

Maternal Attachment Scripts and Infant Secure Base Behavior

Morgan Tini

David Corcoran

Lisa Rodrigues-Doolabh

Everett Waters

*State University of New York
at Stony Brook*

ABSTRACT

Bowlby's attachment theory predicts strong links between maternal attachment representations and infant attachment behavior. That link has already been established for the Adult Attachment Interview and is widely cited as persuasive evidence of the AAI's validity as a measure of adult attachment representations. Recent research has shown that attachment script assessments correlate highly with coherence scores from the Adult Attachment Interview (H.Waters & Rodrigues, 2001). The goal of the current study was to establish a parallel link between mothers' knowledge and access to a secure base script and their infant's Strange Situation classifications.

Thirty-one women and their 12-18 month infants participated. Each mother produced attachment narratives organized around mother/child and adult/adult story lines as part of the script assessment. Infant security was evaluated in the Ainsworth Strange Situation. Findings indicated that the script based assessment predicted infant attachment security at a comparable rate (76%) as that of the Adult Attachment Interview.

INTRODUCTION

The current study is part of a project designed to specify in detail how early attachment experience is represented in the mind. Initial studies (H. Waters, Rodrigues, & Ridgeway, 1998) indicated that early attachment experience is represented in the form of a temporal-causal script structure organized around components of the “secure base phenomenon” defined by Bowlby and Ainsworth. Adult’s knowledge of the secure base script can be assessed by having them tell short stories from prompt words that suggest secure base script content and organization. Recent research (H. Waters & Rodrigues, 2001) has shown that script assessments correlate with coherence scores from the Adult Attachment Interview.

Bowlby’s attachment theory predicts strong links between maternal attachment representations and infant attachment behavior. Evidence that AAI scores are related to infant attachment behavior in the Ainsworth Strange Situation is widely cited as persuasive evidence of the AAI’s validity as a measure of adult attachment representations. The specific goal of the present study is to determine whether our script assessments of a woman’s attachment representations are similarly related to her infant’s behavior in the Strange Situation. Positive results would significantly strengthen our claim that our script assessment clarifies the nature of representations indirectly tapped by the AAI.

Participants and Design

Thirty-one women & their 12-18 month old infants were recruited from birth announcements in local newspapers (middle-class community). The mothers first completed the H. Waters & Rodrigues narrative script assessment, and were then invited with their infants to the laboratory for the Ainsworth Strange Situation assessment. Mothers also completed the Brennan & Shaver “Relationship Styles and Preferences” self report questionnaire.

Secure Base Script Assessment

Uses word prompt outlines that frame attachment-relevant story lines. Two are mother-child situations (Baby’s Morning, Doctor’s Office), two are adult-adult situations (Camping Trip, The Accident). Individuals produce narratives that are then scored on secure base scriptedness on a 7 - 1 scale.

Ainsworth Strange Situation

A laboratory procedure consisting of eight 1-3 minute episodes that include two infant-mother separations. Infant behavior is scored on proximity-seeking and contact-maintaining, avoidant and resistant behavior. Infants are classified as secure (B), insecure-avoidant (A), insecure-ambivalent (C).

TABLE 1: SAMPLE PROMPT-WORD OUTLINES

Baby's Morning

mother	hug	teddy bear
baby	smile	lost
play	story	found
blanket	pretend	nap

The Doctor's Office

Tommy	hurry	mother
bike	doctor	toy
hurt	cry	stop
mother	shot	hold

PROTOTYPIC SECURE BASE SCRIPT

(Mother-child)

Sequence of events in which the caregiver:

- 1) supports the child's exploration
- 2) remains available & responsive & serves as a resource as necessary
- 3) the child encounters an obstacle or threat and becomes distressed
- 4) either the child retreats to the caregiver or the caregiver effectively comforts the child
- 5) the difficulty is resolved or removed
- 6) proximity and/or contact with the caregiver effectively comforts the child
- 7) the child (possibly with the caregiver's assistance) returns to constructive play (or ends play comfortably & makes a transition to another activity)

Baby's Morning: Secure Base Script - from mother with a "B" baby

Has all the pieces of a secure base script, good interaction in the beginning, child turns to mom to find blankie, even trusting mom and calming with hope that blanket would be found eventually.

Baby woke up very early this morning. Mother tried to pretend she was sleeping but baby wasn't playing by herself this morning. Oh no, she was ready to play with mom and mom only. So, mama got up and gave her a big hug and said, "Good morning sunshine!" Went and changed her diaper. Baby immediately wanted to know where her teddy bear and her dolls were. She knew exactly where they were - under her bed. She pulled the box out, got out her baby, got out her teddy bear. But where was her blanket? It was nowhere to be found. It wasn't in her crib where it usually was in the mornings. She turned to mommy and said, "Blankie, blankie!" Mom said, "I don't know hun, I'll have to look and see if I can find it." Oh no, baby's blanket was never lost before. So mama looked and looked and looked and looked. She couldn't find it and couldn't find it. She said, "Let's have a story and I think by the end of the story mom will know where it was." So she sat down and told the baby a beautiful story about a princess and a dragon and a frog. By the end baby was pretty bored and wanted that blanket. But all of the sudden mama remembered that it was in the laundry basket. She had just washed it last week. So she went and got the blankie and gave it to baby who was very, very happy. As soon as baby got a nap. . . or got her blankie, she went right down for her nap. Mother was very happy and fell asleep right after. The End.

Baby's Morning: Secure Base Script - from mother with an "A" baby

Very little direct, responsive interaction between mom and child. Secure base script is embedded in the story told to the child, but the child does not participate in the story telling. Ending is odd, mom is left out of ending.

At seven a.m. the baby started to cry, "Mommy! Mommy! Mommy! Feed me." So the mom got up and went to the crib and took the baby out. But the baby wanted to bring her blankie with her out of the crib, so they took it out of the crib. The mommy asked the baby if she wanted to play and she said, "no, feed me." So, she took the baby and put her into her high chair and made her oatmeal and decided to tell her a little story while she was eating to make her laugh and enjoy her oatmeal. And the story that she told was about a little baby who lost her teddy bear. But then they looked all over. They looked under the couch, and they looked under the coffee table, and inside the TV cabinet and they finally found the teddy bear cause daddy had put it away the night before. Once they found the teddy bear, they were very happy and the baby lived happily ever after. By the time the story was over, the baby had finished her oatmeal. And she went to play with her Elmo doll for a little while until it was time for her nap. And she took her nap and went to sleep.

Baby's Morning: Secure Base Script - from mother with a "C" baby

There is general positivity in the beginning part of the story, but the lost bear and resolution are not in a secure base format. It is in the form of a single person's problem.

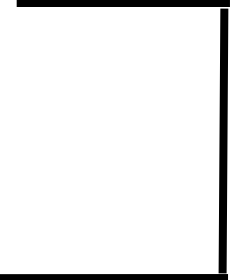
One day, a mother decided that she would spend the entire day playing with her baby. They woke up in the morning and they played tent under the blanket. They hid under the blanket and kissed and kissed and then the baby gave the mother a big hug and lots of smiles as they rolled around their big bed. Then as - then as they went on with their day, the mother told her baby a story of the Three Little Bears. It was a pretend story about a teddy bear who was lost... It was a pretend story about a girl who lost her teddy bear somewhere in the forest. She searched and searched through trees and flowers and suddenly, she found her teddy bear right where she left it -- in her garden. So relieved that she found the teddy bear, she hugged the teddy bear tight and laid in the garden and took a nap.

Cross-Generational Transmission

If Securely Attached,
Then Mom Knows the
Secure Base Script



Mom Demonstrates
Sensitive Care



Child Has Confidence in Mom's
Availability and Responsiveness
(i.e., Security)



**Strange Situation
Behavior**

MOTHER SCRIPT SCORES AND INFANT ATTACHMENT

	Secure (B)		Insecure (C)		Insecure (A)	
Secure Script	7.0 (B4)	6.75 (B4)			6.5 (A1)	
	6.0 (B3)	5.75 (B2)				
	5.5 (B1)	5.25 (B3)				
	5.25 (B2)	5.13 (B3)	5.25 (C1)			
	5.0 (B3)	4.75 (B1)	4.88 (C1)			
	4.25 (B1)	4.0 (B2)	4.38 (C2)			
No Script	3.38 (B4)	3.25 (B3)	3.5 (C2)	3.5 (C2)	2.38 (A1)	
	3.13 (B3)		3.38 (C1)	3.0 (C2)	2.25 (A1)	
			3.0 (C1)	2.5 (C1)	2.25 (A1)	2.0 (A1)

Do Mothers of Secure and Insecure Infants Differ on Secure Base Script Knowledge and Self Reported Attachment Style?

<u>Script Score</u>	Secure (B)	Insecure (C) Ambivalent	Insecure (A) Avoidant	Secure vs. Insecure Contrast
Mother-child (max. = 7)	5.0	3.7	3.1	p<.05
Overall (max.= 7)	4.9	4.0	3.2	p<.05
 <u>Self-Report</u>				
Anxiety (max.= 135)	58.5	60.7	69.5	ns
Avoidance (max.= 135)	43.3	30.0	39.0	ns

Note: Study is ongoing, current sample consists of 15 secure, 9 ambivalent, 5 avoidant

KEY FINDINGS

- Of the 31 infants in the sample, 2 could not be classified, 15 were secure, and 14 were insecure (9 were insecure-ambivalent (C) , 5 were insecure-avoidant (A)).
- The success rate of using script scores to predict infant classifications was examined by using 4.0 and above as evidence of a secure base script and less than 4 as evidence of the absence of a script (see chart). There were 22 clear hits (76%), & 7 misses (24%).
- T-tests were conducted on mother-child, adult-adult, and overall script scores (averaged across all four attachment narratives), comparing secure versus insecure groups. All comparisons were significant, $t(27)=3.16, p<.01$, $t(26)=1.93, p<.05$, and $t(27)=2.75, p<.01$, one-tailed tests.
- The avoidance and anxiety scales from the Relationship Styles and Preferences Survey did not correlate with secure base script scores. Nor did the self report scales discriminate between the mothers of secure vs insecure infants.

CONCLUSIONS

The close association of a mother's AAI classification with her infant's Strange Situation is one of the most influential findings in adult attachment research. In the current study we examined whether, like maternal AAI classifications, mothers' knowledge and access to the secure base script is associated with their infant's Strange Situation classifications. Our findings indicated that the script based assessment predicted infant attachment security at a comparable rate (76%) as that of the Adult Attachment Interview (van Ijzendoorn, 1995). This is important evidence that the notion of a secure base script is relevant to understanding the AAI. It also supports the use of the script assessment in research that focuses on the secure vs. insecure distinction and requires greater specificity and economy than the AAI can provide.

Finally, our study produced no relationship between the script assessment or the infant's attachment classification with the Brennan & Shaver attachment self-report measure. Along with previous research that reports similar results with the AAI, this is further evidence that the AAI and the self-report measures assess different constructs.