutual recognition of others' rights components predicted significant additional variance in 10 out of 14 analyses with at least one significant unique predictor. My results lend some support to the idea that the three components together predict more variance than the traditional conceptualization of attachment in middle childhood (availability and accessibility alone).

Supervision Partnership: Reliability and Discriminant Validity

The Friends and Family Interview and questionnaires used to measure the supervision partnership were revised to fit the needs of this study. Therefore, we explored the reliability and discriminant validity of these measures before using them in main analyses. All measures demonstrated good reliability, consistent with the reliability of the measures from which they were derived. We can therefore conclude that the revisions made to these measures did not lower the reliability relative to the original measures, that observer agreement was acceptable for the interview, and that the items on the questionnaires are consistent with each other. One validation criterion for attachment measures proposed by Kerns and Seibert (2015) is to demonstrate discriminant validity by producing non-significant relationships with constructs that are theoretically distinct from attachment. Child temperament is one such construct, as a child's temperament reflects internal, biological qualities, while parent-child attachment reflects a child's beliefs about his/her relationship to parents (Vaughn et al., 1992). The supervision partnership measures demonstrated good discriminant validity in regards to temperament, as none of the indices of the supervision partnership were significantly related to temperamental withdrawal or negative reactivity. This also provides some support for the supervision partnership construct, as the willingness to communicate and mutual recognition of others' rights components behaved very similar to the traditional conceptualization of attachment at this age (availability and accessibility alone).

We also explored discriminant validity in regards to verbal intelligence. We expected that our measures of the supervision partnership would reflect children's internal working models (or schemas) of their relationship with their parents, and not just their skills in expressing themselves verbally. This is especially relevant for interview methods of measuring attachment, as security ratings take into account specificity and consistency of examples provided. However, we found significant correlations between verbal intelligence and several indices of the supervision partnership, both measured by the FFI and self-report questionnaires. Although we had hoped to demonstrate discriminant validity with verbal intelligence, we were able to include verbal intelligence in our regressions, and therefore controlled for the shared variance between the supervision partnership and verbal intelligence. The fact that the supervision partnership was still able to predict significant variance in dependent variables where significant results are expected, even when controlling for verbal intelligence, demonstrates that the effects we are finding are unique to the supervision partnership, and are not due to significant relationships with verbal intelligence.

Supervision Partnership Components as Factors of the Same Latent Construct

Correlations between the indices of the supervision partnership range from small to large effect sizes. Effect sizes were large between the three components of the supervision partnership as measured by the FFI, both for mothers and fathers. The relationship between willingness to communicate and availability and accessibility as measured by self-report questionnaire also produced a large effect size for both mothers and fathers, but mutual recognition of others' rights measured by self-report questionnaire for mothers was not related to any indices of the supervision partnership, other than mutual recognition measured by the FFI. The otherwise large

effect sizes support the idea that the three components of the supervision partnership may belong to the same higher order construct of attachment.

The discrepant results for the two indicators of mutual recognition require further exploration. One possibility is that the small effect sizes for mutual recognition measured by questionnaire may reflect the unique way that this variable was constructed, as it was created by calculating difference scores between mother report and child report to reflect their agreement about rights regarding decision making. This differs from the other five indices, which were calculated purely from the child's perspective. Another possibility relates to the fact that the FFI and the questionnaire measures capture somewhat different conceptualizations of the mutual recognition construct, in that the FFI measure assessed willingness to collaborate on decision making whereas the questionnaires assessed agreement on who makes the decisions. It might be that the former conceptualization better captures the supervision partnership construct.

The confirmatory factor analysis model for mothers, which was estimated only using data from the FFI, demonstrated good model fit on some indices (such as chi square and CFI), and moderate to poor fit on others (such as SRMR and RMSEA). The path estimates were strong for availability and accessibility and willingness to communicate, and weaker but still significant for mutual recognition of others rights. For fathers, path estimates showed a similar pattern of stronger estimates for availability and accessibility and willingness to communicate and a weaker but still significant estimate for mutual recognition of others' rights, with model fit indices that were moderate to poor across the board.

The results of this study indicate that all three components of the supervision partnership should be considered when assessing parent-child attachment in late middle childhood and early adolescence. Future studies could explore how existing measures of attachment typically used

for this age range could be expanded to include assessments of the willingness to communicate and mutual recognition components. For example, perhaps story stem narratives (Granot & Mayseless, 2001) could include additional scenarios in which the latter two components of the supervision partnership could be assessed. This also introduces another area for future study, which would be to apply the three components of the supervision partnership to the insecure attachment patterns, and explore how the two latter components of the supervision partnership might be affected in insecure attachment patterns. Another necessary step in moving forward with this area of research would be to create a new questionnaire measure that includes questions about all three components of the supervision partnership in one measure, as opposed to the use of three separate measures in this study. This will decrease measurement error, will be more user-friendly for children answering the questionnaire by having a similar format, and will help decrease administration time.

Supervision Partnership and Parenting

One criterion proposed by Solomon and George (2008) for validating a new measure of attachment is that it should relate to caregiver behavior, especially to caregiver responsiveness. To test the validity of the supervision partnership, we examined the relationship between our measures of the supervision partnership and measures of parental responsiveness and autonomy support. We included autonomy support because parental support of the child's increasing autonomy becomes more relevant to attachment security as children get older (Brenning et al., 2012a, 2012b; Karavasilis et al., 2003; Kerns et al., 2011). Both correlations and regressions indicated that the supervision partnership measures were related to child reports of parenting, as expected. This was found for children's reports of parenting for both mothers and fathers. The

supervision partnership was also related to parenting across measurement method, that is, when the supervision partnership was assessed by interview and self-report questionnaires.

Contrary to expectation, the supervision partnership variables were not related to mothers' reports of their own parenting. One possible explanation for this is that attachment is more related to children's *perceptions* of their parents' behavior than to parents' perceptions of their own behavior. It may be how the child interprets and internalizes the parent's behavior that is important for their ability to use parents as an attachment figure. Another possibility is that the relationship between attachment and child reports of parenting is artificially inflated due to the common source of information (the child). However, since FFI ratings for the supervision partnership demonstrate the same pattern of results as the self-report questionnaires, and both are related to child reports of parenting, it seems that these associations are not solely due to artificial inflations caused by self-reports.

The results of this study indicate that parental autonomy support is equally important for the development and maintenance of the supervision partnership as parental responsiveness and sensitivity. In young children, parental responsiveness and sensitivity is the main parenting characteristic that is studied in relation to attachment (De Wolff & van IJzendoorn, 1997). As children get older, however, researchers have begun considering a wider variety of parenting behaviors and characteristics in relation to attachment, including responsiveness, autonomy support, behavioral control, and harsh control (Koehn & Kerns, 2015b). In a recent meta-analysis of parenting behaviors and parent-child attachment in middle childhood and adolescence, parental autonomy support, along with responsiveness, produced the largest effect sizes in the study (Koehn & Kerns, 2015b). The present study provides further support that other parenting behaviors, in addition to parental responsiveness, are important for the maintenance of

attachment security as children get older. Future studies could expand on the relationship between the supervision partnership and parenting by exploring the relationship with other parenting behaviors besides responsiveness and autonomy support.

Our results may also have implications for attachment-based interventions. Many current attachment-based interventions focus on young children and affecting change in the attachment relationship by targeting parents' behaviors (Brisch, 2011; Dozier et al., 2006; Marvin, Cooper, Hoffman & Powell, 2002). These interventions focus on improving parental responsiveness by helping parents better attend to their child's cues and improve parents' empathy toward their child. Some attachment-based interventions have recently been introduced for use with teens, one intended for use with teens with behavioral issues that focuses on parental sensitivity (Moretti & Obsuth, 2009), and another family-based intervention for teens with internalizing disorders, which focuses on improving parental autonomy support (Diamond, Russon & Levy, 2016). Our results support the idea that targeting parental autonomy support as well as responsiveness may affect changes in parent-child attachment. Future research could explore this relationship by specifically targeting autonomy support in existing interventions, and measuring the causal effect on attachment security by comparing attachment scores before and after using the intervention.

Supervision Partnership and Peer Competence

Another validation criterion for attachment measures proposed by Solomon and George (2008) is that attachment security should predict other important aspects of development. A secure attachment is thought to provide a foundation for connectedness with friends and empathy with peers (Sroufe, Egeland, & Carlson, 1999), and indeed peer competence is one aspect of development that has shown the strongest associations with attachment (Groh et al., 2014; Kerns

& Brumariu, 2016; Pallini et al., 2014; Schneider et al., 2001). In this study, we looked at multiple aspects of peer competence, and used multiple informants. We asked children to report on positive friendship qualities, parents to report on their children's positive friendship qualities and peer problems, and teachers to report on children's peer problems and peer social skills. We found that the supervision partnership for both mothers and fathers was consistently positively correlated with child reported friendship quality. Only one indicator of the supervision partnership for both mothers and fathers was not significantly correlated with child reported friendship quality (mutual recognition of others' rights measured by self-report questionnaires for mothers and accessibility and availability measured by self-report questionnaire for fathers). One component of the supervision partnership for mothers (willingness to communicate measured by the FFI) was related to parent reported positive friendship quality, but there were no other significant correlations. Meta-analyses on the relationship between attachment security and friendship quality have found an average effect size of r = .20 (Pallini et al., 2014; Schneider et al., 2001). Many studies included in these meta-analyses used representational measures of attachment security, such as the modified Strange Situation or attachment q-sort method. Our study is among the first to examine the relationship between attachment measured by the Friends and Family Interview and friendship quality, and our effect sizes are somewhat stronger than the average effect sizes reported in meta-analyses. More research is needed to explore the relationship between attachment measured by interview and self-report questionnaire methods and friendship quality to estimate the true nature of this association in the population. Future studies may also benefit from examining friendship quality and peer relationships using other measurement methods, such as coded observations.

The pattern of results was somewhat different when examining measures that assessed children's skills or problems in interactions in the peer group. For mothers, only one indicator of the supervision partnership was significantly and negatively related to parent reported peer problems, but there were no significant relationships with teacher reported peer competence. The supervision partnership for fathers, however, was related to parent reported peer problems, and two indices were related to teacher reported social skills. It has been hypothesized that this age period, as children are transitioning from childhood to adolescence, may be a time when children's attachment to their fathers becomes more salient, as fathers have been theorized to nurture children's functioning in contexts outside the family, including peer relationships (Bogels & Phares, 2008; Kerns et al., 2015; Verschueren & Marcoen, 1999). Secure attachments to fathers may be protective against developing peer problems in childhood. Previous research has shown that attachment to fathers is related to lower conflict with peers and less aggression (Booth-Laforce et al., 2006; Ducharme, Doyle & Markiewicz, 2002; Lieberman, Doyle, & Markiewicz, 1999). Fathers are known for connecting with their children through rough and tumble play (Lamb, 1997; Parke, 2002) and providing secure base support as children explore the world (Kerns et al., 2015). Children may learn the difference between aggression and play through their play experiences with fathers, which may lead children to handle conflicts with peers more effectively (Parke, 2002).

Supervision Partnership and Narrative Coherence

Additional attachment measure validation criteria were proposed by Kerns and Seibert (2015), including that attachment measures should be related to other validated measures of attachment. The Friends and Family Interview (FFI) provides a measure of narrative coherence that is coded separately from measures of safe haven and secure base support for mothers and

fathers (measures we used to assess availability and accessibility in this study). Previous studies found correlations between .40 and .60 between attachment experience measures and narrative coherence (de Haas et al., 1994; Fonagy et al., 1991; Kerns et al., 2015; Psouni & Apetroaia, 2014; Steele & Steele, 2005). Our study found similar results, with correlations ranging from .10 to .47 for self-reported indicators of the supervision partnership and .41 to .83 for interview measures of the supervision partnership. For fathers, only self-reported availability and accessibility was not significantly related to narrative coherence (out of five indicators), and for mothers, only self-reported mutual recognition of others' rights was not significantly related to narrative coherence (out of six indicators). This provides support for the idea that the two "new" components (willingness to communicate and mutual recognition of others' rights) may be valid indicators of attachment, as they show similar patterns to established measures of attachment (narrative coherence).

Future studies could further test the validity of the supervision partnership by comparing it to other attachment measures. In this study, we compared the supervision partnership to narrative coherence, which is a validated indicator of attachment, but is not an independent measure (as both the supervision partnership and narrative coherence were both assessed using the FFI). Future studies could explore relationships between the supervision partnership as measured by the FFI and other independent measures of attachment, such as story stem narratives (Granot & Mayseless, 2001), script-based measures (Psouni & Apetroaia, 2014), or other interview methods such as the Child Attachment Interview (Target et al., 2003).

Supervision Partnership Components: Unique Contributions

A final aim of this study was to test that the three components of the supervision partnership together predict more variance in the dependent variables than the traditional

conceptualization of attachment alone, as this would argue that the supervision partnership concept more fully captures the attachment relationship between parents and children at this age. Therefore, we examined unique effects of the latter two components of the supervision partnership, willingness to communicate and mutual recognition of others' rights, and compared this to the availability and accessibility component (the traditional conceptualization of attachment) in all analyses. We found that at least one of the latter two components were unique predictors in most (but not all) analyses in which the supervision partnership together predicted significant variance when controlling for demographic variables. These findings of unique predictive effects are especially impressive given the correlations among the supervision partnership components. This supports our proposal that the supervision partnership may more fully capture parent-child attachment in late middle childhood and early adolescence than the traditional conceptualization of attachment alone, which focuses on caregiver accessibility and availability.

Strengths, Limitations and Future Directions

One strength of this study is the use of multiple informants for the assessment of parenting and peer competence variables, as both child and parents reported on parenting constructs, and child, parents, and teachers all reported on various aspects of friendship quality and peer competence. A second strength is the use of multiple measurement modalities in the assessment of the supervision partnership construct, utilizing both coded interviews and self-report questionnaires. A third strength is that this study was able to collect information from children about their relationships with both their mothers and their fathers, which allows us to compare results across relationships. A fourth strength of this study is that multiple validation criteria were explored to test the supervision partnership concept.

Although this study has many strengths, it also has some limitations that must be acknowledged. First, the sample size for data from fathers was too small to explore any analyses with father-reported variables. To address this, future research would benefit from inviting fathers into the lab to increase rates of participation, or by recruiting a larger sample of families into the study. Similarly, the sample size for data from teachers was small enough to affect power, as some effect sizes may have been different given a larger sample. We made multiple attempts to contact the parent at home (typically fathers) and teachers from whom we had not received data, but were often unsuccessful. Future studies would benefit from recruiting a larger sample, so that even though we would only expect a percentage of teachers to participate, we may still have enough data for adequately powered analyses. While our sample size for mothers provided sufficient power for all analyses, we were unable to test a structural equation model with indicators from both the FFI and self-report questionnaires together. Studies with larger sample sizes may be able to better explore the relationship between the three components of the supervision partnership in structural equation models and to test the likelihood that the three components belong to the same higher-order latent construct of attachment security.

The sample in this study lacks diversity, which is another limitation to this study. While there is some diversity in both ethnicity and socio-economic status, the majority of the sample is from middle to upper class Caucasian families. While this is largely to be expected, as our sample is similar to the population of the region and diverse samples are more difficult to recruit, the lack of diversity in the sample limits generalization of results. Future studies could focus on gathering data from a wider variety of families to address whether the supervision partnership is equally applicable across ethnicities, household types, and socio-economic status.

Another limitation of this study is the cross-sectional study design, which does not allow us to test for causal relationships between variables, or test reliability across time. Future research on the supervision partnership could use these measures in a longitudinal study design to explore developmental changes in the parent-child relationship across time. If a longitudinal design was used, the relationship between the supervision partnership and parenting could be assessed across time to explore directionality of effects. Longitudinal designs would also allow us to explore test-retest reliability of the supervision partnership across time.

This study also relied on questionnaire methods to assess parenting and peer relationships, which introduces another limitation. The use of both behavioral measures of parent-child interactions and peer interactions and questionnaires from multiple informants would provide a multi-method and multi-rater approach, which would be less susceptible to bias. Future studies would benefit from exploring the relationship between the supervision partnership and both parenting and peer relationships in a more inclusive way, by utilizing multiple measurement methods.

The measurement of the mutual recognition of others' rights construct was inconsistent across measurement modalities, which introduces another limitation. In Koehn & Kerns (2015), mutual recognition of others' rights was measured by asking the child "Who is responsible for making decisions about the following topics?" and scoring parent and child deciding together highly, and parent or child making the decision alone as low on the scale. This approach did not seem to fully capture the mutual recognition construct, as it does not take into account that for some decisions, the parent may be appropriately allowing the child to have some autonomy in decision making, or that there may be some decisions for which the parent and child may agree that the parent is responsible. To address this, we asked both parents and children to each answer

"who should be responsible for making these decisions," and calculated difference scores, in which low scores indicate more agreement (and therefore more security), and high scores indicate less agreement (and lower security). We asked questions in the Friends and Family Interview to assess agreement between parent and child, but as we rated the mutual recognition construct on the FFI, we realized that, in addition to agreement, higher scores for mutual decision-making should indicate that the parent and child were willing to negotiate when they disagreed, and take the other's opinion into account (reflecting more of a mutual recognition that the other has rights in the decision making process). The latter is an aspect not fully captured by the questionnaire. In post-hoc analyses, we scored the mutual recognition construct in the same way used by Koehn & Kerns (2015) to explore whether this mutual decision-making construct was more similar to the FFI approach. We found that the re-coded mutual recognition component was not related to any other indicators of the supervision partnership, or to mutual recognition as scored by the FFI. Therefore, it seems that neither approach used in questionnaires to measure the mutual recognition component fully captures the construct. Future research should focus on creating a questionnaire that captures the shared understanding about decision-making responsibilities, while also taking into account willingness to negotiate and consider each other's point of view.

In addition to the many future directions already discussed (such as continuing to explore validation criteria, expanding other attachment measures, and using other methods to explore parenting and peer relationship constructs) there are other topics that future research could pursue. Future studies could examine the supervision partnership in a wider age range to fully capture the entire transition from childhood to adolescence as some indicators of the supervision partnership were negatively related to age. By including subjects from a wider age range, we

would be able to empirically identify the age at which willingness to communicate and mutual recognition of others' rights become more relevant, and we would also be able to explore whether the supervision partnership is an appropriate conceptualization for attachment in adolescence. Future studies may also seek to replicate findings in other samples, including exploring the supervision partnership cross-culturally. Cross-cultural replication is another validation criterion for attachment measures that has not yet been assessed for the supervision partnership. We might expect somewhat different results in other cultures, however, especially in cultures in which children have less autonomy throughout adolescence. Specifically, in cultures in which parents exercise more control over their children until adulthood, we might expect that the mutual recognition of others' rights would not be relevant for secure attachment relationships.

Final Conclusions

In conclusion, this study provides additional support for a supervision partnership conceptualization of parent-child attachment in the late middle childhood to early adolescence transition years. I found that the three components of the supervision partnership were related to each other, both when measured by self-report questionnaire and coded interviews. I also found that the three components, each measured by both self-report questionnaire and coded interviews, produced moderate to good model fit as indicators of the same latent construct. The supervision partnership showed discriminant validity by having no significant relationship to temperament, although it was significantly related to verbal intelligence. The supervision partnership was also related to child reports of parenting for both mothers and fathers (although not to mother reports of parenting), as well as some indicators of friendship quality and peer competence. The supervision partnership for both mothers and fathers was highly related to

narrative coherence, a common indicator of attachment security. And finally, regression results show that the willingness to communicate and mutual recognition of others' rights components often demonstrated unique variance, above and beyond the availability and accessibility component (the traditional conceptualization of attachment security). These results support the idea that the traditional conceptualization of attachment security alone may not fully capture the developmental changes in the attachment relationship that occur during the late middle childhood and early adolescent years, and that the willingness to communicate and mutual recognition of others' rights components may also be part of the attachment security construct for this age range. Future directions include continuing to define and revise measures of mutual recognition of others' rights, further exploring validation criteria, expanding other attachment measures (including applying the supervision partnership to insecure attachment patterns), exploring the relationship to other parenting and peer relationship constructs using multiple measurement methods, exploring the supervision partnership in a wider age range, and examining the supervision partnership across cultures.

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Appendices

Appendix A

Friends and Family Interview

Introduce the interview:

"I want to get an idea about you, what sort of person you are, what you like to do, your relationships with friends and family. One thing we sort of take to be true about all people and relationships is that there are things we like best in ourselves and in other people, and other things that we like least (or not very much at all) in ourselves and other people."
"So this might be something we talk about as I ask you the following questions."

"Remember, it's OK if you don't want to answer any of these questions if you don't feel like it, just tell me so and we'll skip it. And remember that anything you tell me is kept safe and nobody else gets to know about it, we don't tell anybody else what you say. So *feel free* to tell me anything you like."

"Any questions for me before we start?"

Section1: Self

1. **"Now, could we start by getting a description of the people close to you in your family, those living in the house with you, and those you are close to you but not living with you?"**

2. **"I'd like to start by getting some idea about what sort of person you are…for example, could you tell me what sort of things you like to do?"**

   (Choose *one* of the activities and ask for an illustration.)

   > "Can you tell me about a specific time you were doing [X] –like, who was there, what did you do, how did you feel, what happened in the end."

3. "So you told me about things you like to do; now I'd like to ask you to give me an idea about the kind of person you are."

   "What are the kinds of things that someone would get to know about you if they knew you well?"
   (look for adjective and phrase descriptions)

4. **"When you are upset, what do you do?"**
   "What happens then?"
   "Is there someone you turn to?"
(Specific example.)

"Can you tell me about a time you were upset?"
"What happened?"
"Is there someone you turned to?"

5. **"When you have to try something hard, how do you get yourself ready?"**

"What happens then?"
"Is there someone you turn to?"
(Specific example.)

"Can you tell me about a time you had to try something hard?"
"What happened?"
"Is there someone you turned to?"

Section 2: Parents

"Now I'd like to ask you a bit about the relationships in your family."

6. **"Can you tell me a bit about your relationship with your mom?"**

"What's it like when you and your mom are together?"

(If no specific example is given, ask for one to illustrate the description.)

"Can you tell me about any time it was like that?"

7. **"What is the *best* part of your relationship with your mom?"**

"Can you tell me about any time it was [it felt] like that?"

"What is one thing you like *least* about your relationship with your mom?"

"Can you tell me about any time it was [it felt] like that?"

8. **"What do you think your mom thinks about you?"**

9. **"Can you tell me a bit about your relationship with your dad?"**

"What's it like when you and your dad are together?"

(If no specific example is given, ask for one to illustrate the description.)

"Can you tell me about any time it was like that?

10. **"What is the best part of your relationship with your dad?"**

"Can you tell me about any time it was [it felt] like that?"

"What is one thing you like least about your relationship with your dad?"

"Can you tell me about any time it was [it felt] like that?"

11. **"What do you think your dad thinks about you?"**

12. **"Could you think of the first time you were separated from your parents?"**
("Maybe when you first went to school, or went to spend a night at a friend's house…")

"How old were you at the time?"
"Do you remember how you felt?"
"How do you think your parents felt at the time?"

13. **"Now, could you think back and tell me if you think your relationship with your parents has changed since you were little?"**

14. **"Thinking ahead to the future what do you think the relationship with your parents will be like, say five years from now?"**

15. **"How do you tell others about your plans for the day, and what do you do when your plans change?"**
(plans after school, with friends, etc.)

"What happens then?"
"Is there someone you turn to?"
(Specific example.)

"Can you tell me about a time you had to tell someone about your plans for the day?"
"What happened?"
"Is there someone you turned to?"

16. **"How do you decide about your goals for the future?"**
(goals you set for yourself, things you want to do or achieve)

"What happens then?"
"Is there someone you turn to?"
(Specific example.)
"Can you tell me about a time you were deciding about a future goal?"
"What happened?"
"Is there someone you turned to?"

17. "What do you do when important things happen to you?"
(If something happens that really matters to you)

"What happens then?"
"Is there someone you turn to?"
(Specific example.)

"Can you tell me about a time something important happened to you?"
"What happened?"
"Is there someone you turned to?"

18. "How does your family figure out who gets to make decisions and rules?"
(decisions about what you are and are not allowed to do)

"What happens then?"
(Specific example.)

"Can you tell me about a time your family figured out who got to make a decision?"
"What happened?"

19. "What happens when you and your parents disagree about who should make a decision?"
(decisions about what you are and are not allowed to do)
"What happens then?"
(Specific example.)
"Can you tell me about a time you and your parents disagreed?"
"What happened?"

"Well, you've told us so much about yourself and your family, and we have a much better view of who you are as a person. "

"Is there anything else that you'd say is important about you that we missed?
(Something you'd like to add? Something you'd like to tell us?)

"Generally, what did you think about these questions?
What questions did you find hardest? Which easiest?
Where there any questions that were upsetting?"

"Remember, anything you've said to us here today is ***confidential***, which means we don't tell anybody else in your family or elsewhere, everything you've told us is kept safe."

"Do you have any questions for us?"

THANK YOU VERY MUCH FOR YOUR HELP!

Appendix B

The Security Scale

Instructions to Child:
This questionnaire asks about what you are like with your mother – like how you act and feel around her. Before we get to those questions, let's try a practice question. Each question talks about two kinds of kids, and we want to know which kids are most like you. Decide first whether you are more like the kids on the left side or more like the kids on the right side, then decide whether that is sort of true for you, or really true for you, and circle that phrase. For each question you will only circle one answer.

Practice Question:

Some kids would rather play sports in their spare time.			**BUT**	Other kids would rather watch T.V.	
Really true for me	Sort of true for me			Sort of true for me	Really true for me

Now we are going to ask you question about you and your mom, or whoever you think of as your "mom."

I am filling this out about my (circle one): mother step-mother grandmother other:_____

1.	Some kids find it easy to trust their mom		**BUT**	Other kids are not sure if they can trust their mom.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
2.	Some kids feel like their mom butts in a lot when they are trying to do things		**BUT**	Other kids feel like their mom lets them do things on their own.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
3.	Some kids find it easy to count on their mom for help		**BUT**	Other kids think it's hard to count on their mom.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
4.	Some kids think their mom spends enough time with them		**BUT**	Other kids think their mom does not spend enough time with them.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me

5. Some kids feel more confident trying new things after talking to their mom about it **BUT** Other kids do not feel more confident trying new things after talking to their mom about it.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

6. Some kids do not really like telling their mom what they are thinking or feeling **BUT** Other kids do like telling their mom what they are thinking or feeling.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

7. Some kids do not really need their mom for much **BUT** Other kids need their mom for a lot of things.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

8. Some kids are sure their mom wants to hear what they think, even when they disagree with their mom. **BUT** Other kids are not sure if their mom wants to hear what they think.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

9. Some kids wish they were closer to their mom **BUT** Other kids are happy with how close they are to their mom.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

10. Some kids worry that their mom does not really love them **BUT** Other kids are <u>really</u> sure that their mom loves them.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

11. Some kids do not feel like their mom encourages them when they try new things **BUT** Other kids do feel like their mom encourages them when they try new things.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

12. Some kids feel like their mom really understands them **BUT** Other kids feel like their mom does not really understand them.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

13. Some kids are really sure their mom would not leave them **BUT** Other kids sometimes wonder if their mom might leave them.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

14. Some kids feel like their mom lets them decide enough things by themselves **BUT** Other kids feel like their mom does not let them make enough decisions by themselves.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

15. Some kids worry that their mom might not be there when they need her **BUT** Other kids are sure their mom will be there when they need her.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

16. Some kids think their mom does not listen to them **BUT** Other kids do think their mom listens to them.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

17. Some kids think their mom encourages them to be themselves **BUT** Other kids do not think their mom encourages them to be themselves.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

18. Some kids go to their mom when they are upset **BUT** Other kids do not go to their mom when they are upset.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

19. Some kids wish their mom would help them more with their problems **BUT** Other kids think their mom helps them enough.

Really true for me | Sort of true for me | Sort of true for me | Really true for me

20.	Some kids are really sure their mom is proud of them		**BUT**	Other kids are not sure if their mom is proud of them.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
21.	Some kids feel better when their mom is around		**BUT**	Other kids do not feel better when their mom is around.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
22.	Some kids think their mom doesn't let them have enough say in choosing what activities they want to do outside school		**BUT**	Other kids think their mom usually lets them choose their activities outside school.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
23.	Some kids feel like their mom always encourages them to follow their interests		**BUT**	Other kids feel like their mom does not always encourage them to follow their interests.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me
24.	Some kids practice with their mom when they are trying to get better at something		**BUT**	Other kids don't practice with their mom much.	
	Really true for me	Sort of true for me		Sort of true for me	Really true for me

Administered for both mothers and fathers

Appendix C

Communication with parents

Response Scale: 1 = Almost Never, 2 = Not very often, 3 = Some of the time, 4 = Almost Always

1. Do you talk to your mom about what you do during your free time?
2. Do you talk to your mom about who your friends are?
3. Do you talk to your mom about what you want to be when you grow up?
4. Do you talk to your mom about what you spend your money on?
5. Do you talk to your mom about school (like how you did on exams, relationships with teachers) when you get home?
6. Do you talk to your mom about which clubs or sports teams you want to join?
7. Do you talk to your mom about where you go when you're out with friends?
8. Do you talk to your mom about important things that happen to you?
9. Do you talk to your mom about how you're doing in different subjects in school?
10. Do you talk to your mom about where you go and what you do after school?
11. Do you talk to your mom about problems in your relationships with your friends?
12. Do you talk to your mom about when you want to try out for something?
13. Does your Mom ask you about things that happen during your free time?
14. Does your Mom ask you about what happens in a normal day at school?
15. Does your Mom ask you about things you want to do?

Administered for both mothers and fathers.

Items 1, 2, 4, 5, 7, 9, 10, 13, 14 were adapted from Stattin and Kerr (2000)

Items 3, 6, 8, 11, 12, 15 were written for this study

Appendix D

Making Decisions Questionnaire- Child version

In your family, who should be responsible for making most of the decisions about the following topics?

Response scale: 1 = my parent(s) should decide, 2 = my parents should decide after discussing it with me, 3 = we should decide together, 4 = I should decide after discussing it with my parents, 5 = I should decide all by myself

1. Whether you do assigned chores
2. How you talk to your parents
3. Whether you use manners
4. What type of language you use
5. Which after-school activities you take part in
6. Whether you take part in religious training or education
7. What time you get up
8. What clothes you wear
9. How you spend your free time
10. How you spend your allowance money
11. Whether you clean your bedroom
12. What TV shows you watch
13. What music you listen to
14. How late you stay out
15. Who you should be friends with
16. Whether you can spend with friends after school

17. When you start dating

18. What time you go to bed on a school night

Making Decisions Questionnaire- Parent version

In your family, who should be responsible for making most of the decisions about the following topics?

Response scale: 1 = parent(s) should decide, 2 = parents should decide after discussing it with your child, 3 = we should decide together, 4 = child should decide after discussing it with parents, 5 = child should decides by him/herself

1. Whether your child does assigned chores
2. How your child talks to you
3. Whether your child uses manners
4. What type of language your child uses
5. Which after-school activities your child takes part in
6. Whether your child takes part in religious training or education
7. What time your child gets up
8. What clothes your child wears
9. How your child spends his/her free time
10. How your child spends his/her allowance money
11. Whether your child cleans his/her bedroom
12. What TV shows your child watches
13. What music your child listens to
14. How late your child stays out
15. Who your child should be friends with

16. Whether your child can spend with friends after school

17. When your child starts dating

18. What time your child goes to bed on a school night

Appendix E 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 Responsiveness: MEAN (1, 3, 6, 7, 9, 12, 13, 15, 17, 18)

Administered for both mother and father, and as a parent-report.

Appendix F

Autonomy Support

Scale 1= Strongly Disagree to 5= Strongly Agree

My mother/father…

1. Emphasizes that every family member should have some say in family decisions
2. Emphasizes that it is important to get my ideas across even if others don't like it
3. Says that you should always look at both sides of the issue
4. Talks at home about things like politics or religion, taking a different side from others
5. Pushes me to think independently
6. Admits that I know more about some things than adults do
7. Often says I have to think about life myself
8. Encourages me to be independent from him/her
9. Lets me make my own plans for things I want to do
10. Is usually willing to consider things from my point of view
11. Isn't very sensitive to many of my needs (reverse coded)
12. Whenever possible, allows me to choose what to do
13. Allows me to decide things for myself
14. Insists upon doing things her/his way (reverse coded)
15. Allows me to choose my own direction in life

Items 1-8 from Silk Autonomy Granting scale, Items 9-15 from Grolnick POPS

When dealing with my child, I…

1. Emphasize that every family member should have some say in family decisions
2. Emphasize that it is important for my child to get ideas across even if others don't like it

3. Say that my child should always look at both sides of the issue
4. Talk at home about things like politics or religion, taking a different side from others
5. Push my child to think independently
6. Admit that my child know more about some things than adults do
7. Often say my child has to think about life him/herself
8. Encourage my child to be independent from me
9. Let my child make his/her own plans for things he/she wants to do
10. Am usually willing to consider things from my child's point of view
11. Am usually very sensitive to many of my child's needs
12. Whenever possible, I allow my child to choose what to do
13. Allow my child to decide things for him/herself
14. Insist upon doing things my way (reverse coded)
15. Allow my child to choose his/her own direction in life

Appendix G

The Friendship Quality Questionnaire – Revised

How old are you?_____

When is your birthday? _____/_____/_____
(month) (day) (year)

When you answer all of the following questions, please think about one of your best friends.

How often do you see or hang out with this friend outside of school?

_____ 5 or more days/week
_____ a few times per week
_____ once per week
_____ 2-3 times per month
_____ once per month
_____ less than once per month

Do you see this friend at school? _____

For each of the following questions, please CIRCLE the number underneath that indicates how true the statement is for you and the friend who came to the lab with you today.

1. My friend and I live really close to each other

Not at all true	**A little true**	**Somewhat true**	**Pretty true**	**Really true**
0	**1**	**2**	**3**	**4**

2. My friend and I always sit together at lunch

Not at all true	**A little true**	**Somewhat true**	**Pretty true**	**Really true**
0	**1**	**2**	**3**	**4**

3. My friend and I get mad at each other a lot

Not at all true	**A little true**	**Somewhat true**	**Pretty true**	**Really true**
0	**1**	**2**	**3**	**4**

4. My friend tells me I'm good at things

Not at all true	**A little true**	**Somewhat true**	**Pretty true**	**Really true**
0	**1**	**2**	**3**	**4**

5. If other kids were talking behind my back, my friend would always stick up for me

Not at all true	**A little true**	**Somewhat true**	**Pretty true**	**Really true**
0	**1**	**2**	**3**	**4**

6. My friend and I make each other feel important and special

Not at all true	**A little true**	**Somewhat true**	**Pretty true**	**Really true**
0	**1**	**2**	**3**	**4**

7. My friend and I always pick each other as partners for projects

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

8. If my friend hurts my feelings, my friend says "I'm sorry"

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

9. I can think of some times when my friend has said mean things about me to other kids

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

10. If my friend and I get mad at each other, we always talk about how to get over it

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

11. My friend would still like me even if all the other kids didn't like me

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

12. My friend tells me I'm pretty smart

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

13. My friend and I are always telling each other about our problems

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

14. My friend makes me feel good about my ideas

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

15. When I'm mad about something that happened to me, I can always talk to my friend about it

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

16. My friend and I do special favors for each other

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

17. My friend and I do fun things together a lot

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

18. My friend and I argue a lot

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

19. I can always count on my friend to keep promises

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

20. My friend and I go to each other's houses after school and on weekends

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

21. My friend and I always hang out together at school or in the neighborhood

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

22. When I'm having trouble figuring out something, I usually ask my friend for help and advice

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

23. My friend and I talk about the things that make us sad

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

24. My friend and I always make up easily when we have a fight

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

25. My friend and I fight

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

26. If my friend and I are mad at each other, we always talk about what would help to make us feel better

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

27. If I told my friend a secret, I could trust my friend not to tell anyone else

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

28. My friend and I bug each other

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

29. My friend and I always come up with good ideas on ways to do things

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

30. My friend and I loan each other things all the time

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

31. My friend often helps me with things so I can get done quicker

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

32. My friend and I always get over our arguments really quickly

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

33. My friend and I always count on each other for ideas on how to get things done

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

34. My friend doesn't listen to me

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

35. My friend and I tell each other private things a lot

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

36. My friend and I help each other with schoolwork a lot

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

37. I can think of lots of secrets my friend and I have told each other

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

38. My friend cares about my feelings

Not at all true	A little true	Somewhat true	Pretty true	Really true
0	1	2	3	4

Appendix H

Mother report friendship quality

Scale: 1= strongly disagree, 4= strongly agree

My child and my child's very best friend:

1. Work well together
2. Ignore each other's suggestions
3. Are very competitive with one another
4. Negotiate peacefully to settle issues
5. Take turns effectively
6. Are verbally aggressive with each other
7. Say they like each other or are friends
8. Reach agreement easily
9. Get mad at each other a lot
10. Readily comply with one another's requests
11. Say "I hate you" or "I'm not going to hang out with you"
12. Show a pattern where one child dominates the other
13. Endorse one another's attitudes and preferences
14. Pick each other as partners
15. Help each other out
16. Criticize each other
17. Notice and respond to each other's protests and complaints
18. Share readily with each other
19. Protest when the other child attempts to control what they do
20. Accuse each other of unfairness

Appendix I

TCRS- 2.1-

4. Lacks social skills with peers

8. Makes friends easily

12. Other children shun or avoid the child

16. Classmates like to sit near the child

20. Has trouble interacting with peers

24. Has many friends

28. Other children dislike this child

32. Well-liked by classmates

Peer social skills subscale: items 4R, 8, 12R, 16, 20R, 24, 28R, 32

R indicates reverse scored item

Administered to teachers

Appendix J

Strengths and Difficulties Questionnaire

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems odd! Please give your answers on the basis of the child's behavior over the last six months.

		Not True	Somewhat True	Certainly True
1.	Considerate of other people's feelings	□	□	□
2.	Restless, overactive, cannot stay still for long	□	□	□
3.	Often complains of headaches, stomach-aches or sickness	□	□	□
4.	Shares readily with other children (treats, toys, pencils etc.)	□	□	□
5.	Often has temper tantrums or hot tempers	□	□	□
6.	Rather solitary, tends to play alone	□	□	□
7.	Generally obedient, usually does what adults expect	□	□	□
8.	Many worries, often seems worried	□	□	□
9.	Helpful if someone is hurt, upset or feeling ill	□	□	□
10.	Constantly fidgeting or squirming	□	□	□
11.	Has at least one good friend	□	□	□
12.	Often fights with other children or bullies them	□	□	□
13.	Often unhappy, down-hearted or tearful	□	□	□
14.	Generally liked by other children	□	□	□
15.	Easily distracted, concentration wanders	□	□	□
16.	Nervous or clingy in new situations, easily loses confidence	□	□	□
17.	Kind to younger children	□	□	□
18.	Often lies or cheats	□	□	□
19.	Picked on or bullied by other children	□	□	□
20.	Often volunteers to help others (parents, teachers, other children)	□	□	□
21.	Thinks things out before acting	□	□	□
22.	Steals from home, school or elsewhere	□	□	□
23.	Gets on better with adults than with other children	□	□	□
24.	Many fears, easily scared	□	□	□
25.	Sees tasks through to the end, good attention span	□	□	□

Peer Problems subscale: MEAN (6, 11R, 14R, 19, 23) Administered to in-lab parent and teachers

Appendix K

School-Age Temperament Inventory

Using the scale below, please circle the number that tells you how often your child's behavior is like the behavior described in each item.

NEVER	**RARELY**	**HALF OF THE TIME**	**FREQUENTLY**	**ALWAYS**
1	**2**	**3**	**4**	**5**

1.	Gets upset when he/she can't find something.	1 2 3 4 5
2.	Approaches children his/her age even when he/she doesn't know them.	1 2 3 4 5
3.	When he/she disagrees, speaks in a quiet and calm manner.	1 2 3 4 5
4.	Smiles or laughs with new adult visitors at home.	1 2 3 4 5
5.	Is shy with adults he/she doesn't know.	1 2 3 4 5
6.	Gets mad even when mildly criticized.	1 2 3 4 5
7.	Seems nervous or anxious in new situations (visiting relatives, new playmates).	1 2 3 4 5
8.	Reacts strongly (cries or complains loudly) to a disappointment or failure.	1 2 3 4 5
9.	Gets angry when teased.	1 2 3 4 5
10.	Gets very frustrated when he/she makes a mistake.	1 2 3 4 5
11.	When meeting new children, acts bashful.	1 2 3 4 5
12.	When angry, yells or snaps at others.	1 2 3 4 5
13.	Moody when corrected for misbehavior.	1 2 3 4 5
14.	Moves right into a new place (store, theater, playground).	1 2 3 4 5
15.	Responds intensely to disapproval (shouts, cries, etc.).	1 2 3 4 5
16.	Prefers to play with someone he/she already knows rather than meeting someone new.	1 2 3 4 5
17.	Makes loud noises when angry (slams doors, bangs objects, shouts).	1 2 3 4 5
18.	Gets upset when there is a change in plans.	1 2 3 4 5
19.	Avoids (stay away from, doesn't talk to) new guests or visitors in the home.	1 2 3 4 5
20.	Has off days when he/she is moody or cranky.	1 2 3 4 5
21.	Seems uncomfortable when at someone's house for the first time.	1 2 3 4 5

Appendix L Family Data Sheet

Please circle the number that best describes the ethnic background of each family member (response optional):

Child: 1 2 3 4 5 6 **Parent 1**: 1 2 3 4 5 6 **Parent 2**: 1 2 3 4 5 6

Relationship to child: Parent 1: _____ Parent 2: _____

1= American Indian 2=Black/African American 3=Asian/Pacific Islander 4= Hispanic

5=White/Caucasian 6=Other:_____

Name of your child's school _____

Name of your child's primary teacher_____

Child's Birthdate:_____

Parent 1's number of years of education: _____ Parent 2's number of years of education: _____

*Note: High school = 12 years; Associate's Degree= 14; College Degree = 16; Master's Degree= 18; Ph.D., M.D. = 20.

Parent 1's Occupation: _____

Number of hours working per week outside home:_____

Number of months per year mother is employed: _____

If less than 12, which months of the year is mother not employed?_____

Parent 2's Occupation:_____

Number of hours working per week outside home:_____

Number of months per year father is employed: _____

If less than 12, which months of the year is father not employed? _____

Please circle all of the following who live in your household. ("Child" refers to your child who is participating in project.)

Child's mother Child's father Child's step-mother Child's stepfather

Child's grandmother(s) #:_____ Child's grandfather(s) #:_____

Sisters' Ages:_____ Brothers' Ages:_____ Others (please list):_____

Please list here those individuals in the household who are responsible for raising the child:

_____

If child's biological parents are divorced or separated:

Is child still in contact with noncustodial parent? Yes No

If yes, frequency of contact: _____ days per month for a total of _____ days per year.

Does your family qualify for food stamps? Yes No

Is your child eligible for free or reduced school lunches? Yes No