

Assessing Both Safe Haven and Secure Base Support in Parent-Child Relationships

Kathryn A. Kerns

Brittany L. Mathews

Amanda J. Koehn

Cierra T. Williams

Shannon Siener

Dept. of Psychological Sciences

Kent State University

Abstract

Although the attachment construct refers to a child's tendency to use an attachment figure both as a *safe haven* in times of distress as well as a *secure base* from which to explore, approaches to assessing attachment at older ages have focused on safe haven behavior. We tested modified versions of the *Friends and Family Interview* and the *Security Scale Questionnaire* to examine separately the correlates of safe haven and secure base support from parents. The main study (n = 107 children, 10 to 14 year-olds) included both interview and questionnaire assessments of safe haven and secure base support from mothers and fathers. The two methods converged in expected ways, and both showed associations with narrative coherence. Children reported greater safe haven support from mothers and greater secure base support from fathers, suggesting secure base support is a key aspect of father-child attachment. Both mother-child and father-child relationships were related to children's school adjustment and coping.

Key words: attachment parent-child relationships fathers emotion regulation
school adjustment

Assessing Both Safe Haven and Secure Base Support in Parent-Child Relationships

The attachment construct (Ainsworth, 1989; Bowlby, 1982) refers to a child's tendency to use an attachment figure both as a *safe haven* in times of distress as well as a *secure base* from which to explore. When distressed, children initiate physical or verbal contact with their attachment figure to obtain comfort. When there are no immediate threats in the environment, children can venture away from attachment figures to explore. Parents can foster both safe haven and secure base behavior by responding sensitively and promptly to their children's distress and by encouraging their children's efforts to explore (e.g., expressing confidence in the child). Knowledge that an attachment figure is available for comfort when needed should facilitate exploration away from the attachment figure, and thus the two aspects of attachment behavior are expected to be related. By definition, a securely attached child is one who can use the parent as both a safe haven and a secure base (Ainsworth, 1989; Bowlby, 1982; Bretherton, 2010; Grossmann et al., 2008).

In late middle childhood and early adolescence (ages 10 to 14 years), children continue to have a need for attachment figures (Allen, 2008; Kerns & Brumariu, in press). The set goal of the attachment system changes from proximity to availability after the transition into middle childhood (Ainsworth, 1989; Kerns & Brumariu, in press). Attachment becomes more reciprocal, in that the parent and child form a cooperative partnership in which both partners take responsibility for communicating and coordinating the child's access to and contact with the attachment figure (Kerns, Brumariu, & Seibert, 2011; Waters, Kondo-Ikemura, Posada, & Richters, 1991). Because of declines in the frequency and intensity of attachment behavior as children get older, as well as the development of more complex attachment representations,

representational measures (e.g., interviews, story stems) or questionnaires rather than observational measures of parent-child interaction are used to assess attachment in later middle childhood and early adolescence (Kerns & Brumariu, in press).

Although an attachment figure functions as both a safe haven and a secure base, the former has been emphasized in definitions and measurement approaches, particularly at older ages. Attachments are often misunderstood to be relevant only in emergency situations when children need comfort, but the attachment system continues to operate even when environmental risks are low (Cassidy, 2008). The term “secure exploration” (Grossmann, Grossmann, Kindler, & Zimmermann, 2008) refers to the idea that securely attached children often show persistence, flexibility, and adaptive emotion regulation in exploratory contexts. The tendency to equate secure attachment with safe haven support is also reflected in measurement approaches. For example, story stem assessment procedures (e.g., Granot & Mayseless, 2001; Kerns, Abraham, Schlegelmilch, & Morgan, 2007) or attachment scripts (Psouni & Apetroaia, 2014) use stories that present situations that require access to a safe haven (e.g., child is sad or threatened) rather than situations that call for the need of a figure to support exploration (e.g., child is trying to improve a skill or face a challenge). Similarly, attachment autobiographical interviews (e.g., Kriss, Steele, & Steele, 2012; Shmueli-Goetz, Target, Fonagy, & Datta, 2008) and questionnaires (e.g., Kerns, Tomich, Aspelmeier, & Contreras, 2000) ask children what they do when they are upset but do not explicitly probe for secure base support.

Both mothers and fathers can serve as attachment figures (Bretherton, 2010), although fathers are often viewed as subsidiary figures in middle childhood because they are less often sought out by children in safe haven situations (Seibert & Kerns, 2009). It is possible, however,

that the importance of fathers may have been underestimated due to a tendency for measures to focus on attachment figures in their role as safe havens rather than as secure bases. Fathers may have an especially important role in supporting their children's secure exploration of the environment (Grossmann et al., 2008; Bögels & Phares, 2008; Bretherton, 2010). Grossmann et al. (2002) examined sensitive and challenging parenting during play, defined as encouraging mature play and the child's efficacy and autonomy within a climate of parental acceptance and cooperation, and found that fathers' sensitive and challenging behavior with their children at age 2 predicted children's later attachment security, whereas sensitive and challenging play with mothers did not. Grossman and colleagues (2002) concluded that sensitive support of exploration is an important component of father-child attachment. In an interview study with parents of preschool children, Bretherton (2010) found that mothers and fathers differentiated their roles such that mothers primarily addressed safe haven needs, whereas fathers primarily supported secure exploration. Collectively, these studies suggest that it is important to assess both safe haven and secure base support, especially in studies of father-child attachment.

The overarching goal of the present studies was to adapt available attachment measures so that they assessed both safe haven and secure base support in parent-child relationships, and to evaluate their correlates. We briefly report two preliminary studies, and then test the measures more extensively in a new sample of 10 – 14 year-olds. We focused on this age period as it is when children are beginning to move toward establishing greater autonomy and spending less time with parents, and thus this may be a developmental stage at which secure base support becomes more critical. We expected the two types of support would be related (i.e., we expected that children who viewed a parent as available for comfort would also report receiving

more support for exploration). We also tested whether the differentiated pattern of safe haven and secure base support noted by Bretherton (2010) for mothers and fathers would be found around the transition to adolescence.

We examined safe haven and secure base support using multiple methods to test if findings generalized across measurement approaches. Attachment interviews are thought to have the advantage (over questionnaires) of assessing attitudes about caregivers that children cannot or will not report directly on a questionnaire. We adapted an autobiographical attachment interview, the Friends and Family Interview (FFI; Steele, Steele, & Kriss, 2009), to assess both safe haven and secure base support. We then adapted the Security Scale questionnaire (Kerns, Aspelmeier, Gentzler, & Grabill, 2001), and administered both adapted measures to examine their convergence. Based on earlier studies that have examined the convergence between interview and questionnaire measures of attachment security (Granot & Mayseless, 2001; Kerns et al., 2007; Psouni & Apetroaia, 2014), we expected to find, for both safe haven and secure base support, modest but significant associations between interviewer judgments of children's inferred experiences with parents (from the FFI) and child-report questionnaire measures of experiences with parents (from the Security Scale).

We also examined how our measures were related to narrative coherence. Questionnaire measures focus on the child's perceptions of experiences with attachment figures (e.g., does child seek out the parent), whereas interview measures ask about experiences with caregivers but also assess the child's narrative coherence when discussing attachment experiences. Narrative coherence refers to whether a target is able to maintain a collaborative and coherent discourse when discussing attachment experiences (Hesse, 2008). More specifically, coherent discourse is

defined as truthful (having evidence for what you say), succinct yet complete, relevant to the topic, and clear and orderly (Beijersbergen, Bakersman-Kranenburg, & van IJzendoorn, 2006; Hesse, 2008; Steele & Steele, 2005). Coherence of discourse has been conceptualized as the most central component of attachment security (Beijersbergen et al., 2006; Steele & Steele, 2005). While it might be expected that consistently positive experiences would be easier to integrate and thus would be associated with higher coherence, it has been argued that coherence is distinct from reported experiences of care such as whether the parent was loving or rejecting (de Hass, Bakermans-Kranenberg, & van IJzendoorn, 1994; Fonagy, Steele, & Steele, 1991; Steele & Steele, 2005). For example, some individuals can coherently describe painful experiences with attachment figures, and other individuals may report positively about parents but their reports appear to be idealized and incoherent in that they are unable to back up these judgments with convincing evidence (Hesse, 2008).

Although some attachment measures (e.g., story stem interviews, story script procedures) are scored while simultaneously considering both depicted experiences and narrative coherence (e.g., Granot & Mayseless, 2001; Kerns et al., 2011; Psouni & Apetroaia, 2014), autobiographical interviews like the FFI provide separate scores for experiences with caregivers and narrative coherence. Given that narrative coherence is interpreted as an index of attachment security (Beijersbergen et al., 2006; Steele & Steele, 2005), measures of safe haven and secure base support would be expected to correlate at least modestly with narrative coherence. Studies with both adults and children suggest that individuals who report loving and warm experiences with parents also provide a more coherent narrative (de Haas et al., 1994; Fonagy et al., 1991; Psouni & Apetroaia, 2014; Steele & Steele, 2005), with correlations between the two in the .40 -

.60 range. Prior studies evaluating overlap focused on safe haven interactions (e.g., what child did when upset) rather than secure base interactions. In Study 2 we tested the new scales by examining how children's safe haven and secure base experiences, as reflected in questionnaires and interviews, were related to narrative coherence. We expected that both types of parental support would be associated with greater narrative coherence.

A premise of attachment theory is that the formation of a secure attachment fosters more adaptive social and emotional development (Bowlby, 1982). Through repeated interactions with a responsive and sensitive attachment figure, a securely attached child learns how to understand and manage emotional experiences (Cassidy, 1994; Contreras & Kerns, 2000; Thompson, 2008). There is substantial evidence that in middle childhood and early adolescence securely attached children are better able to manage their emotions, even in the absence of their attachment figures. For example, secure attachment is associated with broad indices of adaptive coping (Contreras et al., 2000; Kerns et al., 2007; Psouni & Apetroaia, 2014) as well as greater use of social support and cognitive coping strategies such as problem solving (Gaylord-Harden, Taylor, Campbell, Kesselring, & Grant, 2009; Seiffge- & Beyers, 2005). We thus expected both safe haven support and secure base support would be associated with more adaptive child coping.

We also examined how the adapted attachment measures were related to children's social and emotional adjustment at school. Adjusting to the demands of school and finding one's place in the peer group have been identified as two key challenges in middle childhood (Patterson & Bank, 1989). This may also be a key age period during which a father's role as a secure base may become more salient, given that fathers are hypothesized to foster children's functioning outside the family, including with peers (Bogels & Phares, 2008; Verschueren & Marcoen,

1999). We examined how safe haven and secure base support from mothers and fathers predicted teacher ratings of children's academic and peer competence at school, which allowed us to examine whether safe haven support from mothers and secure base support from fathers would be more highly related to children's social adjustment and exploration outside the family environment, as predicted by Bogels and Phares (2008).

In summary, we addressed five questions: 1. How highly related are measures of safe haven and secure base support, when assessed with either interviews and questionnaires? 2. Are interview and questionnaire measures of safe haven and secure base support related to one another, and to narrative coherence? 3. Is there any evidence that children preferentially use mothers as safe havens and fathers as secure bases? 4. Are safe haven and secure base support from mothers and fathers differentially related to children's school adjustment and coping, such that safe haven support from mothers, but secure base support from fathers, are most strongly related to child adjustment? 5. Does narrative coherence also show associations with child adjustment, and are patterns similar to those found for safe haven and secure base support?

Method

Preliminary Study 1: Revision of FFI Interview and Scoring.

Our interest in adapting attachment measures was sparked by our experiences when we used the Friends and Family Interview (FFI; Steele et al., 2009) in a small pilot study ($n = 30$) with 12 to 14 year-olds. The FFI coding manual includes rating scales for coherence as well as parent-child experience scales; from the latter, we were interested in the scale that is labeled "secure base support". When we scored the interviews using the original scale for secure base

support -- which emphasizes parental emotional support-- we found that mothers received scores across the entire score range, but fathers only received low scores, despite the fact that several children spoke quite warmly about their fathers. The FFI includes a question that directly asks about safe haven support (i.e., “What do you do when you are upset?”), but there is no comparable question that asks about secure base support. Even though they were not directly prompted, children sometimes commented that their fathers encouraged them to try new things, provided them confidence when they faced a challenge, respected their opinions, etc. (children also made these comments when discussing their mothers). Thus, it appeared that children were spontaneously describing examples of parents providing secure base support.

We then modified both the content and coding of the FFI for the main study. We added a question to the interview to solicit information about secure base support, and also created a new coding scale so we could separately rate safe haven and secure base support. For the latter, we identified common examples of secure base support from the pilot study interviews, and incorporated these into a new scale to assess secure base support from the FFI (see below, main study, for more details of new scale).

Preliminary Study 2: Revision of Security Scale to Assess Safe Haven and Secure Base Support.

Preliminary Study 2 provided an opportunity to develop an expanded version of the Security Scale, revised to include items to assess secure base support. The Security Scale (Kerns et al., 2001) questionnaire assesses children’s perceptions of parent-child attachment and has been frequently used with 9 to 14 year-old children (see Kerns et al., 2000, Kerns et al., 2011, and Van Ryzin & Leve, 2012). The original version (Kerns et al., 2001) is a 15 item, single

dimension measure that assesses attachment security to a particular parent. For each question, the child is presented with two different types of children, and then has to decide which is more similar to him or her, e.g., “Some kids wish their mom would help them more with their problems BUT other kids think their mom helps them enough.” After picking which kids they are more like, the child specifies whether they are “sort of like” or “really like” the child in the question. Thus, each item is measured on a 4-point scale (higher scores reflecting greater security), with item scores averaged to calculate a total score.

We reviewed the Security Scale (15 items), and almost all items referred to safe haven support (e.g., going to a parent when upset). The one exception was an item that referred to the parent allowing the child to do things on his or her own (vs. parent interfering). For Study 1, we generated six new items designed to assess secure base support to supplement the one secure base support item from the original questionnaire. The new items, based on the themes reflected in the comments of children from Preliminary Study 1, assessed feeling more confident after talking to parent, thinking parent wants to hear child’s opinion even when they disagree , encouraging the child to be themselves or to try new things, letting child make decisions, and sure parent is proud of them.¹ The new questions were presented in the same “Some kids... other kids...” format, e.g., “Some kids are 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.” The remaining 14 items from the original Security Scale constituted the new safe haven scale, e.g., “Some kids feel their mom really understands them BUT other kids feel like their mom really does not understand them.”

To obtain initial validity data on the revised scales, we administered the adapted 21 item

version of the Security Scale as part of a larger study. We recruited children ($n = 103$, 99 with Security Scale data; 88 with parenting and adjustment data collected at a second time point 2 months later) and their mothers with invitation letters distributed through local schools and announcements in local papers in suburban communities or small towns. Approximately 87% of the participants identified as Caucasian, 6% African American, 3% Hispanic, and 4% Other/Biracial. Participants came from both intact (55%) and divorced or separated households (45%). The mean level of maternal education ($M = 14.32$, $SD = 2.05$) corresponding to an Associate's Degree.

Children rated safe haven and secure base support from their mother (due to time constraints, information about father-child attachment was not collected). Cronbach alphas revealed good internal consistency of the scales (safe haven support : .88; secure base support: .73). As expected, safe haven and secure base support received from mothers were related to one another, $r = .75$. We also calculated a Security score based on the 15 original items on the Security Scale, which was substantially correlated with the Safe Haven scale, $r = .99$ (note the Safe Haven scale contains 14 of the original 15 items) and the Secure Base scale, $r = .79$ (note only one item is common to the two scales). The two scales were not related to child age or gender, but were related to family status; children from intact families, compared to those that were from stepparent or single parent families, reported receiving more safe haven support, $t(97) = 3.44$, $p = .001$, means 3.42 and 3.07, as well as more secure base support, $t(97) = 3.37$, $p = .001$, means 3.29 and 2.96. Subsequent analyses, reported as bivariate correlations, were based on the 88 cases with complete data.

The larger study included parenting constructs that have been linked to secure attachment

(Kerns et al, 2001; Kerns et al, 2011). Mothers completed a measure of Maternal Willingness to Serve as an Attachment Figure (see Kerns et al., 2001; example: “I feel a child should be given comfort and understanding when s/he is upset”). Children completed questionnaires to assess parental acceptance and psychological control (Barber, Stolz, & Olsen, 2005). We found that children who reported greater reliance on their mothers for safe haven support had mothers who reported more often serving as an attachment figure to their children, $r(86) = .37, p < .001$. In addition, children reporting greater safe haven support perceived their mothers as more accepting, $r(86) = .67, p < .001$, and using less psychological control, $r(86) = -.39, p < .001$. Although secure base support was not related to maternal reports of parenting, $r(86) = .17, p = .11$, it was related to child reports of maternal acceptance, $r(86) = .56, p < .001$, and psychological control, $r(86) = -.45, p < .001$.

We also examined correlations with emotion regulation. Adolescents completed the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004), and we examined the lack of emotional awareness, lack of emotional clarity, and nonacceptance of emotion subscales. Children who reported receiving more safe haven or more secure base support were less likely to report poor awareness of their emotions, $r(86) = -.27$ and $-.27, ps < .01$, had fewer difficulties with clarity of their emotions, $rs(86) = -.30$ and $-.36, ps < .001$, and had less difficulty accepting their emotional states, $rs(86) = -.23, p < .05$, and $-.29, p < .001$.

Finally, we examined correlations with child reports of social anxiety and interviewer ratings of depressive symptoms. Children completed the Social Anxiety Scale for Adolescents (SAS-A) questionnaire (La Greca & Lopez, 1998), and a clinical graduate student administered a 17 item semi-structured interview of depressive symptoms, the Children’s Depression Rating

Scale Revised (CDRS-R; Poznanski et al., 1984). The interview was given twice over a 2 month interval. A trained interviewer scored the interview for depressive symptoms (20% scored by an independent rater; intraclass correlation at time 1 was .91 and time 2 was .78), and scores from the two time points ($r = .55, p = .001$) were averaged to provide an overall depressive symptoms score. Children reporting more safe haven support were less socially anxious, $r(86) = -.27, p < .01$, and rated by interviewers as less depressed, $r(86) = -.46, p < .001$. Children with greater secure base support also reported less social anxiety, $r(86) = -.24$, and were rated less depressed, $r(86) = -.35, p < .01$.

Main Study.

Participants. We recruited a new sample ($n = 111$) of children between the ages of 10 and 14 years (73 girls, 38 boys). The sample was primarily Caucasian (86%), with some children of African American (5% of sample) race, mixed race (5% of sample), or Native American race (4% of sample). Average number of years of education in the sample (16 is equivalent to a Bachelor's degree) was 15.54 years for mothers and 15.05 years for fathers. We limited our analyses to the 107 children who had data for both mother-child and father-child so that the mother-father comparisons would be based on the same sample.

Procedure. Children were recruited from local schools by distributing information about the study to parents through invitation letters or announcements in school newsletters. Interested parents were asked to contact the researchers. The participating schools (one public, one private) were located in a suburb of a medium sized city. Children completed the attachment measures at school during school hours. We administered adapted versions of the Friends and Family Interview and the Security Scale. One parent (typically the mother; 87%) completed a brief

demographic questionnaire and a measure of child coping which they returned to the school along with the child's consent form. Teachers were contacted and asked to complete a questionnaire about the child's behavior at school.

Measures.

Descriptive information for the main study variables is given in Table 1.

Friends and Family Interview (FFI; Steele et al, 2009). Children were interviewed individually by a female graduate student with the Friends and Family Interview. The FFI was modified in two ways. First, to focus specifically on parent-child relationships, we omitted the questions that ask about peers, siblings, school, and friends. We retained the questions about self as a warm up before asking questions regarding attachment figures. In addition to more general questions that ask a child to describe his or her relationship with a particular parent, there is a question that asks about safe haven support ("When you are upset, what do you do?"), and then are asked to provide a specific example. We added a new question to ask about secure base support, "When you have to try something hard, how do you get yourself ready?", again with a follow up to request a specific example.

Two coders read the entire interview, and then separately rated the mother-child and father-child relationship for both *Safe Haven Availability* and *Secure Base Support*. The Safe Haven Availability rating was taken from the Steeles' coding manual with only minor revision (called "secure base support" in that manual), with high scores reflecting that a parent was available to provide emotional and instrumental support when a child experienced a problem or was upset. Highest scores are given when parents are described as providing emotional support. We created the Secure Base Support rating scale, with high scores reflecting that a parent

supported exploration through encouraging the child, supporting the child's individuality, and showing confidence in the child's abilities. The same coders also rated each interview for overall narrative coherence, using the standard procedures outlined in the manual (Steele et al, 2009). Raters first coded truth, economy, relevance, and manner, then made an overall rating of coherence (see Table 1 for observer agreement).

Security Scale. Children completed the revised version of the Security Scale separately for each parent; scale alphas are reported in Table 1.

Academic and Peer Competence at School. Teachers were asked to complete the 38 item Teacher-Child Rating Scale (TCRS; Primary Mental Health Project, 1995), with items rated on 5-point scales. The TCRS was developed specifically for use with teachers. We focused on the items assessing academic and peer competence at school. The *Learning Problems* and *Task Orientation* subscales both assess a child's ability to succeed on academic tasks (e.g., does child complete school work, able to follow instructions). The two subscales were highly correlated and were combined to create a single index of academic competence (alpha = .91; Learning Problems items were reverse coded). The *Peer Social Skills* scale assesses a child's likeability and social skills with peers (e.g., does child have many friends, is socially skilled; alpha = .96). We contacted 1-2 teachers for every child (1 teacher for those children who stayed with one teacher for most of the day, 2 teachers for those who rotated to several teachers throughout the day). Ratings from at least 1 teacher were available for 96 children, and 56 children had data from 2 teachers; for the latter, the correlations between the two teachers was $r = .71$ for academic competence and $r = .77$ ($ps < .001$) for peer competence, and we averaged teacher ratings to derive single scores for academic and peer competence, respectively. On average, teachers had

known each child for about eight months (range: 4 to 18 months) and spent about 150 minutes a day with the child (range: 30 to 280 minutes).

Parent Reports of Child Coping. One parent completed the Children's Coping Strategies Checklist (Ayers, Sandler, West, & Roosa, 1996; Eisenberg et al., 1996), rating how often their child used 30 different coping responses when upset (from 1 = Never to 5 = Very Often). The scales of interest assessed how well a child utilized *problem solving* (9 items, e.g., tries to make things better by changing what makes him/her feel bad), *positive reframing* (5 items, e.g., tries to make things better by changing what makes him/her feel bad), and *support seeking* (10 items, e.g., talks to someone about his/her feelings). The *problem solving* and *positive reframing* scales were substantially correlated ($r = .63$) and were aggregated to create an index of *cognitive coping*.

Results

There were no child age or gender differences for the attachment measures, and few cases where there were gender differences in correlations between variables for boys and girls (6 of 72 correlations, scattered across different variables). Given the few sex differences and the modest sample size, we report only results for the total sample.

How highly related are measures of safe haven and secure base support, when the two aspects of secure base behavior are assessed separately? As expected, children who reported receiving more safe haven support from a parent also reported receiving more secure base support from that parent. These correlations, shown in Table 2 in bold, were stronger for the Security Scale (mother-child relationship, $r = .77$, father-child relationship, $r = .78$) than for the FFI (mother-child relationship, $r = .58$; father-child relationship, $r = .58$).

Are interview and questionnaire measures of safe haven and secure base support related to one another, and to measure of narrative coherence? There was substantial overlap between the questionnaire and interview measures of safe haven and secure base support (see Table 3), with effect sizes in the medium to large range. It tended to be that the highest correlations were for the same type of support in the same relationship (e.g., safe haven support for mother assessed by the two methods), and these correlations are shown in bold.

We next examined associations between narrative coherence from the FFI and measures of safe haven and secure base support from parents (also in Table 3). Greater narrative coherence was related to higher safe haven support from mothers and fathers as assessed with either the FFI or the Security Scale. These results were stronger for the FFI (large rather than small to medium effect sizes), which is not surprising, given that they came from the same data source. Coherence was positively correlated with maternal and paternal secure base support as assessed with the FFI, but was not related to secure base support as assessed with the Security Scale.

Is there any evidence that children preferentially use mothers as safe havens and fathers as secure bases? As shown in Table 4, children reported going more to mothers for safe haven support, but to fathers for secure base support, with effect sizes ranging from small to large. The findings were stronger for the FFI than for the Security Scale; the latter comparison for secure base support from fathers was only marginally significant.

Does safe haven and secure base support from mothers and fathers differentially relate to child adjustment? As shown in Table 5, we found that safe haven and secure base support from mothers and fathers, assessed with the FFI and Security Scale, both predicted teacher ratings of children's academic and peer competence at school, with only one exception

(secure base support from fathers as assessed with the Security Scale was not related to children's competence at school).

Analyses examining correlations with maternal reports of coping (Table 5) revealed that parental safe haven support, but not secure base support, showed some associations with child coping. Specifically, child reports of greater safe haven support from mothers and fathers as assessed with the FFI, and greater safe haven support from mothers as assessed with the Security Scale, were associated with parents' reports of greater use of social support coping by the child. Child reports of greater safe haven support from fathers as assessed with the FFI, and greater safe haven support from mothers and fathers as assessed with the Security Scale, were associated with greater use of cognitive coping by the child. Significant effects were in the small to medium range.

Does narrative coherence predict school adjustment and coping? As shown in Table 5, greater coherence on the FFI was related to higher levels of academic and peer competence at school, but was not related to child coping. Effect sizes for correlations with school adjustment were in the medium to high range.

Discussion

This study yielded several important findings. As expected, when looking at each measure separately we found that reports of secure base and safe haven support from the same parent were related to one another, although measures of safe haven and secure base support were less highly correlated (and thus, more distinct) when assessed with the modified interview (FFI) than with the questionnaire (Security Scale). In addition, we found convergence between children's reported experiences of safe haven and secure base support with parents as assessed

with two different methods (i.e., interview and questionnaire). Prior studies with questionnaire and interview measure of attachment security have found the two to show significant but modest associations, typically in the small to medium range (Granot & Mayseless, 2001; Kerns et al., 2007; Kerns et al., 2011; Psouni & Apetroaia, 2014). For example, Psouni & Apetroaia (2014) reported a correlation of .24 between the Security Scale and coherence rated from the FFI. The robust associations found in the present study (r_s .35 to .55) between the questionnaire and interview measures of safe haven and secure base support suggest that despite differences in the methods, the two approaches do overlap in expected ways. The high convergence for the two measures may be due in part to the specific focus on children's reported experiences with parents (i.e., there was substantial overlap in the content of the measures).

Although some individuals can coherently describe negative experiences (Hesse, 2008; Steele & Steele, 2005), we found that children who were able to produce more coherent interviews also reported more positive safe haven and secure base support experiences with parents on the interview, and more positive safe haven experiences on the questionnaire. The associations between coherence and the measures of safe haven and secure base support from the FFI are similar in magnitude to prior studies with the FFI that examined associations between coherence and safe haven support (Psouni & Apetroaia, 2014; Steele & Steele, 2005). It is possible that children at this age do not yet have the reflective capacity to integrate and coherently describe negative or incoherent experiences with attachment figures. Even in adults, however, individuals who produce more coherent narratives also describe more positive experiences with parents (de Haas et al., 1994; Fonagy et al., 1991), suggesting that coherence is not typically independent of reported experiences, and that cases where individuals coherently

describe negative experiences are exceptions to the rule.

Our study provided an opportunity to compare children's attachments to mothers and fathers. Although most children reported both types of support from both parents, they also showed a pattern of preferring mothers for safe haven support and fathers for secure base support (the latter finding was stronger for the FFI). Prior studies have identified mothers as the attachment figure most often sought out by children in middle childhood (e.g., Seibert & Kerns, 2009), but that result was likely due to the focus in prior studies on safe haven rather than secure base support. By contrast, the present study suggests that both mothers and fathers are important attachment figures, even though they may adopt somewhat complementary roles. It is important to note that we only included children who reported having contact with both their mothers and fathers. It would be interesting to examine safe haven and secure base support in more diverse families. It may be that the provision of complementary support from mothers and fathers develops when two parents are available, but that in the absence of a second attachment figure a parent (mother or father) would make active efforts to provide both types of support. A further test of whether parent gender or parent adoption of complementary roles explains our findings would be afforded in studies that examine safe haven and secure base parental support in families with gay or lesbian couples. If these couples also adopt complementary roles, then it might be that parents adopt more specialized roles as a way to differentiate family relationships (i.e., it allows each parent to create a somewhat unique and special relationship with a child).

Although there were differences in the types of support mothers and fathers provided, contrary to our expectations safe haven and secure base support from mothers and fathers showed similar rather than distinct relations to child school adjustment and coping. Although

some prior studies found that mother-child and father-child attachments were differentially related to different domains of child competence (e.g., Verscheuren & Marcoen, 1999; Lieberman, Doyle, & Markiewicz, 1999), other studies have not shown clear differences (e.g., Kerns et al., 2000; Kochanska & Kim, 2013). Our study is consistent with the idea that a secure attachment to either parent is related to greater competence at school and more adaptive coping when under stress (see Kochanska & Kim, 2013, for similar conclusions regarding attachment and behavior problems). Additional studies are needed to explore whether the correlates of safe haven and secure base support from mother-child and father-child relationships are differentially related to other aspects of child competence, e.g., to test the idea that fathers' support of exploration is a protective factor for the development of social anxiety (Bögels & Phares, 2008).

Both the experience scales and narrative coherence were related in similar ways to children's school adjustment, in that children who reported greater safe haven or secure base support from parents on the interview or questionnaires, and those who provided more coherent narratives, were rated by teachers as showing greater academic and peer competence at school (the only exception was that father secure base support assessed with the Security Scale was not related to school adjustment). Although based on correlational data, these findings suggest that secure attachment may foster children's adaptive behavior even in the absence of the caregiver. The pattern of similar correlations across measures suggests that the construct common to the two attachment measures is what is related to children's school adjustment. Interestingly, only safe haven support from parents was related to children's coping. It is possible that parents who readily are available as comfort figures use opportunities when children seek their support to help children develop adaptive ways of coping with problems, as suggested by Contreras and

Kerns (2000).

A next step would be to test whether any intervening mechanisms are needed to account for these links. It is possible that, even when safe haven and secure base support show similar relations to a measure of child competence, there may be different intervening processes that account for the associations. For example, only safe haven support was related to children's coping, and it is possible that more adaptive coping is the more proximal mechanism that accounts for why safe haven support is related to behavior at school. By contrast, perhaps secure base support is associated with school behavior because parental encouragement to explore fosters children's feelings of self-efficacy and self-worth (constructs not assessed in the present studies). Thus, an important direction for future research that replicates and extends the current findings on safe haven and secure base parental support and child adjustment would be to test potential mediating mechanisms that might help explain these associations.

This paper represents a first attempt to modify and test expanded versions of the FFI and Security Scale. In validating the measures, we examined correlations with maternal and child reports of parenting, and with a broad set of indicators of social and emotional adjustment using multiple data sources (parents teachers, and trained interviewers). Validating new measures requires extensive testing across multiple samples, and clearly there is a need to test the measures further to more fully evaluate their validity, e.g., by testing how both safe haven and secure base support are related to observational assessments of parenting. Another limitation is that our study focused primarily on convergent validity. Although we found safe haven and secure base support were not related to child age or gender, additional research is needed to test the discriminant validity of the measures (e.g., are they associated with child temperament or IQ).

We used a shortened version of the FFI in this study, which may account for why observer agreement for narrative coherence was somewhat lower than found in other samples. Finally, the areas from which we recruited had limited racial and ethnic diversity, and this is reflected in the samples. Thus, this work could be extended by examining the reliability and validity of measures of safe haven and secure base support in more diverse samples.

In conclusion, this study was the first in children to examine parent-child attachment by assessing both safe haven and secure base support. Most of the findings from our study were based on measures taken from different sources, and thus the obtained associations cannot be attributed to reporting biases from the child. Overall, the findings suggest it is important to expand attachment assessments to include secure base support as well as safe haven support, especially when father-child attachment is the focus. Finally, the studies have practical implications, especially regarding fathers as attachment figures. Fathers tend to be included much less frequently in psychotherapeutic interventions (Duhig, Phares, & Birkeland, 2002), and are often left out of research evaluating parenting interventions (Phares, Fields, Kamboukos, & Lopez, 2005). The present findings suggest that fathers play a complementary role to mothers, and thus there is a need to examine their role in family interventions.

Footnote

¹ The present study was developed prior to the publication of Feeney and Thrush's (2010) work in which they distinguished between secure base exploration and safe haven support in married couples. Although an independent effort, there is some overlap but also some differences in the two approaches. Feeney and Thrush proposed three dimensions of secure base support that were intended to be distinct from safe haven support: availability of an attachment figure during exploration, interference with exploration, and encouragement of exploration. Note, however, that some of their measures of availability appear to tap comforting, which we conceptualize as safe haven support. Thus our conceptualization of secure base support focuses primarily on what Feeney and Thrush describe as (non)interference with exploration and encouragement of exploration, and overlaps with what the Grossmanns (Grossmann et al., 2002; Grossmann et al., 2008) have termed secure exploration.

References

- Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist, 44*, 709 - 716. doi:10.1037/0003-066X.44.4.709
- Allen, J. P. (2008). The attachment system in adolescence. In J. Cassidy, P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 419-435). New York, NY US: Guilford Press.
- Ayers, T. S., Sandler, I. N., West, S. G., & Roosa, M. W. (1996). A dispositional and situational assessment of children's coping: Testing alternative models of coping. *Journal of Personality, 64*(4), 923-958. doi:10.1111/j.1467-6494.1996.tb00949.x
- Barber, B. K., Stolz, H. E., & Olsen, J. A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development, 70*.
- Beijersbergen, M. D., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2006). The concept of coherence in attachment interviews: Comparing attachment experts, linguists, and non-experts. *Attachment & Human Development, 8*(4), 353-369. doi:10.1080/14616730601048175
- Bögels, S., & Phares, V. (2008). Fathers' role in the etiology, prevention and treatment of child anxiety: A review and new model. *Clinical Psychology Review, 28*(4), 539-558. doi:10.1016/j.cpr.2007.07.011
- Bowlby, J. (1982). *Attachment and Loss: Vol. I Attachment* (2nd ed.). New York: Basic.
- Bretherton, I. (2010). Fathers in attachment theory and research: A review. *Early Child Development and Care, 180*(1-2), 9-23. doi:10.1080/03004430903414661

Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs Of The Society For Research In Child Development*, 59 (2-3), 228-283.

doi:10.2307/1166148

Cassidy, J. (2008). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 3-22). New York, NY US: Guilford Press.

Contreras, J. M., & Kerns, K. A. (2000). Emotion regulation processes: Explaining links between parent-child attachment and peer relationships. In K. A. Kerns, J. M. Contreras, & A. M. Neal-Barnett (Eds.), *Family and peers: Linking two social worlds* (pp. 1 - 25). Westport, CT: Praeger.

de Haas, M. A., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (1994). The Adult Attachment Interview and questionnaires for attachment style, temperament, and memories of parental behavior. *The Journal of Genetic Psychology: Research And Theory On Human Development*, 155(4), 471-486. doi:10.1080/00221325.1994.9914795

Duhig, A. M., Phares, V., & Birkeland, R.W. (2002). Involvement of fathers in therapy: A survey of clinicians. *Professional Psychology: Research and Practice*, 33, 389 – 395.

Eisenberg, N., Fabes, R. A., Karbon, M., Murphy, B. C., Wosinski, M., Polazzi, L., & ... Juhnke, C. (1996). The relations of children's dispositional prosocial behavior to emotionality, regulation, and social functioning. *Child Development*, 67(3), 974-992.

doi:10.2307/1131874

Feeney, B. C., & Thrush, R. L. (2010). Relationship influences on exploration in adulthood: The characteristics and function of a secure base. *Journal Of Personality And Social*

Psychology, 98(1), 57-76. doi:10.1037/a0016961

Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at one year of age. *Child Development*, 62(5), 891-905. doi:10.2307/1131141

Gaylord-Harden, N. K., Taylor, J. J., Campbell, C. L., Kesselring, C. M., & Grant, K. E. (2009). Maternal attachment and depressive symptoms in urban adolescents: The influence of coping strategies and gender. *Journal of Clinical Child And Adolescent Psychology*, 38(5), 684-695. doi:10.1080/15374410903103569

Granot, D., & Mayseless, O. (2001). Attachment security and adjustment to school in middle childhood. *International Journal Of Behavioral Development*, 25(6), 530-541. doi:10.1080/01650250042000366

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal Of Psychopathology And Behavioral Assessment*, 26(1), 41-54. doi:10.1023/B:JOBA.0000007455.08539.94

Grossmann, K., Grossmann, K. E., Fremmer-Bombik, E., Kindler, H., Scheuerer-Englisch, H., & Zimmermann, P. (2002). The uniqueness of the child-father attachment relationship: Fathers' sensitive and challenging play as a pivotal variable in a 16-year longitudinal study. *Social Development*, 11(3), 307-331. doi:10.1111/1467-9507.00202

Grossmann, K., Grossmann, K. E., Kindler, H., & Zimmermann, P. (2008). A wider view of attachment and exploration: The influence of mothers and fathers on the development of psychological security from infancy to young adulthood. In J. Cassidy, & P. R. Shaver

- (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 857-879). New York, NY US: Guilford Press.
- Hesse, E. (2008). The Adult Attachment Interview: Protocol, method of analysis, and empirical studies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 552-598). New York, NY US: Guilford Press.
- Kerns, K.A., & Brumariu, E. (in press). Attachment in middle childhood. In J. Cassidy & P. Shaver (Eds.), *Handbook of Attachment* (2nd ed., pp. 366 - 382). New York, NY US: Guilford Press.
- Kerns, K.A., Abraham, M.M., Schlegelmilch, A., & Morgan, T.A. (2007). Mother-child attachment in later middle childhood: Assessment approaches and associations with mood and emotion regulation. *Attachment and Human Development*, 9, 33-53.
doi:10.1080/14616730601151441
- Kerns, K. A., Aspelmeier, J. E., Gentzler, A. L., & Grabill, C. M. (2001). Parent-child attachment and monitoring in middle childhood. *Journal Of Family Psychology*, 15(1), 69-81. doi:10.1037/0893-3200.15.1.69
- Kerns, K. A., Brumariu, L. E., & Seibert, A. (2011). Multi-method assessment of mother-child attachment: Links to parenting and child depressive symptoms in middle childhood. *Attachment & Human Development*, 13(4), 315-333. doi:10.1080/14616734.2011.584398
- Kerns, K. A., Tomich, P. L., Aspelmeier, J. E., & Contreras, J. M. (2000). Attachment-based assessments of parent-child relationships in middle childhood. *Developmental Psychology*, 36(5), 614-626. doi:10.1037/0012-1649.36.5.614
- Kochanska, G., & Kim, S. (2013). Early attachment organization with both parents and future

- behavior problems: From infancy to middle childhood. *Child Development*, 84(1), 283-296. doi:10.1111/j.1467-8624.2012.01852.x
- Kriss, A., Steele, H., & Steele, M. (2012). Measuring attachment and reflective functioning in early adolescence: An introduction to the Friends and Family Interview. *Research in Psychotherapy: Psychopathology, Process and Outcome*, 15(2), 87-95.
- La Greca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology*, 26, 83-94.
doi:10.1023/A:1022684520514
- Lieberman, M., Doyle, A., & Markiewicz, D. (1999). Developmental patterns in security of attachment to mother and father in late childhood and early adolescence: Associations with peer relations. *Child Development*, 70(1), 202-213. doi:10.1111/1467-8624.00015
- Patterson, G. R., & Bank, C. L. (1989). Some amplifying mechanisms for pathologic processes in families. In M. R. Gunnar & E. Thelen (Eds.), *Systems and development* (pp. 167-209). Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.
- Phares, V., Lopez, E., Fields, S., Kamboukos, D., and Duhig, A. (2005). Are fathers involved in pediatric research and treatment? *Journal of Pediatric Psychology*, 30, 631 – 643.
- Poznanski, E. O., Grossman, J. A., Buchsbaum, Y., Banegas, M., Freeman, L., & Gibbons, R. (1984). Preliminary studies of the reliability and validity of the Children's Depression Rating Scale. *Journal Of The American Academy Of Child Psychiatry*, 23(2), 191-197.
doi:10.1097/00004583-198403000-00011
- Primary Mental Health Project, Inc. (1995). *Screening and evaluation measures and forms: Guidelines*. Rochester, NY: Author.

- Psouni, E., & Apetroaia, A. (2014). Measuring scripted attachment-related knowledge in middle childhood: the Secure Base Script Test, *Attachment & Human Development*, *16*, 22 – 41.
- Seibert, A.C., & Kerns, K.A. (2009). Attachment figures in middle childhood. *International Journal of Behavioral Development*, *33*, 347 - 355. doi: 10.1177/0165025409103872
- Seiffge-Krenke, I., & Beyers, W. (2005). Coping trajectories from adolescence to young adulthood: Links to attachment state of mind. *Journal of Research on Adolescence*, *15*(4), 561-582. doi:10.1111/j.1532-7795.2005.00111.x
- Shmueli-Goetz, Y., Target, M., Fonagy, P., & Datta, A. (2008). The Child Attachment Interview: A psychometric study of reliability and discriminant validity. *Developmental Psychology*, *44*, 939-956. doi:10.1037/0012-1649.44.4.939
- Steele, H., & Steele, M. (2005). The construct of coherence as an indicator of attachment security in middle childhood: The Friends and Family Interview. In K. A. Kerns & R. A. Richardson (Eds.), *Attachment in middle childhood* (pp. 137-160). New York, NY US: Guilford Press.
- Steele, H., Steele, M., & Kriss, A. (2009). *Friends and family interview*. Unpublished instrument.
- Thompson, R. A. (2008). Early attachment and later development: Familiar questions, new answers. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment* (2nd ed., pp. 348 - 365). NY: Guilford.
- Van Ryzin, M. J., & Leve, L. D. (2012). Validity evidence for the security scale as a measure of perceived attachment security in adolescence. *Journal of Adolescence*, *35*(2), 425-431. doi:10.1016/j.adolescence.2011.07.014

Verschueren, K., & Marcoen, A. (1999). Representation of self and socioemotional competence

in kindergartners: Differential and combined effects of attachment to mother and father.

Child Development, 70(1), 183-201. doi:10.1111/1467-8624.00014

Waters, E., Kondo-Ikemura, K., Posada, G., & Richters, J. E. (1991). Learning to love:

Mechanisms and milestones. In M. R. Gunnar & L. Sroufe (Eds.), *Self processes and*

development (pp. 217-255). Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.

Table 1

Descriptive Statistics for Main Study Variables

Variable	<i>M</i>	<i>SD</i>	<i>Reliability estimate*</i>
FFI – Safe haven mother	2.55	.89	.92
FFI – Safe haven father	2.02	.77	.87
FFI – Secure base mother	2.18	.81	.86
FFI – Secure base father	2.43	.81	.85
FFI – Coherence	2.68	.73	.79
Security Scale – Safe haven mother	3.40	.51	.88
Security Scale – Safe haven father	3.32	.56	.90
Security Scale – Secure base mother	3.26	.52	.76
Security Scale – Secure base father	3.38	.50	.74
Teacher – Academic competence	22.72	4.64	.91
Teacher – Peer competence	3.76	.99	.96
Mother – Support coping	3.57	.65	.89
Mother – Cognitive Coping	3.20	.63	.76

Note: *Reliability column refers to intraclass correlations for the FFI scales, and to Cronbach's alpha for all other scales.

Table 2

Associations of Safe Haven and Secure Base Support within a Measure

	Safe haven father	Secure base mother	Secure base father
FFI			
Safe haven mother	.39**	.58**	.42**
Safe haven father		.38**	.58**
Secure base mother			.37**
Security Scale			
Safe haven mother	.36**	.75**	.26*
Safe haven father		.31*	.78**
Secure base mother			.31*

Note. Items in bold signify correlations between safe haven and secure base support within the same relationship. * correlations significant at $p < .01$; ** correlations significant at $p < .001$.

Table 3

Associations of Safe Haven and Secure Base Support across Two Measures (FFI and Security Scale) and with Narrative Coherence

	Security Scale				Coherence
	Safe haven mother	Safe haven father	Secure base mother	Secure base father	
FFI					
Safe haven mother	.55***	.22*	.43***	.18	.21*
Safe haven father	.12	.52***	.16	.40***	.21*
Secure base mother	.43***	.27**	.35***	.22*	.13
Secure base father	.23*	.54***	.26**	.48***	.17
Coherence	.65***	.47**	.53**	.50**	

Note. Items in bold signify correlations for the same relationship aspect assessed across the two methods. * correlations significant at $p < .05$; ** correlations significant at $p < .01$; *** correlations significant at $p < .001$.

Table 4

Comparisons of Safe Haven and Secure Base Support in Mother-Child and Father-Child Relationships

	Mother	Father	<i>t</i> value	Significance	95% CI for Mean difference
FFI					
Safe haven	2.60	2.02	6.59	.0001	.405 to .754
Secure base	2.20	2.43	-2.59	.01	-.404 to -.054
Security Scale					
Safe haven	3.44	3.32	2.09	.05	.006 to .232
Secure base	3.28	3.38	-1.69	.10	-.209 to .017

Note. $N = 107$.

Table 5

Correlations of Parent-Child Attachment with School Adaptation and Child Coping

		Teacher ratings		Parent ratings	
		Academic competence	Peer competence	Support coping	Cognitive coping
FFI					
	Safe haven mother	.38***	.38**	.23*	.06
	Safe haven father	.28**	.29**	.34**	.26*
	Secure base mother	.32***	.22*	.14	.06
	Secure base father	.35***	.30**	.14	.13
	FFI Coherence	.37***	.38**	.19	.10
Security Scale					
	Safe haven mother	.34***	.37**	.23*	.26*
	Safe haven father	.24*	.30*	.18	.27*
	Secure base mother	.30***	.26*	.16	.18
	Secure base father	.14	.14	.16	.18

Note. For comparability across measures, these analyses included only those children who had both parent and teacher reports ($N = 96$).

* $p < .05$. ** $p < .01$. *** $p < .001$.