**Supplemental Material 1**

**Behavioral Synchrony Coding Scheme**

Synchrony in parent-child interactions occurs when the dyad achieves reciprocal, coordinated engagement through shared attention, topic, and affect. Synchrony is evident when children and adults are turn taking through verbal and non-verbal communication around a common activity. Although one member of the dyad may be supporting the interaction, synchrony requires that both participants are attuned to the other. Exchanges during synchrony may be rich in verbal and non-verbal communicative elements or as simple and brief as eye contact and a smile or a gesture with directed gaze.

# Summary of codes

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| **Code** | **Definition** | **Examples** |
| **S: Synchronous** | When a three-turn exchange has occurred, start coding Synchrony. (A-C-A or C-A-C)  The adult and child achieve reciprocal engagement such that the child’s physical, gestural or verbal responses indicate attention to what the adult is attending to and communicating and similarly the adult’s actions, gestures, or verbal responses indicate attention to what the child is attending to and communicating.  Multiple adult or child turns may occur in a row, but within 3 seconds, each partner should be taking a turn.  Synchrony can occur around a negative interaction, if both partners are responsive to one another (parent acknowledges how the child feels while redirecting, child expresses feelings but follows the redirection)  Conversational turns may overlap, but if both partners are responsive to the other within 3 seconds, synchrony can still occur | Parent and child are playing patty cake  Child and parent are taking turns rolling a ball back and forth  Dyad is taking turns in building a tower. The parent crashes the tower the child built, and the child watches and laughs |
| **A: Asynchronous** | When more than 3 seconds has passed since 1 or both communication partners have taken a turn  The child is unengaged or engaged in object only play such that the parent is not interacting with the toys or the child is not referencing the adult.  Asynchrony may be coded if all other elements of synchrony are achieved but there is considerable mismatch in affect between the adult and child. This mismatch cannot be coded if one partner has a neutral affect. A mismatch is evident when strong negative and positive facial expressions and voice tones are detected. | Child is pressing all the buttons on a toy  Child is throwing a ball against the wall  Child is turning pages in the book and the adult is watching  Child is climbing under the table  Child is off camera or turned away from the adult |