

Dyadic heart rate patterns during mother-infant book reading at 9-months post-partum.

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Parenting an infant can be a complicated psychological and physiological challenge for many women; to date, however, there has been little investigation of the psychophysiological dimension of dyadic mother-infant interactions. In this home-based study, 36 first-time mothers and their nine-month-old infants participated in a paradigm in which a mildly stressful separation and reunion was followed by a recovery period (either mother-infant book reading or quiet rest). Mother and infant heart period (HP), activity, and temperature were recorded continuously and simultaneously. Two weeks before the home visit, maternal self-ratings of psychological symptoms were obtained using the Brief Symptom Inventory. The magnitude of HP change from reunion to recovery was tested for relations with maternal psychological symptoms. Maternal HP change and infant HP change were significantly related to each other ($r=.485$, $p=.035$). For dyads who had 'quiet rest' during the recovery period, maternal self-ratings of somatizing symptoms were positively correlated with their own HP changes ($r=.578$, $p=.030$) as well as with their infants' HP change ($r=.852$, $p=.004$). For dyads who read books together during the recovery period, maternal somatization was not significantly related to their own HP change, but was significantly correlated with their infants' HP change ($r=.801$, $p=.003$). These findings suggest a relation between maternal anxiety-related somatic symptoms and magnitude of maternal and infant heart rate recovery after a mild social stressor. In addition, the data suggest that book reading may be a specific aid to some mothers in the regulation of their physiological reactivity after such a stressor.