

From inner to dyadic connection: The effect of mindfulness intervention on mother-infant bio- behavioural synchrony

ABSTRACT:

Background

Mother-infant bio-behavioural synchrony, the coordination of behavioural/physiological/neural cues during interactions, is considered fundamental for later development. Mindfulness' literature claims that we connect better with others if we are aware of and connected with our own inner experience. Thus, mindfulness, while promoting the mother's connection with her own inner world, might promote her attunement with the infant.

Aims

To explore the effects of mindfulness on mother-infant bio-behavioural synchrony.

Method

67 mother-infant dyads were video-recorded during interactions at 3, 6, 9 months. Mothers' dispositional and interpersonal mindfulness were assessed. We coded mother's and infant's affective behaviours and physiological activation (RSA, with ECG sensors). Neural activity was recorded with EEG. 34 dyads participated at a 5-weeks mindfulness intervention at 9 m, 18 dyads were part of the control group. Both groups were assessed before and after the intervention.

Results

Mindfulness was associated with more matching of mother-infant's positive affective behaviors and higher association between mother's and infant's RSA. A greater lateralization of brain activity for the alpha and gamma bands power was evidenced only in high mindful mothers indicated an optimized emotional and cognitive functioning. The intervention increased mindfulness and the quantity of shared interactive moments only in the intervention group.

Conclusions

Mindfulness is an important protective factor that allows mothers to connect better at a biobehavioural level with their infants. Mindfulness could be improved in order to promote positive parenting during infancy.

Keywords

Mother-infant interaction, Mindfulness, Bio-behavioral synchrony, Infancy, Intervention

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