Revisions to the Coding of Maternal Mind Mindedness

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Introducction

Maternal sensitivity has been identified as a significant predictor of the security of infant attachment (DeWolff & van Ijzendoorn, 1997). Maternal sensitivity is the consistency with which a caregiver responds to infant needs. It has been thought to be one of the most important predictors of attachment security until recently (Meins, Fernyhough, Fradley, & Tuckey, 2001). In the past few years research has begun to shift toward a new predictor of attachment security developed by researcher Elizabeth Meins: Maternal Mind-Mindedness. The concept of Maternal Mind-Mindedness is based upon a mother’s interpretation of her infant’s behavior and whether she “treat[s] her infant as an individual with a mind rather than merely as a creature with needs that must be satisfied” (Meins et al., 2001, p. 638). Though the original measure of mind-mindedness included various factors, mind-related comments were shown to be the most predictive. Mind-related comments are comments that frame an infant’s behavior in a way that emphasizes the child’s mind (Meins et al., 2001). Meins developed a coding system for these comments that consists of seven comment categories. Every “discrete sound, single word, or sentence” is coded into one of the following categories: Comments on mental states, comments on mental processes, comments on infant’s emotional engagement, comments on infant’s attempt to manipulate other people’s thoughts/beliefs, comments in which the caregiver is speaking for the baby, comments on the baby (physical body or appearance, personality, etc.), and a final catch-all category for comments that do not fall in the other six (Meins, Fernyhough, Wainwright, Gupta, Fradley, & Tuckey, 2002). In addition to comment category, a measure of the appropriateness of the comment is included. Later researchers also added a measure of whether the comment was positive, negative, or neutral (Demers, Bernier, Tarabulsy, & Provost, 2010). While the coding system is theoretically sound, there are several practical issues that cause confusion between different coders.

Purpose

The purpose of this study is to:
1) identify coding problems that lead to poor inter-rater reliability and;
2) revise the coding system to remedy them.

Method

Using archival data from a longitudinal project, videotaped interactions of mothers and infants at two different time points were observed by two coders who were blind to the hypotheses of the study. Maternal mind-mindedness was coded according to the original system developed by Meins and others (2001). Following, an evaluation of inter-rater reliability failed to reach a criterion of 80% agreement. The discrepancies in codes were considered by the original coders to determine reasons for the lack of agreement. These coding issues were discussed among several researchers working on the project. Changes to the coding system were made to increase inter-rater reliability while maintaining construct validity.

Results

Two areas of the coding were identified to increase clarity. Therefore, the following changes were made:

1. A stricter definition of maternal utterance. The original definition of maternal utterance was “a discrete sound, single word, or sentence” (Meins et al., 2002). However, even though two coders were watching the same tape, they frequently arrived at different interpretations of what an utterance was. It is important that the definition be strict enough to prevent these different interpretations. The following is the revised definition: Code each meaningful maternal utterance. Utterances are distinguished as separate by a discernable gap in speech or change in meaning due to intonation (question, exclamation, etc.). Repeated statements are counted as separate utterances.

2. Combination of overlapping categories. It can be extraordinarily difficult to distinguish between comments on mental state and comments on mental processes, because of the close relations between the two categories. In previous studies, mental state comments were defined further as knowledge, thoughts, desires, and interests. However, in these same studies, examples of mental processes included statements such as “Do you remember…” and “Are you thinking.” Since these are also statements that refer to knowledge and thoughts, discrimination between these two categories is difficult. Consequently, they were combined into a single category.

References


Discussion

The revised coding system will be used to recode the original interactions with the expectation that inter-rater reliability will meet or exceed 80%. In addition, data from another longitudinal study is using this revised system. Publication of the results from these research projects using the revised system will advance the field by improving the methodology used to study maternal mind-mindedness.