

**Table S1. Correlation between CIB interactive composite scores and 2D and 3D motion features**

	CIB interactive composites							
	Maternal sensitivity	Mother limit setting	Mother intrusiveness	Dyadic reciprocity	Negative dyadic status	Infant avoidance	Infant engagement	Infant compliance
<i>Individual parameters</i>								
Mother quantity of movement	-0.44 <i>p=0.06</i>	<b>-0.54 <i>p=0.018</i></b>	<b>0.58 <i>p=0.009</i></b>	-0.44 <i>p=0.06</i>	0.15 <i>p=0.53</i>	0.22 <i>p=0.37</i>	-0.44 <i>p=0.06</i>	-0.35 <i>p=0.14</i>
Mother activity ratio	<b>-0.6 <i>p=0.007*</i></b>	<b>-0.65 <i>p=0.003*</i></b>	<b>0.59 <i>p=0.008*</i></b>	<b>-0.53 <i>p=0.02</i></b>	<b>0.47 <i>p=0.044</i></b>	<b>0.59 <i>p=0.008*</i></b>	-0.44 <i>p=0.06</i>	-0.24 <i>p=0.32</i>
Infant quantity of movement	-0.26 <i>p=0.28</i>	-0.35 <i>p=0.147</i>	<b>0.48 <i>p=0.038</i></b>	-0.27 <i>p=0.26</i>	-0.08 <i>p=0.74</i>	0.15 <i>p=0.54</i>	-0.2 <i>p=0.41</i>	-0.05 <i>p=0.84</i>
Infant activity ratio	<b>-0.48 <i>p=0.037</i></b>	-0.36 <i>p=0.13</i>	0.31 <i>p=0.19</i>	<b>-0.47 <i>p=0.04</i></b>	0.4 <i>p=0.088</i>	<b>0.47 <i>p=0.044</i></b>	-0.37 <i>p=0.12</i>	-0.36 <i>p=0.13</i>
<i>Synchrony parameters</i>								
<i>Dynamics of partners heads distance</i>								
Mother contribution to heads distance	-0.09 <i>p=0.71</i>	0.23 <i>p=0.34</i>	0.18 <i>p=0.47</i>	-0.14 <i>p=0.56</i>	-0.21 <i>p=0.39</i>	-0.28 <i>p=0.25</i>	-0.12 <i>p=0.63</i>	0.34 <i>p=0.15</i>
Infant contribution to heads distance	0.1 <i>p=0.67</i>	-0.22 <i>p=0.37</i>	-0.19 <i>p=0.43</i>	0.16 <i>p=0.52</i>	0.2 <i>p=0.42</i>	0.26 <i>p=0.28</i>	0.14 <i>p=0.58</i>	-0.33 <i>p=0.17</i>
<i>Focus of engagement</i>								
% of time spent face to face	0.41 <i>p=0.08</i>	<b>0.51 <i>p=0.026</i></b>	-0.34 <i>p=0.15</i>	0.44 <i>p=0.057</i>	-0.44 <i>p=0.057</i>	<b>-0.61 <i>p=0.005*</i></b>	0.42 <i>p=0.076</i>	0.37 <i>p=0.12</i>
% of time spent looking together at the table	-0.2 <i>p=0.4</i>	-0.14 <i>p=0.57</i>	0.06 <i>p=0.8</i>	-0.25 <i>p=0.29</i>	-0.06 <i>p=0.81</i>	0.03 <i>p=0.9</i>	-0.26 <i>p=0.275</i>	-0.13 <i>p=0.59</i>
<i>Dynamics of motion activity</i>								
Synchrony ratio: Parent response to Infant	<b>-0.54 <i>p=0.017</i></b>	<b>-0.62 <i>p=0.004*</i></b>	<b>0.61 <i>p=0.005*</i></b>	<b>-0.48 <i>p=0.039</i></b>	<b>0.48 <i>p=0.038</i></b>	<b>0.59 <i>p=0.008*</i></b>	-0.41 <i>p=0.08</i>	-0.22 <i>p=0.38</i>
Synchrony ratio: Infant response to Parent	-0.2 <i>p=0.4</i>	-0.12 <i>p=0.62</i>	0.09 <i>p=0.7</i>	-0.23 <i>p=0.34</i>	0.22 <i>p=0.37</i>	0.28 <i>p=0.24</i>	-0.26 <i>p=0.28</i>	<b>-0.46 <i>p=0.047</i></b>
Overlap ratio	<b>-0.56 <i>p=0.012</i></b>	<b>-0.53 <i>p=0.02</i></b>	<b>0.46 <i>p=0.049</i></b>	<b>-0.5 <i>p=0.03</i></b>	<b>0.5 <i>p=0.028</i></b>	<b>0.6 <i>p=0.007*</i></b>	-0.38 <i>p=0.11</i>	-0.18 <i>p=0.46</i>
Pause ratio	<b>-0.66 <i>p=0.002*</i></b>	<b>0.64 <i>p=0.003*</i></b>	<b>-0.63 <i>p=0.004*</i></b>	<b>0.61 <i>p=0.005*</i></b>	<b>-0.55 <i>p=0.014*</i></b>	<b>-0.63 <i>p=0.004*</i></b>	<b>0.52 <i>p=0.023*</i></b>	0.44 <i>p=0.06</i>

CIB=Coding Interactive Behavior; \*p≤0.05 with Holm corrected p-value.