**Results**

**Mediation analysis with Dyadic Synchrony at 12 months**

Results on the mediation analysis with *Dyadic Synchrony* at 12m are the same of those with *Dyadic Synchrony* at 8w. *Dyadic Synchrony* significantly predicted infant *Language* development(b=1.65, t=4.74, *p*<.001)*,* with a more synchronous interaction predicting better infant language outcomes. There was also evidence of a partial mediation: there were in fact both a significant *direct* effect of maternal *Group* on infant *Language* development (b=-5.19, 95% CI [-9.34, -1.05]) as well as an *indirect* effect via *Dyadic Synchrony* (b=-2.10, 95% Boot CI [-4.74, -0.10]). The corresponding partially standardized indirect effect size estimate was -0.19 (95% Boot CI [-0.42, -0.01]). These results suggest that the quality of the mother-infant interaction is an important mechanism underlying the association between maternal *Group* and infant *Language* development but it does not completely explain the difference observed between the AR and HC groups in this dimension. After controlling for maternal FSIQ and employment, *Dyadic Synchrony* remained a significant predictor of infant *Language* development(b=1.76, t=4.28, *p*<.001), but it was no longer a mediator in the relationship between maternal *Group* and infant *Language* development (b=-2.39, 95% Boot CI [-5.30, 0.02]). Furthermore, *Dyadic Synchrony* significantly predicted infant *Cognitive* development(b=1.14, t=2.44, *p*=.017), with a more synchronous interaction predicting better infant cognitive outcomes but it was not a mediator in the relationship between maternal *Group* and infant *Cognitive* development (b=-1.46, 95% Boot CI [-3.55, 0.06]). When controlling for maternal FSIQ, results remained the same. These results suggest that the quality of the mother-infant interaction, even later on in the postpartum period, significantly predicts infant cognitive development at 12 months, but does not explain the difference observed between the AR and HC groups in this dimension.

**Tables**

**Table 1: Correlations among CARE-Index dimensions at 8 weeks**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | N |
| **1** | **Maternal Sensitivity 8w** | - |  |  |  |  |  |  |  | 93 |
| **2** | **Maternal Control 8w** | **-41\*\*\*** | - |  |  |  |  |  |  | 93 |
| **3** | **Maternal Unresponsiveness 8w** | -.17 | **-.76\*\*\*** | **-** |  |  |  |  |  | 93 |
| **4** | **Infant Cooperativeness 8w** | .**95\*\*\*** | **-.34\*\*** | **-.22\*** | **-** |  |  |  |  | 93 |
| **5** | **Infant Compulsiveness 8w** | **-.48\*\*\*** | **.79\*\*\*** | **-.53\*\*\*** | **-.42\*\*\*** | **-** |  |  |  | 93 |
| **6** | **Infant Difficultness 8w** | .04 | .**46\*\*\*** | **-.45\*\*\*** | .02 | .15 | - |  |  | 93 |
| **7** | **Infant Passivity 8w** | -.05 | **-.72\*\*\*** | **.87\*\*\*** | -.12 | **-.66\*\*\*** | **-.51\*\*\*** | - |  | 93 |
| **8**  | **Dyadic Synchrony 8w** | **.99\*\*\*** | **-.42\*\*\*** | -.16 | **.97\*\*\*** | **-.48\*\*\*** | .02 | -.05 | - | 93 |

**\**p*<.05, \*\**p*<.01, \*\*\**p*< .001.**

**Table 2: Correlations among CARE-Index dimensions at 12 months**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | N |
| **1** | **Maternal Sensitivity 12m** | - |  |  |  |  |  |  |  | 88 |
| **2** | **Maternal Control 12m**  | **-.67\*\*\*** | - |  |  |  |  |  |  | 88 |
| **3** | **Maternal Unresponsiveness 12m** | **-.03** | **-.67\*\*\*** | **-** |  |  |  |  |  | 88 |
| **4** | **Infant Cooperativeness 12m** | **.99\*\*\*** | **-.67\*\*\*** | -.03 | **-** |  |  |  |  | 88 |
| **5** | **Infant Compulsiveness 12m** | **-.75\*\*\*** | **.70\*\*\*** | **-.23\*** | **-.74\*\*\*** | **-** |  |  |  | 88 |
| **6** | **Infant Difficultness 12m** | **-.30\*\*** | .**54\*\*\*** | **-.38\*\*\*** | **-.32\*** | .12 | - |  |  | 88 |
| **7** | **Infant Passivity 12m** | .09 | **-.56\*\*\*** | .**67\*\*\*** | .08 | **-.42\*\*\*** | **-.54\*\*\*** | - |  | 88 |
| **8**  | **Dyadic Synchrony 12m** | **.99\*\*\*** | **-.68\*\*\*** | -.03 | **.99\*\*\*** | **-.75\*\*\*** | **-.35\*\*** | .09 | - | 88 |

**\**p*<.05, \*\**p*<.01, \*\*\**p*< .001.**

**Table 3: Correlations between Bayley and socio-demographic- and infant-related factors**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | N |
| **1** | **Cognitive development** | - |  |  |  |  |  |  |  |  | 96 |
| **2** | **Language development** | **.62\*\*\*** | - |  |  |  |  |  |  |  | 96 |
| **3** | **Motor development** | .**47\*\*\*** | **.41\*\*\*** | **-** |  |  |  |  |  |  | 96 |
| **4** | **Socio-Emotional development** | .02 | .17 | .18 | **-** |  |  |  |  |  | 91 |
| **5** | **Adaptive Behaviour** | .14 | .16 | **.22\*** | **.41\*\*\*** | **-** |  |  |  |  | 91 |
| **6** | **Maternal employment status** | .18 | .**23\*** | .19 | **.32\*\*** | .09 | - |  |  |  | 103 |
| **7** | **Maternal FSIQ** | **.26\*** | **.29\*\*** | -.03 | **.35\*\*** | .05 | **.31\*\*** | - |  |  | 85 |
| **8**  | **Pregnancy planned** | .21 | **.30\*** | .07 | .13 | -.03 | **.45\*\*\*** | **.54\*\*\*** | - |  | 71 |
| **9** | **Any breastfeeding from birth** | -.04 | .07 | -.08 | .13 | **.29\*\*** | -.00 | .20 | .11 | - | 103 |

**\**p*<.05, \*\**p*<.01. \*\*\**p*< .001.**

**Table 4: Correlations between Dyadic Synchrony at 8w and socio-demographic -**

**and infant- related factors**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | 5 | N |
| **1** | **Dyadic Synchrony 8w** | - |  |  |  |  | 93 |
| **2** | **Maternal employment status** | **.22\*** | **-** |  |  |  | 103 |
| **3** | **Pregnancy planned** | .22 | .**45\*\*\*** | **-** |  |  | 71 |
| **4** | **Any breastfeeding from birth** | .10 | -.00 | .11 | - |  | 103 |
| **5** | **Infant age at 8w video** | -.08 | -.14 | -.23 | -.17 | - | 93 |

 **\**p*<.05, \*\*\**p*< .001.**

**Table 5: Correlations between Dyadic Synchrony at 12m and socio-demographic -**

**and infant-related factors**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 | 2 | 3 | 4 | N |
| **1** | **Dyadic Synchrony 12m** | - |  |  |  | 88 |
| **2** | **Maternal employment status** | .07 | **-** |  |  | 103 |
| **3** | **Pregnancy planned** | .24 | .**45\*\*\*** | **-** |  | 71 |
| **4** | **Any breastfeeding from birth** | .17 | -.00 | .11 | **-** | 103 |

**\*\*\**p*< .001.**