Maternal and infant characteristics associated with shared pleasure in early mother-infant interaction

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Introduction
Infants acquire their capacity to have and express emotions through interactions and care giving by their parents. Having experiences of shared positive emotions in interaction with the parent is essential for the infant for learning to feel and express them also later in life (Cole et al. 2004, Masten 2009). However, which features of parents and infants are associated with shared pleasure has received little attention.

Aim of the study
To see whether maternal and infant interaction behaviour, maternal depressive symptoms and infant temperamental characteristics are associated with observed shared pleasure in mother-infant interaction.

Material and methods
48 mothers and their healthy 7-month-old infants (48% females) recruited from the database of the Population Register Center in Tampere were videotaped in a free play situation. Mothers filled in the Edinburgh Postnatal Depression Scale (EPDS) and the Infant Behavior Questionnaire (IBQ). The videotapes were scored with the Emotional Availability Scales, 2nd Edition (EAS) for maternal involvement (Table 1).

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Table 1. Mean or median, standard deviation or quartile range and entire range of main background variables and measures used among Finnish full-term, healthy 7-months-old infants and their mothers (n = 48).

| SP moments | Number | Length | Proportion |
| EPDS total score | 0.01 | <0.01 | 0.10 |
| IBQ | Positive affect | -0.17 | -0.05 | -0.47 |
| Negative affect | 0.24 | -0.47 | 0.33 |
| EAS | Maternal sensitivity | 0.42 | 0.50 | 0.63 |
| Maternal structuring | 0.46 | 0.55 | 0.50 |
| Child involvement | 0.60 | 0.51 | 0.64 |
| Child responsiveness | 0.48 | 0.45 | 0.63 |

Results
SP sequences occurred in 32/48 (67%) of the segments in the total videotaped sample. The median length of a SP sequence was 1.0 seconds. The number and proportion of SP moments were positively correlated with higher EAS scores of maternal sensitivity, maternal structuring, infant involvement of parent, and infant responsiveness. The number of SP segments were not correlated with maternal depressive symptoms or with maternal report on infant characteristics. The mean length of SP moments was negatively correlated with maternal depressive symptoms. The proportion of SP moments in the analysed video segment was positively correlated with infant negative affect, and negatively correlated with infant positive affect (Table 2). Mothers who had no SP moments tended to be younger and less sensitive than mothers with at least one SP moment, but in this sample the differences did not reach statistical significance.

Table 2. Correlations between the number, length and proportion of shared pleasure moments (SP) in mother-infant interaction, maternal depressive symptoms according to the EPDS, observed maternal sensitivity and structuring and child involvement and responsiveness in the EAS, and maternal report on infant Positive and Negative Affectivity in the IBQ among Finnish full-term, healthy 7-months-old infants and their mothers (n = 48).

Discussion
Not surprisingly mothers and infants with good interactional skills had more moments of shared pleasure. The range of the length of SP moments between the dyads was wide, with the best mother-infant dyads being able to extend the shared joy for five seconds. Depressive symptoms seemed to affect the parent’s ability to maintain shared pleasure. According to our findings, perceived infant negative affect may drive the parent to engaging the infant more in pleasurable interaction. However, the findings are preliminary and need to be confirmed.

References