Title: Psychometric characteristics of the Child Occupational Self Assessment (COSA), Part Two: Refining the psychometric properties.

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Major Finding: The COSA can be used by children with disabilities in a valid and reliable manner and has adequate sensitivity to be used as an outcome measure.

Participants: n= 43
- Seven occupational therapists used the COSA with children in the USA in schools (74.4%), inpatient hospitals (16.3%), private homes or other practice settings (each 4.7%).
- 30 males, 13 females
- Age range 8– 17 years old, mean age 12.21 years
- Diagnosis: Majority developmental disabilities (48.8%), followed by neurological diagnosis (CP) (18.6%), mental health/psychological conditions (16.3%), and orthopedic/musculoskeletal, medical, or other diagnosis (each 4.7%).
- Ethnicity: 62.8% Caucasian, 23.3% African American, 7% multiracial, 4.7% Hispanic, 2.3% missing.

Method: Children completed the COSA version 2.0 with their therapists. Children responded to a series of 24 items using two four- point rating scales to indicate occupational competence and value.

Analysis: Rasch analysis using Winsteps software.

Findings:
- Occupational Competence rating scale
  - 62% of responses used the two highest rating categories. Rating scale was used as intended.
  - Two items did not meet fit requirements: “Get enough sleep” and “Choose things that I want to do”. All other items represented a valid construct of occupational competence.
  - 96% of children were measured in a valid manner.
  - Items represented 3 statistically significant different levels of occupational competence.
- Values rating scale
  - Rating categories were used with equal frequency, and rating scale was used as intended.
  - Four items did not meet fit requirements: “Choose things that I want to do”, “Do things with my family”, “Move my body from one place to another”, and “Use money to buy things by myself”.
  - 89% of children were measured in a valid manner.
  - Items represented 3 statistically significant different levels of value for occupations.

Conclusion: Sensitivity of the COSA improved, making it useful as an outcome measure. Most items were valid measures of competence and values, and most children were measured in a valid manner.

Implications for future research: Some items should be modified to clarify meaning, and additional research should be conducted with a larger sample.

Evidence– based practice implications:
- Children reported that doing chores, making others understand their ideas, and working on something even when it gets hard were difficult tasks to perform. Therapists can support successful performance by addressing these tasks during intervention.
- Children in more restrictive settings report that choosing things is difficult. Therapists working in these settings should provide opportunities for children to make their own choices.
