Different amounts of protest in 4-month-old infants of depressed vs. non-depressed mothers

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Different amounts of protest in 4-month-old infants of depressed vs. non-depressed mothers

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Abstract

Amount of vocal protest was measured in 4-month-old infants of depressed vs. non-depressed mothers during 10 minute face-to-face interaction. The sample consisted of a two groups of mothers with their infant: depressed (n=17) and non-depressed (n=49), in total N=66. Vocal protest was measured using PRAAT software and manual, reliable coding. Results showed that infants of depressed mothers expressed a lower amount of vocal protest compared to infants of non-depressed mothers as measured in mean percentage of time (p <.001).

Background

A significantly heightened amount of protest has previously been reported for infants of depressed mothers during face-to-face interaction (Field, Healy, Golder, & Guthertz, 1990). Two other studies have also reported a heightened amount of protest in infants of depressed mothers on a tendency level (Murray, For-Cowley, Hopper, & Cooper, 1996; Friedman, Beebe, Jaffe, Ross, & Trigg, 1996). Previous studies have predominantly used composite multimodal measures, which measure several modalities together (Field et al., 1990; Murray, 1996). However, multimodal measures may cover up so-called discordant affects (the infant is expressing converging affects through different modalities), which have been detected in infants of depressed mother (Beebe et al., 2008).

In an infant seat and the mother on a small chair. Vocal recordings were made using individually head microphones. The infant (M = 2.91, SD = 4.78). This difference was significant (p <.001).

Protest results

On average, infants of non-depressed mothers showed a higher percentage of time in protest (M = 11.56, SD = 14.65) than infants of depressed mothers (M = 2.31, SD = 4.78). This difference was highly significant (F(1,93) = 3.61, p = .001).

Discussion

Contrary to previous findings, the results of this study showed a lowered amount of vocal protest in infants of depressed mothers. Possible interpretations will now be discussed. Figure 1 shows the results from the present and previous studies.

One possible explanation is the use of different measures. However, only across the depressed samples does the measure seem to largely impact the amount of protest. This could be explained by the presence of discordant affect in the infants of depressed mothers, which would result in different amount of protest when different modalities are measured.

Sample characteristics might have affected the results. The depressed women in the present sample can be considered low-risk (Table 1), while Field has often used particularly high-risk samples. Interactions of high-risk infant-mother dyads are quantitatively and qualitatively different (Murray & Cooper, 1997; Field, 1997). Furthermore, it has been argued that there are different types of depressed mothers characterized by different behavior patterns in mother and infant (Cohn, Malas, Bronnick, & Lyons-Ruth, 1986; Tronick & Weinberg, 1997; Field; Hernandez-Raf & Dies, 2005). Infants of under stimulating depressed mothers have been found both in the mother and infant to result in less protest when the mother and infant interact (Cohn et al., 1997; Field, 1990). The infants of the disengaged mothers might turn passive and turn self-regulation in time (Tronick & Weinberg, 1997).

Conclusions

Protest is a lowered amount of protest in infants of depressed mothers, while previous studies have detected higher amounts. The relatively small sample size of the depressed group should be taken into account. However, findings of both a higher and a lower amount of protest in infants of depressed mothers might be explained by a model where a mid-range amount is seen as optimal. Operating outside the ‘mid-range’ could be understood as attempts to cope with interactional disturbances by heightening or lowering the response.

References


