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## EXAMINING PARENTS' ROMANTIC ATTACHMENT STYLES AND DEPRESSIVE AND ANXIETY SYMPTOMS AS PREDICTORS OF CAREGIVING EXPERIENCES

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**ABSTRACT:** Evidence has suggested that parental romantic attachment style and depressive and anxiety symptoms are related to experiences of caregiving (Creswell, Apetroaia, Murray, & Cooper, 2013; Jones, Cassidy, & Shaver, 2014; Lovejoy, Graczyk, O'Hare, & Neuman, 2000), but more research is necessary to clarify the nature of these relations, particularly in the context of attachment-salient events such as reunions. In a cross-sectional study of 150 parents of children ages 1 to 3 years, we assessed participants' attachment styles (self-reported anxiety and avoidance) and depressive and anxiety symptoms. Participants generated a narrative describing their most recent reunion with their child, which we coded for caregiving outcomes of negative emotion and secure base script content. Attachment style and depressive and anxiety symptoms separately predicted each caregiving outcome. Depressive and anxiety symptoms mediated the associations between attachment style and caregiving outcomes. These results suggest that parental attachment insecurity and depressive and anxiety symptoms contribute to negative emotion and reduced secure base script content. Further, depressive and anxiety symptomatology partially accounts for the relation between attachment insecurity and caregiving outcomes, suggesting that parental mental health is a critical point for intervention.

**Keywords:** attachment style, caregiving, reunion, depression, anxiety

**RESUMEN:** La evidencia sugiere que el estilo de afectividad romántico por parte del progenitor y los síntomas depresivos y de ansiedad tienen relación con las experiencias de prestar cuidado, aunque más investigación es necesaria para clarificar la naturaleza de estas relaciones, particularmente en el contexto de eventos donde la afectividad es prominente, tales como reuniones. En un estudio inter-seccional de 150 progenitores de niños de edad entre 1 y 3, evaluamos los estilos de afectividad de los participantes (ansiedad y evitación auto-reportadas) y los síntomas depresivos y de ansiedad. Los participantes generaron una narrativa para describir su más reciente reunión con sus niños, las cuales codificamos en cuanto a resultados de emoción negativa del cuidado y el contenido del escrito de base segura. El estilo de afectividad y los síntomas depresivos y de ansiedad predijeron separadamente cada resultado de la prestación de cuidado. Los síntomas depresivos y de ansiedad mediaron las asociaciones entre el estilo de afectividad y los resultados de la prestación de cuidado. Estos resultados sugieren que la inseguridad de la afectividad y los síntomas depresivos y de ansiedad, por parte del progenitor, contribuyen a la emoción negativa y al reducido contenido del escrito de base segura. Es más, la sintomatología depresiva y de ansiedad parcialmente es responsable por la relación entre la inseguridad en la afectividad y los resultados de la prestación de cuidado, lo cual sugiere que la salud mental del progenitor es un punto crucial para la intervención.

**Palabras claves:** estilo de afectividad, prestación de cuidado, reunión, depresión, ansiedad

**RÉSUMÉ:** Les recherches suggèrent que le style d'attachement romantique parental et les symptômes dépressifs et symptômes d'anxiété sont liés à des expériences du mode de soin, mais plus de recherches sont nécessaires afin de clarifier la nature de ces relations, en particulier dans le contexte d'événements importants pour l'attachement tels que les retrouvailles. Dans une étude transversale de 150 parents d'enfants d'âge 1 à 3 ans, nous avons

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évalué les styles d'attachement des participants (anxiété auto-rapportée et évitant) et les symptômes dépressifs et d'anxiété. Les participants ont généré un récit décrivant leur retrouvaille la plus récente avec leur enfant, que nous avons codée pour des résultats de mode de soin d'émotion négative et un script de base de contenu sécuritaire. Séparément, le style d'attachement et les symptômes dépressifs et d'anxiété ont prédit le style d'attachement et le résultat de soin. Les symptômes dépressifs et d'anxiété ont servi de médiateurs entre le style d'attachement et le résultat de soin. Ces résultats suggèrent que l'insécurité de l'attachement parental les symptômes dépressifs et d'anxiété contribuent à l'émotion négative et au contenu sécuritaire réduit. De plus, la symptomatologie dépressive et de l'anxiété explique partiellement la relation entre l'insécurité de l'attachement et les résultats de soin, suggérant que la santé mentale parentale est un point critique pour l'intervention.

**Mots clés:** style d'attachement, prendre soi, réunion, dépression, anxiété

**ZUSAMMENFASSUNG:** Befunde deuten an, dass der elterliche romantische Bindungsstil sowie depressive Symptome und Angstsymptome mit Erziehungserfahrungen assoziiert sind. Allerdings ist mehr Forschung notwendig, um die Art dieser Beziehungen – insbesondere im Zusammenhang mit bindungsbedeutsamen Ereignissen wie der Wiedervereinigung – zu klären. In einer Querschnittsstudie mit 150 Eltern von Kindern im Alter von 1 bis 3 Jahren beurteilten wir die Bindungsstile (selbstberichtete Angst und Vermeidung) sowie depressiven Symptome und Angstsymptome der Teilnehmer. Die Teilnehmer generierten eine Erzählung, die die jüngste Wiedervereinigung mit ihrem Kind beschrieb und deren Inhalte für die Erziehungsergebnisse negative Emotionen und sichere Bindung kodiert wurden. Bindungsstil und depressive Symptome sowie Angstsymptome sagten separat jedes Erziehungsergebnis vorher. Depressive Symptome und Angstsymptome mediieren die Assoziationen zwischen dem Bindungsstil und den Erziehungsergebnissen. Diese Ergebnisse legen nahe, dass elterliche Bindungsunsicherheit und depressive Symptome sowie Angstsymptome zu negativen Emotionen und weniger sicheren Bindungsäußerungen beitragen. Außerdem wird der Zusammenhang zwischen Bindungsunsicherheit und Erziehungsergebnissen teilweise durch die depressiven Symptome und die Angstsymptomatik erklärt, was darauf hindeutet, dass die elterliche psychische Gesundheit ein ausschlaggebender Ansatzpunkt für eine Intervention ist.

**Stichwörter:** Bindungsstil, Pflege/Erziehung, Wiedervereinigung, Depression, Angst

抄録: 根拠から、親の恋愛の愛着スタイルと抑うつおよび不安症状が育児経験に関連することが示唆されているが、これらの関連の性質、特に再会のように愛着が際立つ出来事のコテキストにおけるものを明確にするために、より多くの研究が必要である。1歳から3歳の子どもの親150人の横断研究において、私たちは参加者の愛着スタイル(自己報告の不安と回避)と抑うつおよび不安症状を評価した。参加者は最近の子どもの再会を叙述し、それを私たちは育児の予後であるネガティブな感情と安全基地の脚本内容についてコード化した。愛着スタイルと抑うつおよび不安症状は、別々にそれぞれの育児の予後を予測した。抑うつおよび不安症状は、愛着スタイルと育児の予後の間の関連を媒介した。これらの結果から、親の不安定な愛着と抑うつおよび不安症状は、ネガティブな感情と安全基地の脚本内容の減少に寄与することが示唆される。さらに、抑うつおよび不安症状は愛着の不安定性と育児の予後の間の関係を部分的に説明し、親の精神保健は介入の重要なポイントになることを示唆している。

**キーワード:** 愛着スタイル、育児、再会、抑うつ、不安

摘要: 有證據表明, 父母的浪漫依附風格及抑鬱和焦慮症狀與護理經驗有關, 但我們需要更多研究, 澄清這些關係的性質, 特別是在依附關係裏突出的事件, 如團聚。在150名子女1~3歲的父母的橫截面的研究中, 我們評估150名子女1~3歲的父母的依附風格(自我報告焦慮和迴避)及抑鬱和焦慮症狀。參與者描述他們最近與孩子團聚的故事, 我們編碼負面情緒和安全基地脚本內容的護理結果。依附風格與抑鬱和焦慮症狀分別預測每個護理結果。抑鬱和焦慮症狀介導的依附風格和護理結果的關聯。這些結果表明, 親子依附的不安全感和抑鬱和焦慮症狀, 導致負面情緒, 降低安全基地脚本的內容。此外, 抑鬱和焦慮症狀部分解釋不安全依附和護理結果的關係, 這表明父母的心理健康是干預的關鍵點。

**關鍵詞:** 依附風格, 護理, 團圓, 抑鬱, 焦慮

**ملخص:** تشير الدلائل إلى أن نمط التعلق الأبوي الرومانسي وأعراض الاكتئاب والقلق ترتبط بتجارب تقديم الرعاية ولكن نحتاج لمزيد من البحث لتوضيح طبيعة تلك العلاقة وخصوصاً في سياقات التعلق البارزة مثل حالات لم الشمل أو اللقاء العائلي. في دراسة مقطعية على 150 والد ووالدة لأطفال من عمر 1 إلى 3 تم تقييم أنماط التعلق (القلق والتجنب المبلغ عنهم ذاتياً) وأعراض الاكتئاب والقلق. قدم المشاركون سرداً قصصياً لوصف أحدث موقف لم الشمل أو الاجتماع العائلي مع أطفالهم. وتم تحليل وتكويد هذه القصص من حيث نتائج تقديم الرعاية: المشاعر السلبية والمحتوى النصي لتصور القاعدة الآمنة (Secure base). اتضح من النتائج أن نمط التعلق وأعراض الاكتئاب والقلق تؤثر بشكل منفصل على كل من نتائج تقديم الرعاية وأن أعراض الاكتئاب والقلق تتوسط الارتباط بين نمط التعلق ونتائج تقديم الرعاية. هذه النتائج تشير إلى أن عدم أمان التعلق الأبوي وأعراض الاكتئاب والقلق تساهم في المشاعر السلبية ونقص محتوى نص القاعدة الآمنة. كما أن أعراض الاكتئاب والقلق تساهم بشكل جزئي في العلاقة بين عدم أمان التعلق ونتائج تقديم الرعاية مما يؤكد على أن الصحة النفسية للوالدين هي نقطة هامة تستدعي التدخل.

**كلمات مفتاحية:** نمط التعلق – تقديم الرعاية – لم الشمل – الاكتئاب – القلق

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The social and emotional well-being of parents is an essential ingredient for high-quality parent–child relationships. Studies have demonstrated that factors such as parents' emotional, relational, and psychological health are critical to support optimal responses to young children's needs and behaviors (Dix, 1991; Lieberman, Silverman, & Pawl, 2005; Nelson, Kushlev, & Lyubomirsky, 2014). Conversely, specific factors that confer risk for suboptimal parenting include insecure attachment style and depressive and anxiety symptomatology (Creswell, Apetroaia, Murray, & Cooper, 2013; Jones, Cassidy, & Shaver, 2014; Lovejoy, Graczyk, O'Hare, & Neuman, 2000); however, to date, the research on these two important factors has remained largely separate and has focused on child outcomes rather than on parental cognitive and emotional processes. In the current study, we examine evidence for an integrated model of parenting wherein parents' depressive and anxiety symptoms help explain the associations between insecure adult romantic attachment style and negative emotion and reduced secure base script (SBS) content in the caregiving context.

## PARENTAL ATTACHMENT STYLE AND CAREGIVING DURING REUNIONS

The concept of adult attachment orientation, or the strategies, expectations, and feelings with which one approaches attachment relationships, encapsulates two key constructs that are measured in different ways. Attachment *states of mind* manifest in the coherence with which adults process attachment-related thoughts or feelings, and are typically assessed via interviews. Attachment *style* refers to self-reported patterns of thoughts and feelings in close romantic relationships, and involves varying levels of anxiety about the availability of close others and avoidance of intimacy (Hazan & Shaver, 1987; Shaver & Mikulincer, 2002). Despite robust associations among adult attachment states of mind, behavior as a caregiver, and child outcomes (e.g., van IJzendoorn, 1995), empirical research on attachment style has mainly examined adults' emotion and behavior in romantic relationships rather than parent–child relationships (Jones & Cassidy, 2014; Simpson & Rholes, 2000).

Research has demonstrated that adult attachment style is related to behaviors in romantic relationships that also may be meaningful in the context of parenting. Individuals with high attachment anxiety fear interpersonal rejection and desire a great deal of closeness in romantic relationships. In turn, they tend to behave in an intrusive and overcontrolling manner toward romantic partners, in such a way that is not responsive to the needs of the partner (Collins & Feeney, 2000; Feeney & Collins, 2001). On the other hand, adults with elevated romantic attachment avoidance display significant discomfort with intimacy and vulnerability in their relationships. Perhaps not surprisingly, they are often indifferent and unsupportive as caregivers to romantic partners (Rholes, Simpson, & Oriña, 1999; Simpson, Rholes, & Nelligan, 1992).

Emerging evidence has suggested that measures of adult attachment style, although primarily focusing on experiences in romantic relationships, also may be meaningfully linked to par-

ents' emotion and behavior in the context of caregiving for young children. Jones and colleagues (2014) theorized that difficulties with emotion regulation, empathy, and compassion demonstrated in adults with insecure romantic attachment styles might contribute to insecure parents' experience of negative emotion and difficulty in responding sensitively to caregiving challenges. Lending support to this theory, several recent studies have demonstrated a link between high attachment anxiety and avoidance and indices of parenting insensitivity (e.g., Edelstein et al., 2004; Millings, Walsh, Hepper, & O'Brien, 2012; Selcuk et al., 2010).

Here, we aim to contribute to research on the link between self-reported, adult romantic attachment style and parenting outcomes. Specifically, we examine the relation between attachment style and parents' (a) negative emotion and (b) SBS content in their narratives regarding a recent reunion with their children. We chose to focus on these outcomes because they provide important insight into parents' phenomenological experiences and have significant consequences for caregiving. Prior research has suggested that everyday separations and reunions may be challenging for both parents and children, and pose intense emotional and behavioral demands for parents (Crowell & Feldman, 1991). In particular, parents with insecure attachment states of mind have shown elevated negative emotion and less sensitive and responsive behavior related to reunions (Crowell & Feldman, 1991). We anticipate that parent–child reunions will pose similar challenges for parents with insecure attachment styles, given their emotion regulation deficits and insensitive caregiving behavior with romantic partners and children.

## RELATIONS TO CAREGIVING EMOTION AND SBS CONTENT

Emotion is central to parental well-being and behavior (Adam, Gunnar, & Tanaka, 2004; Dix, 1991). Adult attachment states of mind have been linked to the experience of negative emotion as a parent (e.g., Adam et al., 2004), but less work has examined how attachment style is related to negative emotion in parenting. There is some evidence that insecure attachment style is associated with feeling less close to one's children, less satisfaction as a parent, greater parenting stress, increased distress related to separation from children, and feelings of jealousy, resentment, and hostility toward children (for a review, see Jones et al., 2014). However, few studies have examined how attachment style affects one's experience of discrete negative emotions during mundane parenting challenges such as reunions with children. Further, most extant evidence relies on parents' self-report of negative emotion, and coder-rated measures of parents' negative emotion are needed to minimize memory and recall biases for emotional events and defensive exclusion of emotional information from memory associated with attachment insecurity (Dykas & Cassidy, 2011; Fraley & Brumbaugh, 2007). To further minimize the effect of defensive responding in this study, we code for defensiveness in parents' narratives. Coder-rated measures of defensiveness may assist in shedding light on psychological states of which individuals are not consciously aware (Borelli et al., 2013).

In addition, we examine the relation between adult attachment style and SBS knowledge. The SBS is a set of beliefs related to a history of care received by the individual that consists of implicit knowledge and helps guide an individual's expectations and behavior in future relational experiences (Waters & Cummings, 2000; Waters & Waters, 2006). The SBS is typically identified through narrative depictions of attachment-related events, and represents implicit understanding of the secure base role (Fivush, 2006; Waters & Cummings, 2000; Waters & Waters, 2006).

In the context of parenting, an SBS involves understanding that when problems occur for a child, the child signals an attachment need, to which the caregiver responds, thereby returning the parent-child dyad to a homeostatic state (Waters & Waters, 2006). In essence, SBS involves the parent recognizing his or her role as *both* a secure base from which the child can explore (i.e., supporting autonomy) and a safe haven to return to when the child is distressed (i.e., providing protection; Bowlby, 1988). Low narrative SBS content may represent a risk factor for insensitive parenting, given that recent studies have linked SBS knowledge to positive and negative parenting behavior (Coppola, Vaughn, Cassibba, & Costantini, 2006; Huth-Bocks, Muzik, Beeghly, Earls, & Stacks, 2014; Waters & Waters, 2006). Notably, evidence has suggested that adult attachment insecurity is linked to low SBS, but most of this research has measured adult attachment state of mind rather than attachment style (Waters & Waters, 2006; Steele et al., 2014). However, Mikulincer, Shaver, Sapir-Lavid, and Avihou-Kanza (2009) contended that histories of unsuccessfully seeking and receiving care are represented in lesser quality SBS knowledge of individuals with insecure attachment style. Indeed, within the past few years, a handful of studies have examined links between self-reported romantic attachment style and SBS knowledge, with findings suggesting that higher security is associated with greater SBS knowledge (Borelli, Burkhart, Rasmussen, Brody, & Sbarra, 2016; Dykas, Woodhouse, Cassidy, & Waters, 2006; McLean, Bailey, & Lumley, 2014; Mikulincer et al., 2009; but for a null finding, see Turan, 2016). To date, only one of these studies has evaluated the association between *parents'* romantic attachment styles and their SBS knowledge (Borelli et al., 2016).

In addition, SBS content is typically measured using the attachment script assessment, in which individuals are instructed to tell a story, using a list of prompt words that are designed to elicit attachment-relevant stories (Waters & Rodrigues-Doolabh, 2001). Narratives are then coded for the presence of secure base content, such as one character in the story responding to and alleviating the other's distress. However, less work has looked at the quality of parents' SBS content in parents' narrative descriptions of their actual relationship experiences with their children (e.g., see Borelli, Burkhart et al., 2016). It is possible that the latter form of narrative might be more revealing, as it may be more personally relevant. In the current study, we draw on this narrative approach to better capture parents' SBS knowledge pertaining to actual experiences with their children—namely, in the attachment-salient context of reunion.

Finally, little is known about mechanisms that underlie the relation between romantic attachment style and caregiving, although some work has suggested that difficulties related to emotion regulation may play a role (Jones et al., 2014). To provide ports of entry for future clinical intervention research and practice with parents of young children, it is critical to better understand potential mediating factors in the relation between attachment and caregiving. In the current study, we explore depressive and anxiety symptoms as a mechanism underlying the association between attachment style and caregiving.

## THE ROLE OF DEPRESSIVE AND ANXIETY SYMPTOMS

A parallel body of literature has suggested that parents' depressive and anxiety symptoms are meaningfully related to their emotions and behavior associated with caregiving. Research consistently has demonstrated that depressed and anxious parents experience negative emotion surrounding their roles as caregivers and have compromised interactions with their children, perhaps due to their difficulties with emotion regulation (Creswell et al., 2013; Dix, Moed, & Anderson, 2014; Hammen, 2003; Lovejoy et al., 2000; Nicol-Harper, Harvey, & Stein, 2007). Parents with greater depressive and anxiety symptoms tend to be more negative and intrusive, and less responsive and sensitive, as compared to those with low depressive and anxiety symptoms. In turn, parental depressive and anxiety symptoms have been associated with negative child outcomes, including children's insecure attachment classification and other developmental problems (Cummings & Davies, 1994; Martins & Gaffan, 2000). However, few studies have explicitly examined the association between parental depressive and anxiety symptoms and parents' attachment-salient cognition and behavior. More empirical research is necessary to ascertain whether the negative emotional and behavioral patterns associated with parental depressive and anxiety symptoms extend to undermine the parent's role as an attachment figure (i.e., demonstrated knowledge of his or her role as a secure base for the child).

Notably, adults with attachment styles high in anxiety and avoidance have an elevated risk of depression and anxiety (Marganska, Gallagher, & Miranda, 2013). Further, the results of longitudinal studies have suggested that insecure attachment style prospectively predicts elevated depressive and anxiety symptoms (Hankin, Kassel, & Abela, 2005), suggesting that attachment insecurity may precede the development of depressive and anxiety symptoms. Insecure adults' experiences in romantic attachment relationships may inhibit their ability to regulate negative emotion, with negative implications for psychological health later on (Marganska et al., 2013; Mikulincer & Florian, 2001).

Despite documented concurrent and longitudinal associations between insecure romantic attachment style and depressive and anxiety symptoms, as well as evidence linking each of these constructs with emotion and behavior in caregiving, very few studies have attempted to conceptually integrate their association with caregiving. Here, we test a model wherein high romantic attachment insecurity places adults at risk for depressive and anxiety



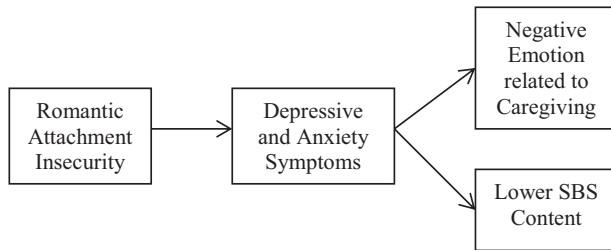


FIGURE 1. Theoretical model.

symptoms, which then predict poorer parental emotional and cognitive responses when reflecting on parent–child reunion (see Figure 1). Because symptoms of depression and anxiety are so highly intercorrelated (Moffitt et al., 2007) as well as the fact that in prior work both have been associated with insensitive caregiving, here, we combine symptoms of depression and anxiety into a composite score (Hardee et al., 2013; Masten et al., 2005).

### THE CURRENT STUDY

In this study, we contribute to a growing literature detailing links between romantic attachment style and parenting emotion and cognition. Specifically, we examine parents' negative emotion and SBS content, as rated by coders, in a narrative about a recent reunion with their young child. We evaluate our hypotheses among a sample of working parents, thus increasing the likelihood that parents would have experienced a recent separation from and reunion with their child. First, we hypothesized that attachment anxiety and avoidance would predict (a) greater negative emotion and (b) lower SBS content in the reunion narrative. Second, we anticipated that depressive and anxiety symptoms also would predict both caregiving outcomes. Third, we predicted that depressive and anxiety symptoms would mediate the associations between attachment anxiety and avoidance and caregiving outcomes.

### METHOD

#### Participants

The study was approved by the Institutional Review Board. One hundred fifty parents with at least one child aged 1 to 3 years participated in the study (74 mothers;  $M_{\text{age}} = 31.53$ ,  $SD_{\text{age}} = 6.55$ ). Participants were recruited online using Amazon Mechanical Turk (mTurk), an online marketplace in which small tasks can be advertised and performed. Participants responded to an advertisement on the site for a survey about parenting and emotions. Research has suggested that mTurk is a reliable means of collecting data from demographically diverse samples (Buhrmester, Kwang, & Gosling, 2011; Gosling, Vazire, Srivastava, & John, 2004). On average, parents provided primary care for 1.88 children ( $SD = .85$ ), and the ages of their children ranged from newborn to 19 years, although all parents had children in the designated age range (1–3 years). The majority of the sample was married (72.0%) or in a

relationship (12.7%). The sample was primarily European American (70.7%; 12.0% African American, 6.7% Asian, 5.3% Hispanic/Latino, 4.0% Native American, and 1.3% other) and middle class; 86.7% identified as working full-time, and 52.6% reported an annual household income between \$41,000 to 60,000.

#### Procedures

Due to our interest in reunions between working parents and children, participants were eligible for the study only if they worked at least 35 hr per week.<sup>1</sup> Participants reported on their thoughts and feelings in romantic attachment relationships and their symptoms of depression and anxiety. Participants then responded to the reunion narrative prompt.

#### Measures

**Attachment anxiety and avoidance.** Participants responded to the Experiences in Close Relationships Scale-Revised (ECR-R; Fraley, Waller, & Brennan, 2000), a 36-item scale assessing attachment anxiety (e.g., “I often worry that my partner will not want to stay with me”) and avoidance (“I don’t feel comfortable opening up to romantic partners”) on a Likert scale of 1 (“Strongly Disagree”) to 7 (“Strongly Agree”), with higher scores reflecting greater attachment anxiety and avoidance, respectively. The ECR-R is highly reliable and shows good convergent and discriminant validity (Sibley, Fischer, & Liu, 2005). Internal consistency in this sample was good for both anxiety,  $\alpha = .94$ , and avoidance,  $\alpha = .89$ .

**Depressive symptoms.** Participants completed the nine-item Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002), indicating on a Likert scale of 0 (“Not at all”) to 3 (“Nearly every day”) how often they had experienced various symptoms of depression over the last 2 weeks (e.g., “feeling down, depressed, or hopeless”). The PHQ-9 has good construct validity (Martin, Rief, Klaiberg, & Braehler, 2006), and reliability for this scale was good in the sample,  $\alpha = .94$ .

**Anxiety symptoms.** The General Anxiety Disorder seven-item scale (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006) is a commonly used, valid, reliable measure (Löwe et al., 2008) assessing how often individuals have experienced symptoms of anxiety over the last 2 weeks, such as “feeling nervous, anxious, or on edge,” using a Likert scale of 0 (“Not at all”) to 3 (“Nearly every day”). The GAD-7 had good reliability in our sample,  $\alpha = .95$ .

**Negative emotion and SBS content in reunion narrative.** We designed a narrative prompt for this study to assess parents' emotion

<sup>1</sup>Prior to data collection, 2,359 people were excluded because they worked fewer than 35 hr per week; significantly more women than men were excluded for this reason,  $p < .001$ .

**TABLE 1.** Descriptions of Narrative Codes

Code Name	Description of Code
Guilt	Participant seems to feel guilty (like he/she should be doing something differently or is to blame) about being away at work, about being a bad parent, or about the child's suffering/behavior.
Sadness	Participant seems to have depressed mood during reunion or specific sadness about the child/relationship/separation even after the reunion.
Anger	Participant seems to experience frustration and anger with the child's behavior, with other life events/people, or with self.
Neediness	The parent's own emotional needs dominate the reunion/response (either the parent's emotional needs from the child or from others, e.g., a romantic partner).
Separation Distress	Significant distress (specifically from separation from the child) seems to persist even after reunion and is not resolved.
SBS Knowledge	Described: Protection and nurturance of the child, warm relatedness to the child, recognition that the child is connected but also a separate individual with mental states, effective resolution of separation, psychological availability, supportiveness, responsiveness, richness of perception, attention to the individual child's personality and developmental needs. Not described: Role reversal, helplessness, rejection of the child, distance, overcontrol, neediness, inappropriate responses to the child's cues, uncertainty, noncontingent responsiveness, deferring to spouse or partner when issues arise with the child.
Defensiveness	Participant displays a defensive focus on the positive aspects of the relationship or of reunions. Response may be solely positive, lacking detail to corroborate highly positive remarks, may seem to leave out important details that could be negative, and may seem potentially avoidant (e.g., ignoring the prompt).

SBS = secure base script.

and cognition while describing reunions with their children. Narrative responses were required to be 200 characters or more. The prompt read as follows:

We would like you now to reflect on your emotional experiences as a parent. Describe the last time you reunited with your child after a day at work. Please discuss any details you think are relevant, including what you and your child were thinking and feeling.

Narratives were assessed for (a) several discrete negative emotions, (b) SBS content, and (c) defensiveness. First, we developed a novel coding system for negative emotion based on previous systems for rating emotion in parents' narrative representations (Slade, Belsky, Aber, & Phelps, 1999). Negative emotions assessed included guilt, sadness, anger, neediness, and separation distress. We chose to examine these dimensions of negative emotion based on evidence supporting their salience in terms of parenting, attachment, and reunions (Adam et al., 2004; Borelli, Nelson, River, Birken, & Moss-Racusin, 2016; Crowell & Feldman, 1991). Second, to measure SBS content, we adapted the extant coding system from Waters and Waters (2006) for the context of autobiographical reunion narratives rather than hypothetical attachment scenarios. SBS content scores were based on the presence of themes such as parental protection and relatedness to the child, supportiveness of autonomy, resolution of distress, and a return to baseline. Finally, we developed a novel coding system for parental defensiveness, as evidenced by an exaggerated focus on the positive aspects of the reunion (for descriptions of all codes, see Table 1; for examples of low- and high-scoring responses for each code, see Table 2).

Although outside of the scope of the current study, we provide additional evidence supporting the convergent validity of our measures of coder-rated negative emotion and SBS content. To do so, we submitted the narrative data to the Linguistic Inquiry and Word Count (Pennebaker & King, 1999), a computer text-analysis

program that calculates the percentage of words used in different psychological categories. Coder-rated negative emotion was positively associated with percentage of negative emotion words in the narrative,  $p < .001$ , and negatively associated with self-reported parenting satisfaction,  $p = .003$ . Coder-rated SBS content was negatively associated with percentage of negative emotion words in the narrative,  $p = .001$ , and positively associated with self-reported marital satisfaction,  $p = .03$ . Coder-rated defensiveness was positively associated with the self-reported feeling that one should be doing something else,  $p < .001$ , and that time would be better spent elsewhere,  $p < .001$ , when engaged in childcare in a diary about the day before the study.

Narratives were scored on a scale from 1 to 7 for each code, with 7 reflecting the highest level of negative emotion, SBS content, or defensiveness. Coders were trained to interrater reliability on a set of 22 narratives that were created independently from the study data for training purposes. Then, study narratives were coded by at least two coders with adequate interrater reliability (final ICC values between .673 and .888; average ICC = .786). We computed mean scores of all coders' ratings on each scale, then we created a composite negative emotion score for each participant reflecting the average score across individual dimensions of neediness, anger, sadness, guilt, and separation distress. Cronbach's  $\alpha$  for the separate scales comprising the negative emotion composite score was good,  $\alpha = .70$ . In this study, scores for negative emotion and SBS content were used as dependent variables whereas defensiveness was used as a covariate.<sup>2</sup>

<sup>2</sup>We also conducted analyses using defensiveness as a moderator. Defensiveness was not a significant moderator of any of our linear regression effects,  $ps > .310$ . Defensiveness did not moderate the mediation analyses involving attachment anxiety and negative emotion, 95% CI [-0.02, 0.03], attachment anxiety and SBS content, 95% CI [-0.02, 0.02], or attachment avoidance and negative emotion, 95% CI [-0.03, 0.02].

**TABLE 2.** Examples of Low, Medium, and High-Scoring Reunion Narratives From Study Participants

	Negative Emotion	SBS Content
Low-Scoring (1)	“He is always upbeat and happy to see me as I am with him. He is learning how to talk and he loves to ask questions and show compassion. I have so much fun with him and it is the highlight of my day when I see him . . . He loves to be around me and he is never afraid to ask me for something if he wants something. I feel so blessed to have a child who is obedient, kind, and loving. I have so much joy in my heart because he is so happy. As long as he is happy, I feel that I have a purpose in life and that purpose is to make sure that he has the best childhood that I can give him.”	“I sometimes feel great. It depends on what type of mood that he is in himself. If he is screaming and carrying on, I just want to get away from him. If he is in a playful good mood, then I would want to be around him more. I am usually pretty tired after I come home from work and I just want some time to relax and settle down before I do anything else. If he is screaming and crying I just want to hand him to my wife and let her deal with it. And she does a great job at it. I owe her a lot most of the times.”
Medium-Scoring (4)	“I sometimes feel bad that I have to leave my daughter every morning before going to work to a daycare but since I am a single mother and have to support her, it’s something I have to do. I figure in the long run and when she begins school we’ll be in a better place that is why every time I pick her up I am so happy to see her and spend as much time with her when I pick her up. I try to have leftovers as much as possible so that I don’t have to spend so much time making dinner. I try to interact with her even though my body is aching and tired, so she knows I care about her and listen to her feelings. I am happier than I have ever been because I left her father and even though this wasn’t what I imagined in my life I know my daughter and I are better off.”	“I thought how happy I was to be going home and spend time with my children. Both of my children were thrilled to see me and jumped up and down, they appeared to feel happy. I hugged them and felt the joy that only comes from being near them. I thought about how tired I was from work and then began to worry about dinner and what we would be eating and whether the children would want to eat. My children are at a challenging age, I worried that they might not listen that night. Overall though, we were all happy to be back together.”
High-Scoring (7)	“I was happy to see my child but after an hour or two I was ready for him to go to bed. I get irritated really easily and he was acting up and my nerves were shot I was extremely tired from work and all I wanted to do was lay down on the couch and relax all he wanted was attention so I felt a little bad that I was so frustrated and . . .”	“I feel very much fulfilled as a parent and as a person any time I have the opportunity to see and play with my child. The last time I reunited with her after a day at work she told me that she did not want to see me then she promptly asked me to play with her. Ha! // I was thinking about how happy I was to see her and my wife, and how relaxed I was feeling now that I was finally home. She was (I think, anyway) happy to see me, and we played together for a while in the evening before and after dinner. After a stressful and difficult day in the office, it is great to come home to see my daughter and just have fun together. // One of the things we did was play with Duplos. I helped her make a power loader exoskeleton from the Alien movies. I don’t think she knew what it was, but we had a good time playing with the goat, the little horse, and the farmer (riding inside the power loader). It is very rewarding to play with my daughter and see her learn and grow as she gets older.”

### Data Analytic Plan

**Depressive and anxiety symptoms.** First, we created a composite score to reflect severity of depressive and anxiety symptoms by averaging participants’ reports of depression and anxiety symptoms. The PHQ-9 and the GAD-7 are both rated on scales of 0 to 3, with higher scores indicating greater symptom severity. However, since the two measures have different numbers of items, we first created mean scores for participants on each measure and then took the average of participants’ mean scores on the two measures.

**Correlations.** To conduct correlations, we created variables reflecting the standardized residuals of coder-rated negative emotion and SBS content when controlling for defensiveness, which allowed us to isolate our constructs of interest while accounting for defensive responding.<sup>3</sup>

<sup>3</sup>Several study variables were positively skewed; to address this, we log-transformed the skewed variables. In all but one of the analyses, the same

**Covariate strategy.** In all subsequent analyses, we included coder-rated defensiveness as a covariate. In linear regression analyses, this covariate was included in the first step. Given the high degree of overlap between attachment anxiety and avoidance, such that the notion of attachment anxiety without avoidance and vice versa would be less meaningful, we did not control for one attachment dimension when using the other as a predictor, which is consistent with previous research using the ECR-R (Lee, Sbarra, Mason, & Law, 2011; Sibley et al., 2005; Steele et al., 2014).<sup>4</sup>

pattern of effects held. In one analysis (testing depressive and anxiety symptoms as a mediator of the link between attachment anxiety and SBS content), however, the indirect effect became insignificant. We report results using the nontransformed variables in the next section.

<sup>4</sup>We considered controlling for child age, but child age was not associated with either of our outcomes of interest (coder-rated negative emotion and SBS content); therefore, we decided not to include it as a covariate.

**TABLE 3.** Means and SDs for Key Variables

Variable	<i>M</i> ( <i>SD</i> )	Possible Range
Defensiveness	2.12 (0.89)	1–7
ECR-R Anxiety	2.79 (1.32)	1–7
ECR-R Avoidance	2.88 (1.01)	1–7
Depressive and Anxiety Symptoms	0.67 (0.76)	0–3
Coded NA in Narrative	1.41 (0.52)	1–7
Coded SBS in Narrative	3.32 (1.09)	1–7

NA = negative affect, ECR-R = Experiences in Close Relationships-Revised, SBS = secure base script.

**Mediation analyses.** Mediation analyses were conducted using Model 4 of the PROCESS macro for SPSS using 1,000 bias-corrected, bootstrapped samples to estimate 95% confidence intervals (Hayes, 2012). Kappa-squared coefficients were calculated without covariates in the model for each mediation analysis, using guidelines from Preacher and Kelley (2011) to estimate small (.01), medium (.09), and large (.25) effect sizes. These effect sizes signify the proportion of the largest indirect effect possible that is obtained through the model.

## RESULTS

### Preliminary Analyses

Means and *SDs* of key study variables are reported in Table 3. Zero-order correlations demonstrated that attachment anxiety, avoidance, and depressive and anxiety symptoms were all positively associated with one another, and each was positively associated with coder-rated negative emotion in the reunion narrative (standardized residual) and negatively associated with coder-rated SBS content in the narrative (standardized residual; Table 4).

**H1a:** Do attachment anxiety and avoidance predict parents' negative emotion in the reunion narrative?

Higher levels of attachment anxiety predicted greater coder-rated negative emotion in the narrative in a linear regression,  $p = .011$  (Table 5). Higher levels of attachment avoidance also predicted greater coder-rated negative emotion in the narrative,  $p = .010$  (Table 5).

**H1b:** Do attachment anxiety and avoidance predict parents' SBS content in the reunion narrative?

Higher levels of attachment anxiety predicted lower coder-rated SBS content in the narrative,  $p = .019$  (Table 5). Attachment avoidance also predicted lower coder-rated SBS content,  $p = .003$  (Table 5).

**H2a:** Do depressive and anxiety symptoms predict parents' negative emotion in the reunion narrative?

A linear regression revealed that greater depressive and anxiety symptoms predicted higher coder-rated negative emotion in the narrative,  $p < .001$  (Table 5).

**H2b:** Do depressive and anxiety symptoms predict parents' SBS content in the reunion narrative?

Greater depressive and anxiety symptoms predicted lower coder-rated SBS content in the narrative,  $p = .014$  (Table 5).

**H3a:** Do depressive and anxiety symptoms explain the associations between attachment anxiety and avoidance and negative emotion in the reunion narrative?

We found significant indirect effects of depressive and anxiety symptoms in the associations between attachment anxiety,  $b = 0.05$ , 95% CI [0.01, 0.10],  $\kappa^2 = .12$  (medium effect size), and attachment avoidance,  $b = 0.06$ , 95% CI [0.02, 0.11],  $\kappa^2 = .09$  (medium effect size), and coder-rated negative emotion.

**H3b:** Do depressive and anxiety symptoms explain the associations between attachment anxiety and avoidance and SBS content in the reunion narrative?

Depressive and anxiety symptoms significantly explained the association between attachment anxiety,  $b = -0.06$ , 95% CI [-0.14, -0.003],  $\kappa^2 = .06$  (small effect size), but not attachment avoidance,  $b = -0.05$ , 95% CI [-0.13, 0.003], and coder-rated SBS content.<sup>5</sup>

## DISCUSSION

In this study, we evaluated the interrelations among romantic attachment style, depressive and anxiety symptoms, and attachment-relevant parenting constructs. We found that both parental attachment style and depressive and anxiety symptoms were related to coder-rated measures of emotion and SBS content in a narrative task. These findings contribute to a growing body of literature suggesting that both adult attachment style and depressive and anxiety symptomatology are meaningfully associated with theoretically relevant aspects of parenting, including emotions and cognitions related to caregiving and attachment (Creswell et al., 2013; Lovejoy et al., 2000; Rholes, Simpson, & Blakely, 1995; Selcuk et al., 2010). We also found that the associations between caregivers' romantic attachment insecurity and negative emotion and SBS content are explained in part by parent depressive and anxiety symptoms.

First, elevated attachment anxiety and avoidance each predicted greater coder-rated negative emotion and lower SBS content when discussing a parent-child reunion. Consistent with evidence that parents with insecure attachment styles report greater negative emotion related to separation from children (Maysseless & Scher, 2000), parents who experience discomfort and difficulty in close relationships appear to demonstrate high levels of distress while reflecting on attachment-salient events. These individuals may

<sup>5</sup>Given that our study was cross-sectional, to test whether depressive and anxiety symptoms or attachment anxiety/avoidance acted as a stronger mediator, we conducted mediation analyses and compared effect sizes. Effect sizes were generally much larger with depressive and anxiety symptoms as the mediator than with attachment as the mediator: for analyses involving attachment anxiety and coder-rated negative emotion,  $\kappa^2 = .12$  vs.  $\kappa^2 = .01$ ; attachment avoidance and coder-rated negative emotion,  $\kappa^2 = .09$  vs.  $\kappa^2 = .02$ ; attachment anxiety and coder-rated SBS knowledge,  $\kappa^2 = .06$  vs.  $\kappa^2 = .06$ .



**TABLE 4.** Correlation Matrix for Key Variables

Variable		1	2	3	4	5	6	7	8
1	Defensiveness	–							
2	ECR-R Anxiety	0.20 <sup>a</sup>	–						
3	ECR-R Avoidance	0.13	0.61 <sup>b</sup>	–					
4	Depressive and Anxiety Symptoms	0.07	0.51 <sup>b</sup>	0.41 <sup>b</sup>	–				
5	Coded NA During Narrative	–0.37 <sup>b</sup>	0.11	0.14	0.26 <sup>b</sup>	–			
6	Coded NA During Narrative (Controlling for Defensiveness)	0.00	0.21 <sup>a</sup>	0.21 <sup>a</sup>	0.31 <sup>b</sup>	0.93 <sup>b</sup>	–		
7	Coded SBS During Narrative	–0.09	–0.21 <sup>a</sup>	–0.25 <sup>b</sup>	–0.21 <sup>b</sup>	–0.25 <sup>b</sup>	–0.31 <sup>b</sup>	–	
8	Coded SBS During Narrative (Controlling for Defensiveness)	0.00	–0.19 <sup>a</sup>	–0.25 <sup>b</sup>	–0.20 <sup>a</sup>	–0.29 <sup>b</sup>	–0.31 <sup>a</sup>	1.00 <sup>b</sup>	–

*Note*

Parent gender: female = 0, male = 1.

NA = negative affect, ECR-R = Experiences in Close Relationships-Revised, SBS = secure base script.

<sup>a</sup>*p* < .05.<sup>b</sup>*p* < .01.**TABLE 5.** Linear Regressions Examining Attachment Anxiety, Avoidance, and Depressive and Anxiety Symptoms as Predictors of Caregiving Outcomes

Dependent Variable	A. Coder-Rated Negative Emotion in Narrative					B. Coder-Rated SBS Content in Narrative				
	<i>R</i> <sup>2</sup>	$\delta R^2$	<i>b</i>	<i>SE</i>	$\beta$	<i>R</i> <sup>2</sup>	$\delta R^2$	<i>b</i>	<i>SE</i>	$\beta$
Step 1										
Defensiveness	0.14 <sup>c</sup>	–	–0.22 <sup>c</sup>	0.04	–0.37	0.01	–	–0.11	0.10	–0.09
Step 2										
Attachment Anxiety	0.18 <sup>a</sup>	0.04 <sup>a</sup>	0.08 <sup>a</sup>	0.03	0.20	0.05 <sup>a</sup>	0.04 <sup>a</sup>	–0.16 <sup>a</sup>	0.07	–0.20
Attachment Avoidance	0.18 <sup>a</sup>	0.04 <sup>a</sup>	0.10 <sup>a</sup>	0.04	0.20	0.07 <sup>b</sup>	0.06 <sup>b</sup>	–0.27 <sup>b</sup>	0.09	–0.25
Depressive and Anxiety Symptoms	0.22 <sup>c</sup>	0.08 <sup>c</sup>	0.19 <sup>c</sup>	0.05	0.29	0.05 <sup>a</sup>	0.04 <sup>a</sup>	0.29 <sup>a</sup>	0.12	–0.20

<sup>a</sup>*p* < .05.<sup>b</sup>*p* < .01.<sup>c</sup>*p* < .001.

struggle to regulate emotion during parenting challenges like reunion and exhibit maladaptive behavioral responses to their own distress, such as directing anger or neediness toward the child (Jones et al., 2014). Further, individuals with high attachment anxiety and avoidance show less understanding of their role as a secure base (i.e., SBS content) while describing reunions with children. We are among the first to link attachment style with SBS content, suggesting that parents' histories of difficulty giving and receiving care in romantic relationships may extend to affect their knowledge of their role as a secure base with their children (Mikulincer et al., 2009).

Second, our study identified links between parent depressive and anxiety symptoms and caregiving outcomes. Parental depressive and anxiety symptoms were associated with greater coder-rated negative emotion related to caregiving, joining a wealth of research indicating that depressive and anxiety symptomatology in parents confers risk for negative emotion as a caregiver (e.g., Dix et al., 2014; Lovejoy et al., 2000). In addition, we found that parental depressive and anxiety symptoms predicted lower SBS content in the narrative task. This finding is consistent with previous work showing that depression and anxiety are related to insensitive parenting behaviors such as intrusiveness and unresponsiveness (e.g., Creswell et al., 2013; Lovejoy et al., 2000). Notably, however,

we are among the first to demonstrate that parents' depressive and anxiety symptoms are associated with lower coder-rated SBS content, an aspect of parenting that is specifically related to their roles as attachment figures. Depression and anxiety may reduce parents' ability to detect children's attachment needs by virtue of their attendant negative emotion, self-focus, and self-doubt: Parents high in depression or anxiety may be too mired in negative emotion, too self-focused, or too uncertain of their efficacy as parents to demonstrate the understanding of children's needs and of sensitive parenting behavior that constitutes SBS knowledge. Given this finding and previous research showing that parents' depressive and anxiety disorders are associated with compromised parent-child attachment (e.g., Martins & Gaffan, 2000), future research could examine whether lower SBS content, and potentially resultant insensitive behavior, act mechanistically in explaining this link.

Drawing on these findings, we demonstrate that reunions between working parents and children may be particularly evocative. Often during these events, parents face intense emotional demands related to prioritizing their children's emotional needs and placing their own aside. A child might display great relief, a desire for closeness, indifference, or acute sadness or anger remaining from the separation, and the parent must reorient after a day at work and respond sensitively to the child's emotions. For

these reasons, we suggest that parents' emotional experience of reunions deserve continued study.

Finally, our findings lend preliminary support for an integrated model of romantic attachment insecurity, depressive and anxiety symptoms, and parenting emotion and cognition. Parents' depressive and anxiety symptoms partially accounted for the increased levels of negative emotion found among parents with high attachment anxiety and avoidance. This finding connects prior lines of research demonstrating that romantic attachment insecurity prospectively predicts the development of depressive and anxiety symptoms (Hankin et al., 2005), and that depressive and anxiety symptoms are linked with negative emotion as a caregiver (Dix et al., 2014; Nicol-Harper et al., 2007). Insecure parents' difficulties with emotion regulation may manifest as depressive and anxiety symptoms, in turn resulting in heightened negative caregiving emotion. Further, depressive and anxiety symptoms partially explained the association between attachment anxiety and lower SBS content, but did not mediate the association between attachment avoidance and SBS content, suggesting that depressive and anxiety symptoms may figure more prominently in parenting sensitivity in the context of the attachment anxiety dimension. Given that individuals high in attachment anxiety tend to engage in hyperactivating strategies to regulate emotion (Lee et al., 2011) whereas adults high in attachment avoidance rely on deactivating strategies, we propose that depressive and anxiety symptoms may be more salient in the parenting sensitivity of adults high in attachment anxiety. Future work should explore other potential factors that may underlie caregiving insensitivity with respect to heightened attachment avoidance, such as externalizing symptoms.

In addition, we note that the effect size for the mediation of depressive and anxiety symptoms between attachment anxiety and coder-rated SBS content was small. It is unsurprising that our mediation effects were stronger for negative emotion than they were for SBS content, given that existing theory and research on SBS knowledge has largely centered on measures of attachment state of mind rather than of attachment style. Nonetheless, we present compelling evidence for our theoretical model of parenting wherein parents with high romantic attachment insecurity may ineffectively regulate their negative emotions, resulting in their vulnerability to symptoms of depression and anxiety, which in turn fuels their lesser quality demonstrated SBS knowledge. Importantly, although we tested for statistical mediation using a cross-sectional, correlational design, which by definition precludes us from being able to ascertain directionality of the effects, these findings lay the groundwork for a conceptual model that can be further tested using longitudinal or experimental designs in future studies.

As researchers attempt to shed light on the internal processes that contribute to parenting behavior and child outcomes, it is critical to continue to examine depressive and anxiety symptoms as risk factors as well as a point of intervention for parenting. If replicated in longitudinal studies, our findings support the notion that parental mental health is a precursor of sensitive caregiving, with implications for interventions designed to enhance caregiving experiences and behaviors (e.g., Suchman, DeCoste, Leigh, & Borelli, 2010).

Clinicians with an interest in promoting sensitive parenting behavior and, subsequently, infant mental health, may find benefit in identifying and targeting the depressive and anxiety symptoms of parents—particularly those who struggle with attachment anxiety and avoidance. Further, it would benefit clinicians working with patients with depression and anxiety to listen for ways in which the symptoms of depression and anxiety may intertwine with attachment insecurity, as these may be areas ripe for intervention. For instance, interlocking between the two may manifest in experiences such as doubts about one's efficacy as a caregiver, negative self-focus that precludes perception of the child's cues, anxiety about abandonment and loss by the child, and resentment toward the child for having so many needs. Targeting these points of overlap between depression and/or anxiety symptoms and attachment anxiety or avoidance may yield more favorable results, both in terms of enhancing parenting sensitivity and ameliorating clinical distress.

### *Limitations, Strengths, and Future Directions*

The findings presented here should be considered in light of several limitations. Our inclusion of parents of both genders in this study strengthens the generalizability of our findings; however, we did not find gender differences in any of the dependent variables in our sample, which is unusual given the commonly cited gender differences in prevalence and transmission patterns of depression and anxiety (e.g., Leach, Christensen, Mackinnon, Windsor, & Butterworth, 2008; Möller, Majdandžić, & Bögels, 2014) as well as differences between mother-child and father-child attachment relationships (e.g., Grossmann et al., 2002). This leads us to believe that it will be important in future work to establish whether the patterns that we observed differ between mothers and fathers.

Future studies might be able to improve upon this study in terms of methodology. First, it will be very important to test our findings, particularly the mediation models, using a longitudinal study design to confirm the temporal order of the effects. By virtue of our cross-sectional design, we are unable to conclusively say that attachment anxiety and avoidance precede depressive and anxiety symptoms, which then predict caregiving outcomes; indeed, depressive and anxiety symptoms might precede the development of attachment anxiety and avoidance. However, we found much larger effect sizes when depressive and anxiety symptoms acted as the mediator in our analyses, lending strength to our model. Although within this study we identified evidence of the convergent validity of our novel coding system, it will be important for future studies to replicate our findings and provide additional support for the reliability and validity of this coding system. Further, several of our variables were positively skewed. Skewed data are common when studying symptoms of psychopathology in a community sample, so we suggest that researchers complement our work with clinical samples to reduce potential bias and to examine whether our findings replicate in a sample with more severe impairment related to attachment style, depression, and anxiety.

In addition, we did not examine emotion regulation in this study. However, given the close connection between emotion

regulation and several of the constructs in this study, as well as well-documented links between attachment style insecurity and emotion dysregulation (Jones, Brett, Ehrlich, Lejuez, & Cassidy, 2014; Kobak & Sceery, 1988; Mikulincer & Florian, 2001), it would be informative for future researchers to measure this directly. Further, it will be important to include measures of child attachment and other outcomes in the future to better understand which parent characteristics (i.e., attachment style, negative emotion, and SBS content) are most important for parent-child attachment and children's developmental trajectories.

With respect to our assessments of parental SBS content, it would be revealing in future work to demonstrate whether parental SBS content in the reunion task is associated with SBS on the attachment script assessment as well as observed sensitive parenting behaviors (Huth-Bocks et al., 2014; Waters & Rodrigues-Doolabh, 2001; Waters & Waters, 2006). Some parents may exhibit elements of competence as a secure base in person that were not evident in the narrative, and vice versa. For example, a mother might match her daughter's facial affect during reunion in person, displaying one indicator of sensitivity (Beebe & Steele, 2013), but not otherwise verbally or physically express warmth and closeness to the child. On the other hand, narrative responses allow us to assess factors such as parents' richness of perception about their children's mental states. Information from both approaches would add to our ability to capture variability across parents and to more fully understand the implications of our results.

Finally, although we closely modeled our coding system on previous work, because we did not use a previously validated narrative approach, it is possible that our findings were influenced by memory and event-recall biases. Individuals with insecure attachment styles may remember relationship-relevant events as more negative or even defensively exclude emotional information from memory (Fraleigh & Brumbaugh, 2007; Simpson, Rholes, & Winterheld, 2010). That is, there may be a discrepancy between what parents write in their narratives and what they actually feel and think that we were unable to capture with our coder ratings. Future validation and replication of our results will reduce this likelihood. Further, the fact that we used a self-reported measure of attachment style may have rendered this variable itself subject to similar biases. Although perceptions of one's orientation in attachment relationships undoubtedly constitute an important dimension of relational functioning, in future work it would be illuminating to examine whether similar effects emerge when considering attachment states of mind, which are thought to be indicative of unconscious psychological processes and, therefore, less subject to distortion.

Despite these limitations, our current study has considerable strengths. First, our use of narrative analysis granted us rich insight into the emotion and cognition of the parents studied. Second, we integrated work from two separate literatures in examining the associations between attachment style, depressive and anxiety symptoms, and parenting-related constructs in the attachment-salient context of reunion. As the literature on attachment style and parenting is relatively new and focuses mostly on general, self-reported patterns of behavior, it is noteworthy

that we offered an important look into coder-rated emotion and cognition of parents in a specific context that is potentially meaningful in terms of the parent's relationship history and the child's future outcomes. Further, we assessed SBS content in the reunion narratives in an effort to render our coder-rated outcomes more directly relevant to attachment. This is an initial, important step in the direction of relating attachment style to attachment behavior and child attachment outcomes (Jones & Cassidy, 2014). We also evaluated SBS content in parents' narratives about their own children, augmenting previous work on story stems.

### Conclusion

In sum, in this study, we provide important preliminary evidence suggesting that parental romantic attachment insecurity and depressive and anxiety symptoms predict higher negative emotion and lower SBS content as a caregiver. Further, our results suggest that parents' depressive and anxiety symptoms may operate as a mechanism between parental attachment insecurity and negative emotion and SBS knowledge as an attachment figure. If replicated and extended in longitudinal designs, these effects may have important implications for interventions designed to enhance caregiving experiences and behaviors. Insecure parents' depressive and anxiety symptomatology may represent a key port of entry for clinicians who aim to promote sensitive parenting behavior.

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