Appendix 1. Teaching Assistant-Child Play Interaction Coding Variables

Variables	Description Description	Unit of Measurement
Engagement States	The engagement state in which the child was in for the <i>majority</i> of the interval (Unengaged, Person, Object/ Parallel, Parallel Aware, Joint Engagement). Unengaged: Child is not interacting with an object or another person (e.g., wandering). Person: Child is focused on a person with no shared object (e.g., singing a song, physical game) Object/Parallel: Child is focused exclusively on an object. The child may be playing with the same types of objects as other children (parallel), but the child shows no awareness of another person. Parallel Aware: Child demonstrates awareness of the shared activity and the interaction partner (e.g., imitates a peer's action) Jointly Engaged: Child coordinates attention between an interaction partner (adult and/or peer) and shared activity. The child may reference the partner through gaze, gesture, language or actions on the shared objects.	Proportion of time in each state
Play Level	The level of the <i>play routine</i> for the majority of the interval. Not Playing: No functional acts on objects Simple: including sensory (e.g., bubbles), cause and effect (e.g., roll cars). Combination: including presentation and general combinations (e.g., puzzles, building) Pre-symbolic: including familiar acts to self or figure (e.g., cup to self, doll in bed). Symbolic: including pretend and thematic play (e.g., doll has life, take on a role as a fantasy character)	Categorical
Initiations of Joint Attention (IJA)	Spontaneous behaviors for purpose of <i>sharing</i> , including language, gestures (pointing, showing, giving), and eye contact.	Frequency count
Initiations of Behavior Regulation (IBR)	Spontaneous <i>requesting</i> behaviors, including language, gestures (pointing, showing, giving), and eye contact.	Frequency count