Motivation

- Children with cerebral palsy (CP) exhibit deficits in selective voluntary motor control (SVMC).
- Subjective clinical exam used to differentiate and describe SVMC in the upper extremity (UE) of children with CP.
- TASC was designed to test and grade ability to move each UE joint with selective control; testers observe control, coordination, fluency, mirroring, and speed.

Methods

- 17 participants with CP were evaluated using the TASC, MACS, and AbilHand-Kids
  - Age: 6.5–18.8 years, mean: 12.7 ± 3.4 years
  - Gender: F(9), M(8)
  - GMFCS: I (3), II(5), III(8), IV(1)
  - MACS: I (4), II(8), III(4), IV(1)
  - SVMC was assessed at each joint
    - 0 = No SVMC
    - 1 = Impaired SVMC
    - 2 = Normal SVMC

Conclusions

- After brief training, raters were reliable in assessing UE SVMC using the TASC.
- Participants with higher SVMC demonstrated higher levels of manual ability and performance.
  - A larger sample size is recommended to power and verify validation.
- The TASC could be a useful tool to objectively measure SVMC in both clinical and research settings.
- Clinically, this measure of SVMC may guide the selection of medical, surgical, or therapy interventions and may improve outcome predictions.