Co-Constructing Script-like Representations of Early Secure Base Experience

Sarit Guttmann-Steinmetz
Melanie Elliott *
Michelle Cunliffe Steiner
Harriet Salatas Waters

State University of New York
at Stony Brook
*UNC Chapel Hill
ABSTRACT

The current study examined the communication style of 25 mothers and their 4 to 5 year old children. Each pair was asked to co-construct two stories from simple picture prompts that were organized around everyday attachment-related situations, one with more positive, one with more negative content. The quality of videotaped interactions were scored in terms of mother sensitivity, cooperation/interference and affect regulation. From the transcribed protocols, mothers were scored on their skills in script elaboration and cognitive support.

Mothers completed the Adult Attachment Interview and the generalized attachment script assessment developed by H. Waters and Rodrigues. Secure mothers were more likely to be effective communicators who easily established a co-construction partnership with their child. They were attentive to the child, timed their comments appropriately and helped their children fill in the details of the story line. These effects were only evident with negative stories suggesting that negative content was more likely to activate the mother’s attachment system.
INTRODUCTION

Recent work in the area of social development has emphasized the importance of narrative co-constructive processes in helping the child build an understanding of his/her social world (Oppenheim & Waters, 1995). Furthermore, social scripts have been implicated in the development of attachment representations (Bretherton 1991). Secure children are better able to fill in the details of attachment-relevant scenarios, e.g., finishing a story about monster in the bedroom. Researchers have proposed that mothers of secure children help co-construct attachment scripts that enable children to fill in the details & provide an ending to stories such as “monster in the bedroom.”

In the current study we examined differences in mothers’ styles in talking with their young children (4-5 yrs) about everyday attachment-related situations. The quality of the mother-child videotaped interactions were rated using scales based on Ainsworth’s maternal sensitivity and cooperation vs interference scales, plus an additional scale on affect-regulation. Cognitive support was also rated from the written protocols on several scales related to script elaboration. It was anticipated that there would be broad-based differences in mothers’ co-construction skills related to the mother’s attachment status.
Participants and Design

Twenty-five mothers along with their 4-5 yr old children were asked to co-construct stories from pictures that implied a simple story line. Each pair co-constructed two stories, one of two possible stories that involved positive affect (mom & child go to the beach, mom & child are reunited after mom’s trip to the city), and one of two stories that contained more negative content (child cannot sit on mom’s lap; child has their finger stuck, but mom can’t come to help).

All of the mothers had completed the Adult Attachment Interview and the H.Waters & Rodrigues (2001, SRCD) generalized attachment script assessment. IQ scores were also available on the mothers to confirm that co-construction skills were not correlated with general intelligence.

Procedure

Four panels that depicted the story line using simple drawings were placed in front of the mother and child (see sample picture prompts). The mother and child were instructed to tell the story together after the experimenter reviewed the pictures with the two, and identified the story topic.
Positive Story: Johnny and Mummy go to the beach

Negative Story: Susy can't sit on Mommy's lap
SAMPLE PROTOCOL - CAN'T SIT ON MOMS LAP

M: OK, where’s Susie?
C: (points)
M: OK. What is she... what is she doing?
C: (points) Coloring.
M: She was coloring. What else was she doing?
   What are these? (points)
C: She was playing blocks with her dolls. And..
M: And what is that? (points) She was playing
   XXX, right?
C: Yah. And, and, and, and a yo-yo. And...
M: Well, that's a pull-toy. It's not really a yo-yo.
   But anyway, so Susie was coloring and playing
   with her toys, right?
C: And she was... and she wanted to sit in
   mom's ... on her lap. And
M: She wanted mommy to hold her? Do you do that?
C: (nods)
M: Yah. And what'd mommy look like she's doing?
C: Washing dishes.
M: Yah, so mommy can't hold her when she's
   washing dishes, right?
C: (shakes head)
M: No. And what's mommy doing here? (points)
C: Ho...
M: She's making dinner it looks like, right?
C: And she's crying.
M: Yah. 'Cuz why?
C: 'Cuz she didn't... she didn’t... she's makin’
   potatoes.
M: Right. And she misses her mommy and she
   wants her mommy to hold her?
C: She's... she's pointing to the door.
   What is that? (points) She's crying. Why is she
   crying?
C: Because she... she wants her mommy.
M: Right. Do you do that all the time?
C: Mmm.
M: Yah. And now her mommy's pointing to the
door, right? (points) Here's the door, right?
   And she says what? What... what usually
   does that mean when there's a door? Is there
   a room?
C: (nods)
M: Do you think it was the living room or the
   bedroom?
C: Bedroom.
M: The bedroom? Do you have a TV in your
   bedroom?
C: (nods)
C: Potatoes.
C: And she wants to...
M: And wait wait wait. What'd mommy say?
   (points)
C: She went to put her... she can't put her
daughter's lap on her, um...
M: She can't have her daughter sit on her lap?
   Why? Because she's making dinner, right?
   (points)
C: (nods)
M: And if she's making dinner, she said, no, no, no.
C: No, no?
M: No.

M: Yah, 'cuz she wants her to go in there and
   watch TV. (points) Is that what mommy says
to you sometimes?
C: (nods)
M: Sometimes mommy needs you to go watch TV
   so I can get some stuff done?
C: (nods)
M: Right. So that's what?
C: I do that.
M: That's what happened. (points) She told her
daughter to go... she told Susie to go... "Go in
   your room and watch some TV until mommy
   gets done." Right?
C: (nods)
M: OK.
INTERACTION SCALES (SCORED 7 TO 1)

**Sensitivity to Signals.** This scale refers to the mother’s ability to perceive and to interpret accurately the signals and communications implicit in her child’s behavior, and given this understanding her ability to respond to the signals appropriately and promptly. Examples include: (a) picking up on the child’s looks to mom, (b) noticing a questioning tone in the child’s voice, (c) answering questions, as opposed to ignoring the child, or moving on to something else.

**Cooperation vs Interference.** This scale refers to the extent to which the mother’s participation is appropriate in its timing and content. Cooperation maximizes the child’s performance by (a) helping the child when “stuck,” while still allowing him to direct the story telling; (b) picking up on something the child says and further developing it with him, and more. Interference is evident in intrusive behavior that disrupts the flow of the child’s story telling. Examples are: (a) interfering with child’s attention; (b) interfering with the child’s ongoing story and demanding he take a new direction.

**Affect Regulation.** This scale refers to the manner in which the mother deals with both positive affect and negative affect displayed by the child, with the goal of keeping the child engaged in the task. Effective affect regulation involves: (a) moderating child’s excitement level so the child stays engaged; (b) keeping the task fun; (c) avoiding boredom; (d) keeping the child from experiencing uncertainty in his progress/success; (e) preventing child from being frustrated.
CO-CONSTRUCTION SCALES (SCORED 7 TO 1)

**Creating a Co-Construction Atmosphere** – The mother explicitly promotes co-constructive atmosphere (versus imposing her own story line onto the child). She recognizes and encourages child-initiated story lines, allowing the child to direct the story telling, allows the child to decide when to go to the next part or when the story is completed. Below are two examples.

(1)  
M: OK Matthew, want to start, tell a little story?  
C: You can start.  
M: OK, I’ll start and then you can join in. OK

(2)  
M: So did Johnny go in the sandbox?  
C: Nah, he was just crying.  
M: He was crying?  
C: Uh-huh  
M: Oh OK. So he was crying.

**Encouraging content elaboration** – Mother uses open-ended prompts (versus adopting a short answer, fill in the blank, or yes/no format). She encourages the child to take the initiative in filling in the details. Her comments and questions both confirm the child’s statements and set the tone for a “what happens next” type prompt, providing a positive, encouraging environment for continued elaboration of story-line.

(3)  
M: And what does he say he wants? What do you think he wants?  
C: to sit on her … to sit …for her to sit on his lap.
C: … then his mommy um, um, was pissed off like my daddy.
M: You didn’t say that. OK. What happened next?
C: Then, um, then he said, “Could you play ice ball with me” …

Supports explanatory framework – Mother asks for explanations in response to child’s statements (why type questions), helping to build a causal framework for the events of the story. She is more likely to include a discussion of how a character feels in her efforts to build an explanatory framework, instead of just focusing on the sequence of events in the story. Her comments may also relate the story line to some experience the child has had, bridging the current story to the child’s own experiences. She may also just go with the child’s efforts to relate the story with his/her own experiences.

C: The door opens. Mommy comes in. Johnny smiles at her.
M: Why is he smiling?
C: Because he likes her and loves her.

M: Mm-hmm. And maybe he’s gonna, what do those look like?
C: Ummmm….  
M: What were you doing this morning?
C: I was doing.
M: Yah, what were you doing?
C: I was doing… CRAYONS!
M: Right! Crayons! What do you think he’s gonna make a picture of?
C: Godzilla.
M: Godzilla! OK. So we’ll say that Johnny was gonna make a picture of Godzilla, OK? With his crayons.
CO-CONSTRUCTION HYPOTHESES

**H1:** There will be consistent individual differences in mothers’ interaction styles and co-construction skills.

**H2:** Effective interaction and co-construction skills will be correlated with mother’s attachment status (as assessed by the Adult Attachment Interview and the generalized attachment script assessment).

**H3:** Mothers’ interaction styles & co-construction/script elaboration skills (scored independently from videotapes and transcribed protocols) will be related.

**H4:** Positive results will be more clearcut with storylines that contain more negative content because they are more likely to engage mothers’ attachment system.

**H5:** General intellectual functioning (IQ) will not correlate with interaction style or script elaboration skills.
### CORRELATIONS OF INTERACTION AND CO-CONSTRUCTION SCALES WITH MOTHERS' AAI COHERENCE AND SCRIPT KNOWLEDGE
(Stories from Negative Secure Base Prompt-Word Sets)

<table>
<thead>
<tr>
<th>Interaction Scales</th>
<th>AAI Coherence</th>
<th>Scriptedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity to Signals</td>
<td>.46**</td>
<td>.63***</td>
</tr>
<tr>
<td>Cooperation vs. Interference</td>
<td>.50**</td>
<td>.68***</td>
</tr>
<tr>
<td>Affect Regulation</td>
<td>.38*</td>
<td>.43*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Co-Construction Scales</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-Construction Atmosphere</td>
<td>.42*</td>
<td>.43*</td>
</tr>
<tr>
<td>Encouraging Elaboration</td>
<td>.42*</td>
<td>.30</td>
</tr>
<tr>
<td>Explanatory Framework</td>
<td>.40*</td>
<td>.29</td>
</tr>
</tbody>
</table>

*** p <.001, ** p <.01, * p <.05 (one-tailed tests)
## CORRELATIONS AMONG SCALES AND ATTACHMENT MEASURES

### POSITIVE STORIES

<table>
<thead>
<tr>
<th>Interaction Scales</th>
<th>AAI Coherence</th>
<th>Scriptedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity to Signals</td>
<td>.20</td>
<td>.26</td>
</tr>
<tr>
<td>Cooperation vs. Interference</td>
<td>-.02</td>
<td>.19</td>
</tr>
<tr>
<td>Affect Regulation</td>
<td>.13</td>
<td>.18</td>
</tr>
</tbody>
</table>

| Co-Construction Scales              |               |              |
| Co-Construction Atmosphere         | -.11          | .25          |
| Encouraging Elaboration             | .12           | .02          |
| Explanatory Framework               | .29           | .11          |

*** $p < .001$, ** $p < .01$, * $p < .05$ (one-tailed tests)
KEY FINDINGS

- Secure mothers demonstrate a more effective interaction style reflecting higher sensitivity and cooperation. They are attentive to the child, timing their comments to coincide with their child’s verbal statements. They also better moderate the child’s affective state during the task.

- Furthermore secure mothers systematically help their child elaborate the co-constructed story, prompting their child to fill in the details, preferring open-ended questions. They prompt explanations and relate the story to the child’s experience.

- Although both interaction and co-construction scale scores correlate across positive/negative stories (range from .52 to .65), only interaction and co-construction scores from negative stories correlate with mothers’ attachment status (see tables to the left).

- Mothers’ interaction & co-construction scale scores were not correlated with IQ.
CONCLUSIONS

The current findings are consistent with the co-construction hypothesis articulated by Oppenheim & H.Waters (1995) that secure mothers are better able to help their children build attachment scripts, enabling them to fill in details and connect events within a coherent, explanatory framework. These mothers are more effective communicators who easily establish a co-construction partnership with their child when compared to insecure mothers. The fact that this relationship holds only for negatively affect-laden story lines suggests that the negative content prompts more engagement from the mothers, producing more clear cut differences between secure and insecure mothers.

Future research should examine the relationship between mothers’ secure base scripts as assessed by the narrative attachment assessment, mothers’ co-construction skills, and the child’s own secure base script, as assessed by independent attachment-related story constructions. This would contribute to our understanding of the processes by which a secure base script is actually transmitted through dialogue/communication from a parent to their child.