

Title: Validity Evidence for the Child Occupational Self Assessment

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Major Finding: Evidence suggests that the COSA has good content validity, structural validity, sensitivity, and generalizability. Evidence for substantive validity and external validity was mixed.

Participants: n = 502

- Children ages 6– 17 years (M = 11 years, 11.73 months): Male = 360, Female = 142
- Country: USA = 253, UK = 187, Iceland = 34, Germany = 22, Switzerland = 6
- Ethnicity: Caucasian/European = 410, African– American/African = 35, Hispanic/Latino(a) = 22, Pacific Islander = 10, Middle Easterner = 10, Multiracial = 10, Other = 4, Missing = 1
- Major Diagnosis: Developmental Delay = 323, Neurological = 88, Mental Health = 46, Other = 45
- Practice Setting: School = 377, Outpatient/Community Rehab = 92, Inpatient = 24, Other = 9

Method: 98 practitioners and researchers administered the COSA . Most children used the standard form, and 162 children required modifications. Icelandic, German, Italian, and British Sign Language translations were used.

Analysis: Partial Credit Rating Scale Rasch Model, with pivot anchoring, using Winsteps software.

Findings:

- Good content validity: All items had acceptable fit to the Rasch model on the Occupational Competence scale; 24 of 25 items had acceptable fit on the Values scale.
- Good structural validity: Combined evidence of item fit, positive item point biserials, and PCA of item residuals suggest two unidimensional scales of Occupational Competence and Value.
- Good sensitivity: Items represent 8 significantly different levels of Occupational Competence and 5 levels of Values. Children’s responses represent 3 significantly levels of both constructs.
- Good generalizability: Good separation reliability, & item hierarchies were similar to previous studies.
- Substantive validity: At least 85% of children were measured in a valid manner by the COSA. The Values rating scale functioned as expected; the Occupational Competence rating scale was used as a 3-point scale for 12 items.
- External validity: Children who were younger, who had an intellectual disability (ID), and who used modifications were more likely to give unexpected responses. Children who used some translations reported higher Value.

Conclusion: Evidence suggests that most children can use the COSA to report Occupational Competence and Value for everyday activities. Not all children are able to differentiate between the middle two Occupational Competence rating categories. The responses of children with ID and younger children should be interpreted carefully, but can still be used to inform intervention.

Implications for future research: Additional research is needed to determine if the use of administration modifications, alternative formats, or translations invalidates the interpretations made from the COSA.

Evidence– based practice implications:

- **Children report that managing emotions and cognitive tasks is more important than self care. Therefore, intervention addressing cognition & process skills may be more meaningful to children.**
- **When administering the COSA, practitioners should be sure that children understand the continuum of the rating scale categories. Presenting rating categories vertically, with higher ratings at the “top”, may facilitate understanding.**