Supplementary Table 1: Differences between those with and without EEG both mother and

infant dyad

|  |  |  |  |
| --- | --- | --- | --- |
|  | EEG data (n=29) | No/unusable EEG data (n=11) | *p* |
| Mother age in years (M,SD)a | 32.4(4.27) | 31.2(4.06) | 0.45 |
| Income in Canadian dollars (M, SD) | 57,416(34,013) | 63,364 (25,081) | 0.60 |
| Maternal Education (n, %)  Less than High School  High School Diploma  College or University  Advanced University | 0  11  16  2 | 2  3  5  1 | 0.13 |
| Ethnicity (n, %)  Caucasian  Non-Caucasian | 27  2 | 11  0 | 0.67 |
| Marital Status (n, %)  Married  Living with partner  Separated  Single | 24  3  1  1 | 9  0  1  1 | 0.83 |
| Smoking in Pregnancy (n, %)  Yes | 3 | 0 | 0.55 |
| Infant sex (n, %)  Male | 14 | 6 | 1.00 |
| Infant age in months (M, SD) | 8.95(0.26) | 9.0(0.0) | 0.55 |

aIncome in Canadian dollars in 1998-1999 when EEG data were collected. Median income of Canadian Families in 1998-1999 was approximately $52,000 CAD (Statistics Canada, 2005)

Supplementary Table 2: Average FA assessed during each condition for mothers and infant

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Baseline | Happy | Fear | *p* (base-happy) | *p* (base-fear) | *p* (fear; happy) |
| Mother (m,SD) | -0.11(0.28) | -0.06(0.30) | -0.04(0.29) | 0.43 | 0.25 | 0.64 |
| Infant (m,SD) | -0.08(0.35) | -0.004(0.30) | -0.08(0.24) | 0.15 | 0.97 | 0.02 |

Supplementary Table 3: Sensitivity analysis. New composite

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Happy Condition FA | | Fear Condition FA | |
| Parameter | Effect Estimate | *P* | Effect Estimate | *P* |
| Person1 | -0.0005 (0.03) | 0.99 | 0.05 (0.03) | 0.11 |
| FA Actor Effect | 0.55 (0.03) | <0.000 | 0.46 (0.10) | <0.000 |
| FA Partner Effect | -.016 (0.88) | 0.88 | -0.03 (0.11) | 0.77 |
| **Approach +Avoidance3**2 | .009 (0.04) | 0.83 | -0.07 (0.04) | 0.14 |
| Person\*FA Actor | -0.21 (0.11) | 0.07 | -0.13 (0.10) | 0.23 |
| Person\*FA Partner | -0.24 (0.11) | 0.03 | -0.06 (0.10) | 0.58 |
| Person\* **Approach +Avoidance3** | -.022 (0.04) | 0.63 | -0.008 (0.04) | 0.84 |
| FA Actor\* **Approach +Avoidance3** | .0003 (0.16) | 0.99 | 0.06 (0.15) | 0.70 |
| FA Partner\* **Approach +Avoidance3** | -0.22 (0.14) | 0.13 | -0.13 (0.13) | 0.31 |
| Person\*FA Actor\* **Approach +Avoidance3** | 0.26 (0.16) | 0.12 | 0.27(0.15) | 0.09 |
| **Person\*FA Partner\*Approach +Avoidance3** | 0.31 (0.14) | 0.04 | 0.29 (0.13) | 0.04 |

Approach+Avoidance= Social approach and avoidance composite score, higher scores indicates a greater tendency to exhibit approach related behaviors. This composite scale was calculated by reverse scoring the *z-*scored social avoidance variables and adding them to the *z*-scores social approach variables.

Effect estimates are unstandardized betas

**Figure Legend**

**Figure s1:** a) *Actor effects:* both mothers and infants Time 1 physiology significantly influence *their own* physiology measured at Time 2; b) *Partner effects:* both mother’s influence infants and infant influence mothers; ci) *Actor interaction effects:* Mothers exhibit more stability than infants; cii) infants exhibit more stability than mothers; di) mothers influence infants to a greater degree than infant’s influence on mothers; and dii) infants influence mother’s to a greater degree than the influence of mothers on infants.

**Figure s2**: In mothers scoring towards the ‘social avoidance’ end of the approach+avoidance composite variable, resting-state frontal EEG asymmetry (FA) significantly impacted their infant’s FA during the happy and fear conditions. Bold lines indicate statistically partner significant effects.