Behavioural and Affective Precursors to Disorganized Attachment in the Still-face Procedure at 4-months

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Behavioural and Affective Precursors to Disorganized Attachment in the Still-Face Procedure at 4-months

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INTRODUCTION

- Disorganized attachment is seen as reflecting an infant’s lack of strategy for coping with the stress of the Strange Situation procedure (SSP; Ainsworth et al., 1978) and has been associated with:
  - Concurrent deficits in emotion regulation, as reflected in physiological stress indices (e.g., Hertsgaard et al., 1995).
  - Later psychopathology (e.g., aggression and dissociation) in childhood and adolescence (van IJzendoorn et al., 1999).
- The SSP, administered with 12- to 18-month-old infants, typically is the first assessment of the attachment relationship.
- Affective and behavioural precursors to disorganized attachment have yet to be elucidated.
- The Still-Face Procedure (SFP; Tronick et al., 1978) offers an age-appropriate procedure to explore the emerging attachment relationship.
  - A single study by Koós & Gergely (2001) provided evidence that precursors to disorganized attachment can be observed at 6.5 months in the SFP.
  - The present study sought to replicate this initial study.

PRESENT STUDY

- We explored whether disorganization in the SSP at 13-months could be predicted from infant affect and behaviour in the SFP at 4-months.
- We hypothesized that infants in disorganized relationships would have the most difficulty regulating their affect and behaviour in the SFP.
- Infants in disorganized relationships were expected to display greater negativity (e.g., crying, negative vocalizations, stress indicators) throughout the SFP, compared to those in organized relationships.

METHOD

PARTICIPANTS

- Community sample of N = 59 adult mothers and their first-born infants.
- Mean age of mothers was 30.08. Majority of mothers were married (75%) and had completed an average of 14.52 years of education. Average household income was $50,000 - $59,999.

MEASURES

- Still-Face Procedure (SFP; Tronick et al., 1978): Consists of 3 60-second periods of face-to-face interaction without touch.
  - Period 1: Normal face-to-face interaction
  - Period 2: Still-face episode (mother asked to "act like a statue" and adopt a neutral expression)
  - Period 3: Normal face-to-face interaction
- Strange Situation Procedure (SSP; Ainsworth et al., 1978; Main & Solomon, 1990)
  - Standard laboratory assessment of the attachment relationship
  - Sufficient interrater reliability found for disorganized classification (Kappa = .83, p < .001), and level of disorganization (ICC = .96).

PROCEDURE

- Mothers and infants participated in the SFP during a 2-hour home visit at 4-months.
- Dyads visited university laboratory at 13-months and participated in the SSP.
- Coding was later completed by independent coders upon review of videotaped interaction.

RESULTS

- Descriptive Statistics: 22 dyads (33% of the sample) were assigned a disorganized classification. Average score for disorganization (1-9) was 3.73 (SD = 2.08).
- “Still-Face Effect:” The three periods of the SFP successfully elicited the “SF effect” (reduced smiling and increase gaze aversion in Period 2).
- Disorganization & SFP Behaviour:
  - Disorganization associated with:
    1) Distancing/Escape behaviour (e.g., arching, turning away) in Period 2, r = .28, p < .05, and Period 3, r = .30, p < .05.
    Greater increase in distancing/escape behaviour across the SFP vs. those in organized relationships, F (2, 114) = 2.67, p = .07 (see Figure 1).
  2) Increased smiling across the SFP vs. those in organized relationships, F (1, 57) = 4.39, p < .05 (see Figure 2).
- It is hoped that identifying such precursors will be beneficial for early intervention to be implemented for dyads at risk for disorganization.

CONCLUSIONS

- The present results suggest that behavioural and affective precursors to disorganization can be identified in the SFP at 4-months.
- Disorganized attachment was differentially associated with greater (1) distancing/escape behaviour and (2) smiling in the SFP, but not with increased negative affect.
- Results are consistent with Koós & Gergely (2001) who found disorganization was associated with increased positive affect across the SFP.
- The SFP appears to be a fruitful avenue for evaluating the mechanisms of emerging attachment relationships, during the period of Attachment-in-the-Making.
- The combination of distancing/escape behaviour and smiling at 4-months may be early expressions of the contradictory behaviours (e.g., proximity-seeking and avoidance) expressed by infants in the SSP by the end of the first year.