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Assessing and quantifying the secure base script from narratives produced by preschool age children: justification and validation tests

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ABSTRACT

Building on a framework presented by Bretherton and associates, Waters and associates argued that interaction sequences relevant to children's access to and use of a secure base for exploration during infancy/toddlerhood become internalized as script-like representations. For adults, these scripted representations are readily assessed using word-prompt lists designed to elicit attachment relevant narratives. However, this method is not appropriate during early childhood. Waters and associates used stories from Bretherton's Attachment Story Completion Task for this purpose. However, the method they used to score secure base script use is not efficient for larger samples (e.g. over 50), and new approaches for scoring have been designed. We describe two approaches to story selection and scoring for access to and use of the secure base script. The two scoring methods show substantial and significant overlap and also have significant associations with other methods of measuring attachment security during early childhood.

KEYWORDS

Attachment representations; secure base script; social competence; adaptation; preschool-age children

John Bowlby proposed that attachment bonds that were co-constructed over the early years of life have enduring effects on psychosocial development and adjustment across the lifespan and that the presence of such effects required processes and mechanisms to carry the essence of those early-formed bonds forward, even when contact with the caregiver is less frequent or absent altogether. He proposed the concept of the "internal working model" (IWM) of attachment as the mechanism that processed new relationship-relevant "data" with reference to earlier established attachment relationships. Bowlby also argued that the IWM of the attachment relationship should inform the construction of internal models of the self (e.g. as worthy of love and respect or not), of the caregiver (e.g. as caring, available, and invested in the attached child, or not), and of the larger social world (e.g. as benign with regard to the child, as generally predictable, and as responsive to the child's attempts to influence the world, or not). Given the heavy lifting Bowlby assigned to IWMs, he was careful to link them with constructs adapted

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from the cognitive psychology of his day and he updated these links to newer constructs as they emerged within cognitive psychology.

Initially, Bowlby suggested an analogy between his WM concept and the mental models ideas of Craik (1943), who argued that people tend to construct mental models of how the world (or specific features of the world) operates and that these models permit them to mentally test alternatives and select the most (likely) adaptive responses when confronted with challenges in the world. Although useful to Bowlby as a heuristic, as the mental models construct developed within cognitive psychology, it became more focused on reasoning (see Johnson-Laird, 2013 for a recent overview of mental models) than on action and feeling (which are crucial to Bowlby's characterization of the WM) and Bowlby began to explore parallels between WMs and Tulving's concept of episodic memory (see Tulving, 2002 for a historical overview of episodic memory). The focus on specific life events that have considerable personal salience seemed valuable for the WM concept, but Bowlby and others recognized that attachments are co-constructed from the minutia of everyday life. That is the routine, day-to-day exchanges between the infant/toddler and caregiver in which the child experiences the caregiver's consistent response to communicative signals, willingness to "play along" and cooperate with the child's ongoing activities and interests, acceptance of the child's immature status and dependence on the caregiver, and capacity for soothing and comforting when needed. While these routine experiences may be punctuated by highly salient episodes that could be relevant to attachment and might also be autobiographically memorable, those episodes are not the primary basis of the relationship.

Bowlby never stopped in his quest for a solid cognitive psychology connection for the WM concept, but he never completely settled on a form or structure that adequately captured what he felt were the essential phenomena of attachment and its organization within the person. However, near the end of his life, Bretherton (e.g. Bretherton, 1987; Bretherton, 1991) suggested that important aspects of Bowlby's WM concept could be understood in terms of event schemas or cognitive scripts and Nelson (1999) described specific correspondences (and distinctions) between her notion of mental event representations (aka: scripts) and WMs. As noted in the introduction to this special issue, a script is a cognitive structure consisting of ordered sequences characteristic of some event or class of events that are typically based on lived experiences of the person. In addition to temporal order information, a script usually implies causal relations within the sequence. For example, in a "restaurant" script, placing an order for a specific food item from a menu is a distal cause of receiving that food item somewhat later. Scripts have some advantages over mental models and episodic memories when it comes to WMs insofar as they are somewhat less mobile or dynamic (in terms of the pace of changes) than mental models, which may change dramatically on the basis of a single experience or appraisal of a previously unknown fact (Johnson-Laird, 2013) and, unlike episodic memories, they are explicitly semantic (i.e. they summarize a history of related experiences) rather than maintaining a focus on a single lived experience. Although changes may occur for both episodic memories and for scripts, the processes of change are different in that scripts are more likely to change as a consequence of actual changes in the nature of lived experiences whereas, episodic memories often change as a function of their retelling to the self and others as details of the experience may be emphasized differently to different audiences.

Harriet Waters and associates were the first team to exploit the script concept proposed by Bretherton with reference to the mental representations of attachment information during early childhood (Waters, Rodrigues, & Ridgeway, 1998). They noted that Ainsworth (e.g. Ainsworth, 1967; Ainsworth, Blehar, Waters, & Wall, 1978) had suggested that evidence of the child using the caregiver as a secure base of exploration and haven of safety in times of need was the single most important hallmark of an infant-caregiver attachment (i.e. the secure base phenomenon) and that individual differences in the use of the caregiver as a secure base were the primary indicators of attachment security (vs. insecurity). Consequently, it seemed to them likely that secure base experience would be the best candidate for being abstracted/generalized as a cognitive script.

Waters et al. (1998) tested this hypothesis using a set of 24 cases, with each case assessed on two occasions (37 and 54 months of age), that had been collected and originally coded (for different kinds of representational content) by Bretherton et al. (1990), using the *Attachment Story Completion Task* (ASCT). The ASCT is a story completion task consisting of a "warm-up" story (usually about a birthday party) followed by four to six attachment relevant stories. The child is provided age and ethnic status matched dolls with playhouse props to "show and tell me what happens next" after the researcher provides the initial story stem. The task is audio or video recorded for later transcription, and stories are scored from the transcribed narratives. Bretherton and colleagues designed a set of scales (e.g. emotion understanding, coherence, security) for scoring the story vignettes that have been used widely as indicators of attachment security in the preschool years (e.g. Verissimo, Santos, Fernandes, Shin, & Vaughn, 2014; Wong et al., 2011).

Working from transcripts of Bretherton et al.'s (1990) original videotapes, Waters et al. (1998) identified "prototypical" secure base script endings for each of three stories from the story completion task (Bretherton et al., 1990) that allowed categorizing stories into "well scripted," "moderately well scripted," and "poorly scripted" categories. They then rank ordered the stories within each category according to their similarity with the ideal prototype for each story. After ranking all cases for each story separately, the rank scores were averaged for three attachment relevant stories (i.e. Spilled Juice, Hurt Knee, Monster in the Bedroom) from the ASCT. The rank scores were significantly correlated with the core attachment security scales reported by Bretherton et al. (1990) for the 37- and 54-month assessments. Moreover, the attachment script rank scores (as well as the Bretherton security scales) were positively associated with child attachment security, assessed using the Attachment Q-sort (AQS, Waters, 1995) that had been completed after observing the children with their mothers at home, when the participants were 25 months of age (Bretherton et al., 1990). Regression analyses indicated that the Bretherton et al. and Waters et al. scoring protocols overlapped substantially in their joint retrodiction of the AQS security score, although each method also uniquely retrodicted a portion of variance for the AQS security score.

The Waters et al. (1998) study was a "proof of concept" that demonstrated the utility of a cognitively grounded measure of attachment security (i.e. the secure base script, SBS). In the time since the original study was published, a number of studies have used the script framework to assess access to and use of the secure base script in samples of adults (e.g. Coppola, Vaughn, Cassibba, & Costantini, 2006; Groh & Haydon, 2018;

Vaughn et al., 2006; Waters, Brockmeyer, & Crowell, 2013; Waters, Raby, Ruiz, Martin, & Roisman, 2018; Waters & Waters, 2006), adolescents (eg. Dykas, Woodhouse, Cassidy, & Waters, 2006; Steele et al., 2014; Vaughn et al., 2016), and school-age children (eg. Psouni & Apetroaia, 2014; Psouni, Folco, & Zavattini, 2015; Waters, Bosmans, Vandevivere, Dujardin, & Waters, 2015), with considerable success. Curiously however, no new studies of access to and use of the secure base script during early childhood appeared in the literature in the 20 years since Waters et al. (1998) was published (but see Posada & Waters, 2018).

It seems likely, at least in part, that the level of interest in script analyses of adult, adolescent, and middle childhood narratives was due to the introduction of a relatively brief and efficient method of obtaining the narratives themselves. Waters and Waters (2006) described a method based on the use of word prompt lists to elicit stories from adult participants that took only about 10-15 min to administer and could be scored for secure base scriptedness in about the same amount of time (after transcription) and a set of word prompt lists appropriate for adolescents appeared concurrently with their description of the word prompt method itself (Dykas et al., 2006). Scoring criteria for a seven-point scale were also published in the same articles. A few years later, a set of word prompt lists appropriate for school-age children (-8-12 years) was published along with the criteria for scoring on a seven-point scale (Waters et al., 2015). But, for younger children who were not able to read, the word prompt method could not be used and the ASCT (Bretherton et al., 1990) was the only tool that had been validated. This posed another challenge to most researchers because the multiple sorting procedure used to achieve final rank scores that were described by Waters et al. (1998), while manageable in small samples, was not efficient when sample sizes exceeded about 50.

Moreover, the individual ASCT stories do not fulfill the requirements for a complete and detailed secure base story (the criteria for assigning scores of 5 or higher on the seven-point scales) for several reasons. First, young children's narratives in response to the ASCT story stems tend to be quite brief and lacking in detail, which requires the examiner to probe or prompt the child (eg. "is there anything else that happens?" or "how did Susie feel when (challenge) happened?"). Second, the initial elements of the secure base script are stated by the examiner (i.e. the examiner presents the initial steps up to the challenge point, then asks "tell me and show me what happens next"). Third, it is occasionally the case that children re-frame a vignette in their narration in a way that reduces its attachment relevance (eg. treating "Aunt Rose" in the separation/reunion stories as a familiar and favored caregiver who keeps the children happy while parents are away overnight), which makes the rationale for assigning scores ambiguous (i.e. which attachment figure should be central and how should a low-keyed greeting of the parents at reunion be scored if the child did not experience the separation as a threat?).

This article describes two related, but distinct, approaches to deal with assigning scores to children's ASCT narratives. The first is a small extension of the approach used by Waters et al. (1998), in the sense that they had identified well scripted, moderately scripted, and poorly scripted exemplars when devising their rank orders. Posada and associates (Posada & Waters, 2018) assigned numeric values to each of the three categories, but added intermediate values (1.5, 2.5) as scoring options (so a 5-point scale) and assigned a score to each of the three stories used by (Waters et al. (1998,

Spilled Juice, Hurt Knee, Monster in the Bedroom). The final score was the average across the three stories.

The second approach to scoring differs considerably from the original method described by Waters and associates. Vaughn and associates used a modified version of the ASCT that did not include the spilled juice or hurt knee story stems (the version of the ASCT used in their study used alternative stories for these two stems, spilled soup and cut finger, which tended to elicit stories focused on pain/injury and disobedience more than use of a secure base). However, this version did include the separation and reunion stories as well as the monster in the bedroom story from the ASCT (Bretherton et al., 1990). They also used a seven-point scale, with scoring criteria modeled on the scales described by Waters and Waters (2006) and Dykas et al. (2006). These criteria are included here as [Appendix 1](#). Instead of assigning scores to each vignette separately, coders using this approach read all three vignettes (i.e. separation, reunion, monster in the bedroom) and assign a single score that considers all of the information in the three vignettes. The scoring criteria permit coders to assign a score of five, six, or seven to the merged set of stories, even though it would not be possible for any single narrative to receive a score of five or greater because the level of detail was not sufficient to credit a fully formed secure base script. The scoring criteria also allow for discounting a single story that is poorly scripted (e.g. being happy when parents left for the night because the child enjoyed playing with Aunt Rose) but is recouped in a second story (e.g. greets parents with a smile and hug at reunion, or shows positive affect when the parent dispatches the monster in the bedroom, then explains that monsters are not "real."). Thus, a relatively low scoring narrative (if each story was scored separately) need not bias the secure base script score when all three vignettes are considered simultaneously as a unit.

An important aspect of the Waters et al. (1998) report was that it established the validity of the scoring protocol by determining that associations between the rank-ordered scores and established attachment measures (i.e. Attachment Q-sort security (AQS) scores, the security scale from Bretherton et al. scoring criteria for the ASCT) were themselves significant. We have also used external criteria to validate the two new script scoring protocols described above (i.e. correlations with the AQS security criterion score, the security and coherence scales from the original ASCT study, and for one dataset coders independently scored transcripts for 92 children using both the five-point Posada security scale and the seven-point Vaughn security scale). Because these validation analyses use data from previously published studies as well as from data being reported now in the papers from this special issue and in an in-press monograph of the Society for Research in Child Development, the methods for each validation analysis presented here are abbreviated.

Validation analyses

Correspondence between scores from five- and seven-point scales

To test whether the five- and seven-point scales yield similar interpretations of a given set of transcripts, a set of 92 cases (overlapping with cases reported in US Sample 2 in subsequent reports in this special issue), was scored using the five-point scale described by Posada and associates and independently coded by a team of coders using the

seven-point scale used by Vaughn and associates. The resulting Pearson correlation was $.68, p < .001$. This finding suggests that the two coding approaches yield similar results when used to score SBS from a common sample.

Script scores x AQS security

Waters et al. (1998) reported that the correlation between the rank-order score for scriptedness and the AQS Security scores in their sample of 24 cases was $r = .39$ at 37 months and $.41$ at 54 months. Both correlation values were reported as significant. For the modified codes used in the articles in this special issue, data from two independent samples are reported (one using the Posada scoring protocol, one using the Vaughn scoring protocol).

Posada scoring

Data reported by Posada, Trumbell, Lu, & Kabustian, (2018) tested the relation between the five-point SBS measure and AQS scores. For details about the sample and procedural protocol, readers should consult the original Posada et al. (2018) report. The sample for this test included 156 children between the ages of 36 and 67 months, with 82 being female. The ASCT was administered toward the end of a home visit and used the same three-story stems that had been used in the Waters et al. (1998) report. Each story was administered following the standard ASCT protocol. After transcription, coders scored each story using the five-point scale described above (i.e. three anchors with additional 1.5 and 2.5 score points for intermediate levels of secure base scriptedness). Rater agreements were satisfactory (ICC median = .87). Final scores for the three stories were significantly correlated and Cronbach's $\alpha = .78$.

The AQS was completed for every child immediately after each of three visits (two at outdoor parks and one home visit) by one or two observers (55% of visits had two observers). Rater agreement (Spearman-Brown prophecy formula) averaged $.78$, $SD = .07$ for all visits with two observers, and these were averaged to yield a composite Q-sort for each visit (when only one observer provided AQS data, the score for that observer was used). This composite was scored for Attachment Security using the standard procedure described by Waters (1995). The resulting AQS Security scores were themselves averaged (Cronbach's $\alpha = .75$) for the final AQS security score (sample mean = $.47$, $SD = .18$).

In this sample, both the AQS security and the SBS scores were also associated significantly with child sex ($r = .20$ and $.29$ for AQS and SBS scores, respectively). Scores favored girls on both measures. The Pearson correlation between the AQS and SBS scores was significant $r = .21, p < .05$, and this value remained significant when sex of child was controlled using regression analyses, $\beta = .18, p < .05$.

Vaughn scoring

The sample available to test relations between the SBS and AQS scores using the seven-point scale comes from data originally reported by Wong et al. (2011). All children included in the study had been observed at home and assessed using the AQS. In addition, 45 of these children had been assessed using the SBS for a different study. The SBS x AQS Security association has not been reported previously. Because the study is available elsewhere, we only provide summary details about the procedure and method here.

The 45 child participants with both SBS and AQS data (23 girls) had been recruited from a larger study of attachment and social competence during early childhood when they were between 24- and 30 months of age. All children were attending a high-quality childcare and early education program in a large metropolitan area located in the Southeastern region of the USA. The childcare program served a predominantly middle-class population, as inferred from education levels approximate income levels of families recruited to the study and norms for educational attainment and income level in the larger community. The AQS assessments took place first and were completed after a home visit, when the children were between 30 and 36 months of age. The SBS assessments were completed approximately 18 months after the AQS data had been collected.

Rater agreement for the AQS was based on a joint visit by two trained observers for 20 of the 45 cases. The remaining observations were completed by a single observer. Home visits lasted between 2 and 3 h and each observer completed the AQS within 4 h of the home visit. The average Q-correlation between observers was .75 (range .70-.80) and the sample mean for security was .36, $SD = .22$.

The ASCT was administered at the childcare center in a laboratory playroom by a trained research associate. Mothers were not present during this assessment. The ASCT story protocol had been adapted from the Bretherton ASCT protocol and did not include the *spilled juice* or *hurt knee* stories. Only the *monster in the bedroom* and the *separation/reunion* stories overlapped and we only used these stories for scoring SBS with the seven-point scale described in [Appendix 1](#). The procedure was video-recorded and subsequently transcribed by assistants who were blind to other aspects of the study. The transcriptions were de-identified and coded by two coders trained to use the seven-point scale. Coder had participated in the SBS protocol administration and so they were blind to the identity of the participants but both coders were familiar to the children included in the study. Because the transcripts were de-identified (i.e. all identifying information removed from the transcript) and because SBS coding took place over two years after the ASCT data had been collected, it is reasonable to assume that coders were not biased by their awareness of study variables or study purposes. Rater agreement for the overall SBS score (based on the overall evaluation of the three stories simultaneously) was satisfactory ($ICC = .70$).

As had been true for the analyses with the five-point scale, both the SBS and AQS scores were significantly associated with sex of child (favoring girls), $r = .43, p < .01$ and $r = .30, p < .05$, respectively for SBS and AQS scores. The Pearson correlation between the SBS and AQS scores was .39, $p < .01$. This value remained significant when sex was controlled in a regression analysis, $\beta = .29, p < .05$.

Relations between SBS and Bretherton scale scores

Data from two samples were available that had scored the ASCT using both the original Bretherton scales for *Security* and/or *Coherence* and the seven-point scoring criteria for SBS. In both samples, scoring for both types of coding was done independently and coders were blind with regard to identifying data about the individual children when the protocols were scored. In both samples, SBS coding took place approximately 18-24 months after the Bretherton coding had been completed. The first sample came

from Wong et al. (2011) described above. SBS scores were available for 61 of the children who also had complete Bretherton coding. Wong et al. had reported that the *Coherence and Security* scales had an extremely high correlation (i.e. $r = .94$) and they combined these into a single score for attachment security. We used the composite score they reported in this analysis. The Pearson correlation between this composite score and the SBS score was $r = .62, p < .001$. Because girls tended to have higher scores for both the SBS and Bretherton composite scores, the effect of child sex was controlled in a regression analysis. In the regression analysis, the association between the two attachment measures remained significant, $\beta = .56, p < .001$.

The second sample was obtained from a Portuguese study and includes 118 children (67 boys, mean age = 51.04 months, $SD = 5.57$). Eighty-two of these children also had teacher ratings for social competence and are described with more details in Fernandes et al. (in this issue). The children attended one of two private daycare/preschool programs affiliated with private elementary schools in a suburb of Lisbon. All families were middle class in terms of education and income level, by local community standards. The ASCT protocols were administered in a quiet area of the preschool and were video-recorded for later transcription. Pearson correlation analysis revealed a positive, significant association between the SBS and the Bretherton *Security* score, $r = .67, p < .001$.

Mother SBS x child SBS

In a recent study, Waters et al. (2018) tested the relation between SBS scores for both mothers (from the Attachment Script Assessment, ASA) and their children (using the ASCT scored using a four-point rating scale similar to the Posada scoring). Participants were 59 children (32 boys, mean age = 4.5 years, $SD = .22$ years) recruited from preschools in Bucharest, Romania. The families were middle class by the standards of their local community. The ASA was administered to the mothers at the end of a home visit. Children were assessed using the ASCT at their preschools. Each of the script assessments was scored by independent teams of raters (ICCs ranged from .65 to .83 across mother and child assessments). The correlation between mother and child script scores was positive and significant ($r = .26, p < .05$).

Conclusion

Taken as a whole, the analyses reported here attest to the validity of the two modifications of the Waters et al. (1998) approach to coding SBS from the ASCT stories that were used in this set of studies. The SBS scores are positively associated with each other and with a range of attachment-relevant variables, including those used by Waters et al. (1998) to justify the SBS approach in their original study. Although there is some variability across different external variables, these two approaches for extracting secure base script information from ASCT stories elicited from children between three and six years of age appear to provide valid indices of secure base content in those narratives and both can be recommended in studies attempting to link access to and use of the secure base script to a range of other outcomes, as has been done in the studies reported in this special issue.

There are some caveats about use of the ASCT that are revealed by work with these two scoring systems. Although most preschool-age children produce narratives that can

be scored in accord with the criteria for each scoring system, some children produce impoverished or perfunctory (e.g. not responding at all or saying "I don't know" when probed for "what happens next" by the interviewer) narratives for one or more of the ASCT story-stems. For individual stories, such narratives can be given a low score if the rater has the impression that the child is avoiding anxiety-arousing content in the story. Because the Posada et al. (this issue and see above) work with the ASCT suggests that cross-story SBS correlations tend to be positive and significant, this may be only a minor problem for the five-point scoring protocol when at least half of the stories are of sufficient length and with sufficient content to score unambiguously. However, impoverished narratives pose a more serious problem for the seven-point scoring if more than one of the child's story completions for the three stories leading to a score elicits such responses. Importantly, this circumstance is quite rare and did not apply to any of the cases recruited for the studies reported in this issue, but, when such a case appears, we recommend that no score be given using the seven-point system. There is also some evidence (e.g. Nichols et al., this issue) to suggest that children with larger receptive vocabularies tend to produce longer and more detailed narratives, which tend to receive higher SBS score. Even so, controlling for verbal ability does not greatly diminish significant associations between SBS scores and external variables (see Fernandes et al., Nichols et al., and Posada et al., sample 2, in this issue).

Finally, because the seven-point system uses only a portion of the ASCT vignettes, it may be feasible to use different story-stems to create an alternative form(s) of the ASCT that could be used for short-term or longer-term longitudinal studies of the developmental course of SBS access and use. We note that there are very few (if any) published studies reporting cross-time SBS data for children or adolescents, and none have been reported for early childhood. While development and validation of alternate form story-stems would be challenging and demanding of time and personnel resources, having alternate forms would allow for repeated assessments to determine both normative changes that may occur in conjunction with cognitive and language development over early and middle childhood as well as the continuity of individual differences over these time periods.

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Appendix 1 Scoring criteria for 7-point scoring using three ASCT stories

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The secure base script typically involves the notion that a dyad is getting along in a satisfactory manner and that some person or event disrupts the ongoing activity or relationship. When the disruptive event is recognized, the attached individual seeks support from the attachment figure/caregiver and seems to expect that appropriate support will be offered. The caregiving/attachment figure does, in fact, recognize the signal as a request for assistance and responds in an appropriate manner to resolve the problem or alleviate the disturbance. The help provided is accepted and welcomed by the attached person and distress (if any is present) is reduced sufficiently that a return to the pre-disturbance period is possible. There may be a return to exploration or simply a time for rest and recuperation (like a nap or going to bed). For the story stems, the stage is set at the point of the disruptive event (e.g. parents and grandmother will go on a short trip and leave the children in the charge of an aunt; child is sent to bed at bedtime and reports that a monster is under his bed) and the task of the child is to narrate the remainder of the story. To fully express the secure base script, the child should be able to initiate a strategy for coping with the disruptive event. This may be soliciting the adult for help (or perhaps change of mind about leaving the child overnight) or could be some substitute activity like playing with the sibling or the caregiver. Although the child may not overtly reveal distress in the narrative, when asked about how the focal child "feels" he or she should be able to recognize that separation is the source of sadness (not happiness or anger) and should be able to give a coherent rationale for the feeling (e.g. sad because parents are gone; sad because child does not know or feel comfortable with the temporary caregiver). When parents return, the child may directly seek proximity/contact (e.g. hugs the parent) or the parent could take an active part in making contact with the child. As with separation, the child should be able to articulate that the return of parents is a source of happiness and give a coherent rationale for the happy feeling (e.g. they came back; the boy/girl missed them when they were gone) the child should not show sadness or anger at the reunion. In the monster story, the child should seek assistance from the parents (or the parents

may simply respond to the initial call by the child that is present in the set-up). The caregiver should make some appropriate intervention to assure the child that the monster is no longer a threat. For older children (over 4.5 years of age) it is expected that the parents will somehow convey that there are no monsters, they are made believe or some other rationale. Younger children may simply have the parents dispatch or kill the monster to resolve the problem. Most older and some younger children should say that there is not REALLY a monster under the child's bed but they may add that the child was afraid or scared or sad because he BELIEVED that the monster was there. In the end, the child will go back to sleep, either in the parent's bed or in his own bed, or some other satisfactory ending is provided.

Stories that are complete in these details and which have only a minimum of irrelevant material inserted into the narrative line should receive a score of 7 (taking all three stories at once, and not separately).

A score of 6 would be assigned for story sets that leave out one or two of the major elements such as failing to actively intervene when parents are leaving or to fail to take action to make contact or achieve interaction at the reunion in one or two stories or that do not clearly express the help-seeking and help-providing aspects of the script. These stories should contain appropriate emotion state words (sad for parent loss, happy for parent return, and frightened or scared or sad for monster) AND give a coherent rationale for at least two of the three emotion states. The child may misstate the emotion state but will correct the mistake without a prompt from the RA. Stories receiving a score of 6 might otherwise have been coded a 7 if they include extraneous material in the narrative (e.g. introducing a new character from the toy set such as the dog) that moves the narrative away from a secure base focus, but is not in itself atypical, odd for story context, or antithetical to the secure base (e.g. being happy at separation and sad at reunion). A score of 6 may be given, even if the child inserts a reflexive "I don't know" a few times in the course of the narratives, as long as a coherent response is given after prompting.

The score of 5 can be assigned when additional elements are missing or out of place in one or more stories; however, in this case, it is still possible to connect the themes across stories for a moderately complete secure base interpretation. The child may go off point in one story and fail to connect that story with the secure base theme, but even in this instance, the affect/emotion states are correctly identified (or corrected immediately), however, there may not be a complete and coherent rationale for each of them. In this case, when a child says "I don't know" they fail to add detail after some prompts, however, they should be able to provide at least some coherent detail for some of the prompts. The implication is not that the child is avoiding the theme but rather that she/he really does not know why the child would have the feeling (correctly identified). At least two of the stories should give an indication that the child "gets" the secure base requirement, either attempting to intervene with parents leaving, taking the initiative (or having parents take initiative) in seeking contact/interaction at reunion, or actively soliciting parental assistance (or having parents show up immediately upon hearing the child's first call about the monster from the set-up). The implication of this score is that the child "has" the script and many of its details but does not activate it in all of the situations where it could be relevant.

The score of 4 implies that the child can articulate only the minimum of elements for the secure base script, however, these should include correct labeling of the emotion states for each story even though the rationales for the states are not clearly stated or possibly not even relevant. The child with this score should not, however, misstate the emotion state (at least without correction) so he or she is not happy at separation or angry/sad at reunion. Other elements of the script may be limited or even mostly missing, although at least one of the stories has additional secure base content (i.e. intervening to slowdown or stop separation, giving parents a hug at reunion, actively soliciting parents help in monster story). There may be many "I don't know" in such narratives, but at least some additional detail can be elicited with prompts. The child may lose the thread of the secure base script more than once over the three stories but should not go off on an insecure tangent or insert atypical or bizarre content into the stories (parents may kill the monster for younger children 36-42 months without a penalty here). In general, the script is not complete in any single story or even across all of them. A special case for giving a score of 4 would be the recovery of the secure base theme in the monster story, after low-

quality narratives for the separation/reunion stories (i.e. narratives that might otherwise receive a 1 or 2 score). In this instance, the child should provide an exceptionally typical secure base story with considerable detail and correctly label the emotion of fear/scared by the monster because the doll "believes/thinks" the monster was there, even though C says monster was not real or not really there.

Scores of 3 suggest the absence of the secure base script, both in the sense of not really being able to talk about the active elements of support seeking/support giving and/or about the expected emotion states for the three stories. Coherent rationales for the expected emotion states are not given, even for those states labeled appropriately. The child may introduce considerable that is not at all like the secure base. The child may use "I don't know" frequently but does not give the impression of avoiding the theme. Some stories (individually or the full set of three) may be coherent and consistent but fully lacking the secure base script. The child tells a story about something else than the topic.

Scores of 2 should be assigned when the child repeatedly states he/she "doesn't know" what happens next and fails to respond to prompts. These stories do not engage the secure base script at all but do not necessarily seem unorganized (or at least not completely so). There may be a logic or rationale to the story but it does not reflect the secure base. The insertion of atypical or odd material in stories that otherwise seem lacking in the secure base content could also receive a two, but these stories should not be antithetical to the secure base (i.e. should not reflect avoidance or resistance or other kinds of ambivalence to contact and interaction with the caregiver, although these stories may be very brief and perfunctory, giving the impression that the child really is avoiding the themes suggested by the story stems.

The score of 1 is given to those stories (individually or in the aggregate set) that introduce anti-secure base elements (parents actively dismiss the child's attempts to seek contact or intervene in the separation, or refuse to help with the monster) or in which the child appears to act autonomously to avoid the difficulties or to resolve the problem without seeking assistance from the adults. In such stories, the emotion states may be used inappropriately (e.g. happy or angry at separation; fear or anger at reunion, happy or sad at monster) and without spontaneous or prompted correction. New story lines may be introduced that both lead away from the secure base theme and suggest a lack of resolution to the underlying problem (e.g. the monster is still there, even after parents say it is gone; the monster is "REALLY" in the room and not only for the purpose of the story). Rationales for feeling states are not coherent or appropriate to the emotion state named (e.g. child is happy at separation because parents may never come back). Story lines may start then abruptly switch to something else because an unpleasant or undesirable element surfaces (e.g. children playing in the yard after parents leave with grandmother get stung by bees and have to go to a doctor's office with Aunt Rose for assistance). Themes of danger and anxiety may be present in one or more of the stories and this danger/anxiety is not relieved by parental assistance (if such assistance is offered at all).