Maternal Trauma Symptoms Moderate the Association between Mothers' Childhood Trauma and their Secure-Base Script Knowledge

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INTRODUCTION

Recently, attachment research has shifted its focus on better understanding and identifying the cognitive underpinnings of Bowlby's "internal working models" construct. The Attachment Script Assessment (ASA) is a semi-projective narrative-based measure developed to assess adults' cognitive scripts for secure-base behavior (SBS) in close relationships (Waters & Rodrigues-Doolabh, 2001, 2004).

Presumably, the degree of secure-base script knowledge an individual possesses and can access, depends upon the individual's history of sensitive and responsive caregiving during childhood (Waters & Waters, 2006). Those individuals with inconsistent secure-base support in early childhood are thought to have difficulties making sense of relational interactions and regulating emotions in close relationships.

Indeed, Steele et al. (2014) provided empirical support for the relationship between attachment experiences in early childhood and an individual's degree of secure-base script knowledge among a normative sample of adolescents. Importantly, a handful of studies have also found that mothers' secure-base script knowledge is predictive of their attachment representations, parenting behavior, and their child's attachment quality (e.g., Huth-Bocks et al., 2014). In particular, Huth-Bocks and colleagues (2014) found that mothers with higher secure-base scriptedness used more positive and less negative parenting strategies. They also scored higher on parental reflective functioning (i.e., caregivers' capacity to understand their child's mental states).

Given these findings, it is plausible that events such as childhood trauma might interfere with the development of secure-base script knowledge; however, no studies have examined other childhood predictors of adult secure-base script knowledge outside of attachment and almost no studies have examined correlates of secure-base script knowledge within higher risk samples.

Research Aims:

➢The present study examines the relationship between mothers' childhood trauma experiences and their secure-base script knowledge.

➢It was hypothesized that mothers who had experienced more childhood trauma would have lower secure-base script knowledge.

➢The impact of mothers' current functioning (i.e., mental health) on the association between maternal childhood maltreatment and secure-base script knowledge was also explored.

METHODS

Participants

- Age: *M* = 26; Range = 18-42 *SD* = 5.7
- Monthly Income Median = $1500
- 73% received services from the Women, Infants, and Children Program
- 76% had public health insurance
- Family status: Single parents = 64%; First-time mothers = 30%
- Race: African American = 47%, Caucasian = 36%, Biracial =12%, Other = 5%
- Education: Some college = 57%, High school or less = 20%, College or graduate degree = 13%

METHODS continued

Procedures

Pregnant women were recruited through the posting of flyers in pregnancy agencies and community organizations serving low income families. These women were interviewed during the last trimester of pregnancy (T1), 3 months after birth (T2), when the baby turned 1 year (T3), and when the baby turned 2 years (T4). Retention (*n*): T1 (120), T2 (119), T3 (115), T4 (99). Data from the first and third waves were used in the present study.

Measures

PTSD Checklist (PCL; Weathers et al., 1993). The PTSD Checklist was used at T1 (α = .87) to measure symptoms of PTSD. Participants indicated the extent to which they had been bothered by each item (e.g., "trouble falling or staying asleep") in the last month using a 5 point scale ranging from 1 = *not at all* to 5= *extremely*.

Childhood Trauma Questionnaire Short Form (CTQ- SF; Bernstein et al., 2003). The CTQ-SF was used at T1 to measure an individual's experience of childhood trauma. A total maltreatment score (α = .95) was calculated based on participants' reports of emotional, physical, and sexual abuse/neglect. Participants indicated the degree to which they agreed with each item (e.g., "people in my family said hurtful or insulting things to me") on a 1 = *never true* to 5 = *very often true* scale.

Attachment Script Assessment (ASA; Waters & Rodrigues-Doolabh, 2001, 2004). The ASA was used at T3 to measure mothers' representations of secure-base script behavior. Among the four attachment stories, very good inter-rater reliability (intra-class correlation, ICC = .88) has been shown. Individuals were asked to produce attachment-related stories using a series of six word-prompt lists. In the present sample, the ICC was .80 for the baby story, .80 for the doctor story, .82 for the camper story, and .81 for the accident story.

-Mother-child attachment scenarios (2)
-Adult-adult (romantic) attachment scenarios (2)
-Neutral scenarios (2)

Stories were coded and ranged from 1 (*low secure base*) to 7 (*high secure base*) based on the presence of:

(1) Identification of a problem, (2) Character distress, (3) A bid for help, (4) Responsiveness of the bid by another character, (5) Assistance accepted, (6) Help comforted individual, (7) Dyad returned to activity

The two scores derived from the mother-child stories are averaged together and the mean of the two adult-adult stories are computed. Based on the mother-child and adult-adult composites, the four attachment-relevant scores can be averaged to produce a total SBS score

Example

Mother–Child Attachment Story Word List

Baby's Morning

Mother	Hug	Teddy bear
Baby	Smile	Lost
Play	Story	Found
Blanket	Pretend	Nap

Example, Score = 2.5; Categorical = Atypical

"…(3 second pause)..I'm ready…(3 second pause)…Once a baby was taking a nap. Mother decided she was gonna clean up the house. But what she didn't know was that the baby was pretending to be asleep. He was hiding under the blanket, trying to play with mommy. Mommy decided to tell the baby a story, about four teddy bears, in the middle of the story the baby fell asleep again, and so mother decided to clean up the house. Low and behold the baby wasn't asleep, he was pretending to take a nap. The mother found herself very frustrated because she couldn't get the house cleaned, she sat down and gave the baby a hug and smiled and told her baby that she loved the baby. The baby finally decided to go under the blanket and take a nap, the mother was so tired she was lost for words and found herself going to sleep with the baby. The end"

Explanation:

➢The participant obtained a low score on this mother-child attachment scenario because she lacked one or more core components that comprise a SBS. While this mother was able to identify a problem and character distress in her story, she employed these components in an atypical manner (i.e., recognized the mother as having the problem and as being distressed). Rather than create a story where the child bids for help, is responded to, and comforted from another character (i.e., caregiver), the participant failed to include these components and did not provide a resolution to the presented problem.

Example

Adult-Adult Attachment Story Word List

Sue's Accident

Sue	Wait	Home
Road	Mike	Dinner
Accident	Tears	Bed
Hospital	Doctor	Hug

Example, Score = 6.75; Categorical = Secure

"Sue's accident. Well, Sue lived in Michigan as it turns out, and Michigan, umm contrary to popular belief uhh did not have the second worse drivers in America, second only to Austin, Michigan actually has the worse drivers in America. And Sue was out on the road, driving along, and somebody was tailgating her. Umm which happens all the time in Michigan. And so Sue didn't know what to do, she was really nervous about this umm and sure enough she had to stop for some traffic ahead, and she tried to stop slowly so the tailgater wouldn't rear end her, but the tailgater did and she got into an accident. And the person was going pretty fast and so Sue had to go to the hospital. Umm luckily she was ok, I mean she wasn't like unconscious or anything, umm and so there was a little bit of a wait at the hospital because she wasn't like in critical condition. But, she was really upset about this whole thing. Umm and her husband Mike came in and when she saw him, Sue just burst into tears because she was actually really afraid of ya know the accident could have been much worse than it was. And Mike offered her comfort and told her not to worry, and he told her he was going to write letters to the Congressman and State Legislatures to get them to change the laws in Michigan so that it could finally become a safe place to drive. And while they were talking about this and planning about all these things, the doctor came in and he said, Sue we got your x-rays back, everything's fine, you don't need to worry, ya know you might be in a little bit of pain so take some Tylenol, just take it easy. And so Mike drove Sue home and he made her a really good dinner and he made her Macaroni and Cheese which is a comfort food and they just went off and sat in bed and Mike gave Sue a big (VOICE became LOUDER) hug and told her not to worry and everything was going to be fine and he was so happy that she was sitting there."

Explanation:

➢The participant was given a high score on this adult-adult attachment scenario because she included most, if not all, of the core components that comprise a SBS. This mother was able to portray an interaction between two characters where the attachment figure attends to the psychological state of the distressed character, helps the troubled character resolve the presenting problem, and helps the character return to normal activities.

RESULTS

Unexpectedly, there was no significant association between mothers' childhood trauma experiences and their secure-base script knowledge in the present study (*r* = -.08, *p* = n.s.). Exploratory analyses were subsequently conducted to examine whether mothers' current functioning, i.e., mental health, influenced the relationship between childhood maltreatment and secure-base script knowledge.

Moderation analyses were conducted using the PROCESS approach (Hayes, 2013). Results revealed a significant main effect of pregnancy PTSD symptoms on secure-base script knowledge (95% CI = -.1075 to -.0379). In addition, results indicated that mothers' pregnancy PTSD symptoms moderated the association between mothers' retrospective reports of childhood trauma and their secure-base script knowledge (95% CI = .0004 to .0017).

Simple slopes analysis revealed a significant, negative association between maternal childhood trauma and secure-base script knowledge for women who reported low levels of PTSD symptoms during pregnancy (95% CI = -.0236 to -.0009) (see Figure 1). There was no significant association between childhood trauma and secure-base script knowledge for women with medium or high levels of PTSD symptoms. Notably, mothers' secure-base script knowledge was lower at medium and high levels of pregnancy PTSD symptoms, regardless of the amount of childhood trauma experienced.

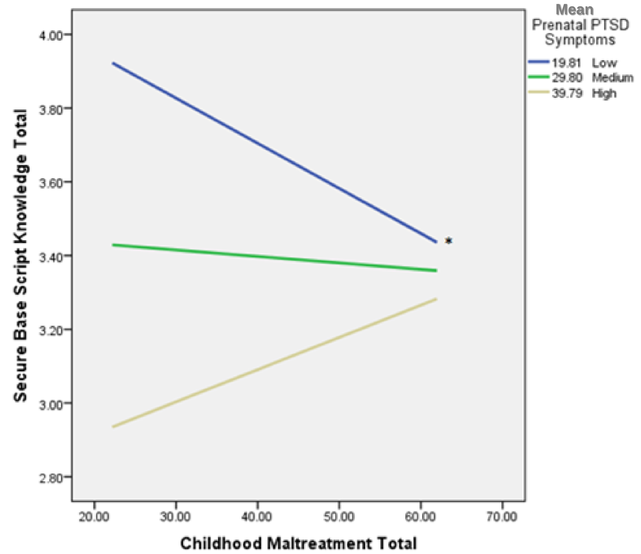

Figure 1. The relationship between childhood trauma and secure base script knowledge at various levels of PTSD symptoms during pregnancy

DISCUSSION

These findings suggest that a history of childhood trauma is related to secure-base script knowledge for some women. However, mothers with elevated levels of PTSD symptoms may have less secure-base script knowledge and/or less accessibility to secure-base scripts due to their emotional distress. Indeed, our results suggest that mothers with moderate or high levels of PTSD symptoms during pregnancy possess lower secure-base script knowledge, no matter the amount of childhood trauma experienced. These findings have important implications for parenting among new mothers. Given the importance of secure-base script knowledge in predicting parenting techniques and parental reflective functioning (e.g., Huth-Bocks et al., 2014), trauma-exposed mothers may be at increased risk for using more negative and less positive parenting strategies. Specifically, without secure-base scripts readily available, trauma exposed mothers may exhibit different parenting behavior from non-trauma exposed mothers. Similarly, the attachment formed between trauma-exposed mothers and their infants may be less secure than infants with non-trauma exposed mothers, in part, due to mothers' varying levels of secure-base script knowledge.

ACKNOWLEDGMENTS

We are extremely grateful to the families participating in this study who allowed us to visit their homes and learn about their circumstances. We are also very grateful to the graduate and undergraduate research assistants who helped collect these data. Thank you to our funding sources: Eastern Michigan University Office of Research Development; American Psychoanalytic Association; International Psychoanalytic Association; The International Honor Society in Psychology (Psi Chi).