The Puzzle of Sibling Attachment Non-Concordance: Implications of Categorical versus Continuous Approaches to Attachment

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**INTRODUCTION**

- Theory has traditionally minimized the possibility of differences in siblings' attachment relationships. Yet, empirical research indicates that non-concordance (i.e. dissimilarity) is remarkably common (van IJzendoorn et al., 2000).
- In attempting to account for non-concordance, one avenue that remains uninvestigated relates to potential issues arising from use of the Strange Situation Procedure (SSP). The SSP's coding scheme provides continuous scales for rating infants' attachment behavior, but relationships are ultimately assigned to categories.
- Empirical research, however, has revealed no consistent empirical support for a categorical model of attachment; rather, the traditional classifications appear best considered as linear combinations of several dimensions that capture variation in the organization of relationships (Fraley & Spieker, 2003).
- Two main dimensional models of attachment relationships have been proposed in previous research, each employing a different statistical approach:
  - Fraley and Spieker (2003).
  - Richters, Waters, & Vaughn (1988) aimed to reveal patterns of attachment behavior observed in the SSP.
- Coders first rated infant interactive behavior during Episodes 5 and 8 (reunions with mother) on each of four 7-point scales (higher scores represent greater intensity, duration, and frequency of behavior):
  - Proximity- and contact-seeking behavior, describing the extent to which the infant attempted to achieve (or re-establish) contact or proximity to his mother;
  - Contact-maintaining behavior, reflecting the infant's efforts to maintain contact, whether initiated by the mother or infant;
  - Resistance, or the infant's display of angry or rejecting behavior;
  - Avoidance, or the infant's efforts to avoid proximity and/or interaction.
- Coders also noted the frequency of infant crying during separation.
- Episodes 4 and 6 were divided into 15-second intervals.
- The total number of intervals during which the infant was crying represented his crying score.

**METHOD**

- **MEASURES**
  - Categorical measure of attachment – the Strange Situation Procedure (SSP, Ainsworth et al., 1978).
  - Models and methods: Two main dimensional models of attachment relationships in a series of separations and reunions, used to assess the quality of the attachment relationship, when each child was approximately one year of age. Each SSP was videotaped, allowing experienced coders to rate each dyad according to Ainsworth et al.'s two-stage coding system.
- **RESULTS**
  - Concordance across Siblings - Categorical
    - Two-way (secure/non-secure) classifications of attachment were used to establish concordance across siblings.
  - Concordance was 68%, occurring in 23 of the 32 sibling pairs. Sibling attachment classifications were not significantly related, \( r^2 = 1.49, \text{ns} \) (see Table 1).

**RESULTS CONT’D**

- **Discuss**
    - Scores on Secure vs. non-Secure were significantly correlated across siblings, \( r = .42, p < .05 \).
    - Scatterplots depicting siblings' scores on each factor are presented in Figures 3 and 4.
    - Scores on Proximity Seeking vs. Avoidant Strategies were not significantly correlated across siblings, \( r = .39, p < .05 \).
    - Scatterplots depicting siblings' scores on each factor are presented in Figures 3 and 4.
    - When attachment is viewed continuously, trends differ depending on the approach. In interpreting these results, fundamental differences between models are likely relevant.
  - When Model 1 was applied, siblings appeared similar in the extent to which siblings' attachment behavior by their mother; in sharp contrast, their tendencies to maximize versus minimize emotionality in these interactions are quite dissimilar.
  - The results emerging from the use of the dimensions developed by Richter et al. (1988, Model 1) suggest substantial similarity in the level of attachment security displayed by siblings in interactions with their mother; in sharp contrast, their tendencies to maximize versus minimize emotionality in these interactions are quite dissimilar.
  - These findings lend support to the notion that variability in attachment security relies primarily on experiential factors (which, given their common mother, may be shared among siblings), while ways in which (in)security are displayed may be more dependent on the child's individual characteristics (e.g. temperament, Belsky & Rovine, 1987).