Multi-Component Upper Extremity Intervention

Author, Year, Country, Design, PEDro score, Rating	**Sample Size**	**Intervention**	**Outcomes and significance: (+) significant (-) not significant**
Maitre et al., 2020 USA RCT 7/10 High quality	**N** = 72 **Age at enrollment:** 6 to 24 months **CP diagnosis:** 100% **CP Type:** Unilateral or quadriplegic CP **GMFCS (Gross Motor Function Classification System) Level:** N/A	Multi-component upper extremity (UE) intervention (n=37) vs. Bimanual play (n=38) ***Intervention details*:** *Multi-component UE intervention:* • Bimanual play with suggested toys without the C-Mitt (20 min/day). • Soft-constraint harness (C-Mitt) worn 6 h/day total • Reaching with gradual motor difficulty introduced by decreasing size and depth (10-20 min/day). • Reaching with the more affected and non-constrained hand in a mitten made "sticky" with Velcro 75% full-reach distance (shoulder level) on an adjustable tray and with objects (also with Velcro) of increasing weight and size challenge for sensory reinforcement (10–20 min/day). • Education of caregivers on principles of positive parenting psychology, "just-right challenge," positive reinforcement, transactional interactions and emotional availability. *Waitlist group:* • Infants in the waitlist group were provided only the first intervention component (i.e., bimanual play with suggested toys for 20 minutes/day).	**Post intervention (4 weeks):** *Reach smoothness* (+) Affected arm reach smoothness: kinematic measures of reach (+) Less affected arm reach smoothness: kinematic measures of reach *Fine Motor* (+) Unimanual fine motor capacity: Bayley measure *Somatosensory processing* (-) P200: measure of tactile perception at contralateral electrode cluster