

The Children's Social Understanding Scale Predicts Social-Emotional Functioning

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Introduction

Theory of Mind (ToM), or mental state reasoning, provides important foundations for empathy, prosocial behavior, reduced prejudice, and increased moral regard for others.

- Vast **individual differences in ToM** are present early and continue into adulthood, with better ToM predicting a myriad of positive outcomes; e.g. fewer relationship problems, higher academic achievement, more prosocial behavior, and better quality of life [1].
- Recently, the **Children's Social Understanding Scale (CSUS)** was developed to provide a parent-report measure of individual differences in ToM that is ecologically valid, allows for greater variance (vs. pass-no pass measures), and encompasses the multifaceted nature of ToM [2].
- The purpose of the current study was to **further validate the CSUS by testing its predictive validity of social-emotional functioning**, as measured by the Strengths and Difficulties Questionnaire (SDQ) [3].

Method

376 parents (primarily mothers) of children ages 3-12 ($M=6;3$ (2;0); 50% girls) completed the SDQ and CSUS. Forty-two percent provided their child's race/ethnicity: White (68%), Asian (20%), and Other (12%).

The Strength and Difficulties Questionnaire (SDQ)

25-item measure of social-emotional functioning rated as 'not true' (0), 'somewhat true' (1), and 'certainly true' (2) in terms of:

- **Scale 1: Strengths:** prosocial behaviors (e.g., considerate of other people's feelings)
- **Scale 2: Difficulties:** (1) emotional symptoms (e.g., often unhappy, depressed, or tearful), (2) conduct problems (e.g., generally well behaved, usually does what adults request (reverse coded), (3) hyperactivity/impulsivity (e.g., constantly fidgeting), and (4) peer relationship problems (e.g., prefers to play alone).

Children's Social Understanding Scale (CSUS)

Parent-report measure of children's understanding of mental states such as beliefs, desires, emotions, intentions, and knowledge. The short-form consists of 18-items rated as: 'Definitely Untrue' (1), 'Somewhat Untrue' (2), 'Somewhat True' (3), and 'Definitely True' (4).

Sample items include "My child talks about differences in what people like or want (e.g., "you like coffee but I like juice")", "My child has trouble figuring out whether you are being serious or just joking" (reverse coded).

Results

Analysis of SDQ

Parents' responses were summed to determine the 'Strengths' ($M=8.31$, $SD=1.73$, max score=10; $\alpha=0.72$) and 'Difficulties' scores ($M=8.67$, $SD=5.06$, max score=40; $\alpha=0.77$).

- **Sex Differences**
 - **Girls scored significantly higher than boys on the Strengths scale** (girls $M=8.57$, $SD=1.66$; boys $M=7.88$, $SD=1.81$; $t(374)=3.28$, $p<.001$, $d=0.40$)
 - **Girls scored significantly lower than boys on the Difficulties scale** (girls $M=8.09$, $SD=4.80$; boys $M=9.32$, $SD=5.01$; $t(374)=-2.44$, $p=.015$, $d=-0.25$).
- **Developmental Differences.** After accounting for sex effects:
 - Scores on the **Strengths scale increased with age**, Δ Adjusted $R^2=.015$, $\beta=.133$, $p=.008$.
 - Scores on the **Difficulties scale remained stable across age**, $\beta=-.001$, $p=.99$.

Analysis of CSUS

Parents' responses were averaged to determine the CSUS score ($M=3.32$, $SD=.37$, max score=4; $\alpha=0.83$).

- **Sex Differences.** There were no sex differences (girls $M=3.33$, $SD=.36$; boys $M=3.31$, $SD=.39$), $t(374)=0.57$, $p=.57$.
- **Developmental Differences (Fig. 1).** Children's scores on the **CSUS significantly increased with age**, Δ Adjusted $R^2=.097$, $\beta=.315$, $p<.001$.

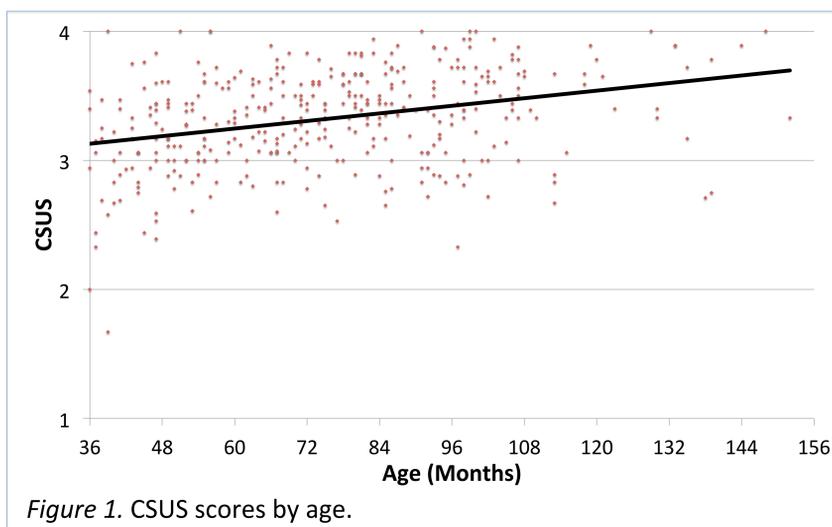


Figure 1. CSUS scores by age.

Predictive Effects of CSUS on SDQ

- **Correlations.** The **CSUS was positively associated with the Strengths scale** ($r=.30$, $p=.01$) and **negatively associated with the Difficulties scale** ($r=-.21$, $p=.01$).
- **Predictive Effects (Fig. 2).** Controlling for age and sex:
 - **CSUS positively predicted the Strengths scale**, Δ Adjusted $R^2=.07$, $\beta=.28$, $p<.001$.
 - **CSUS negatively predicted the Difficulties scale**, Δ Adjusted $R^2=.05$, $\beta=-.23$, $p<.001$.

Results

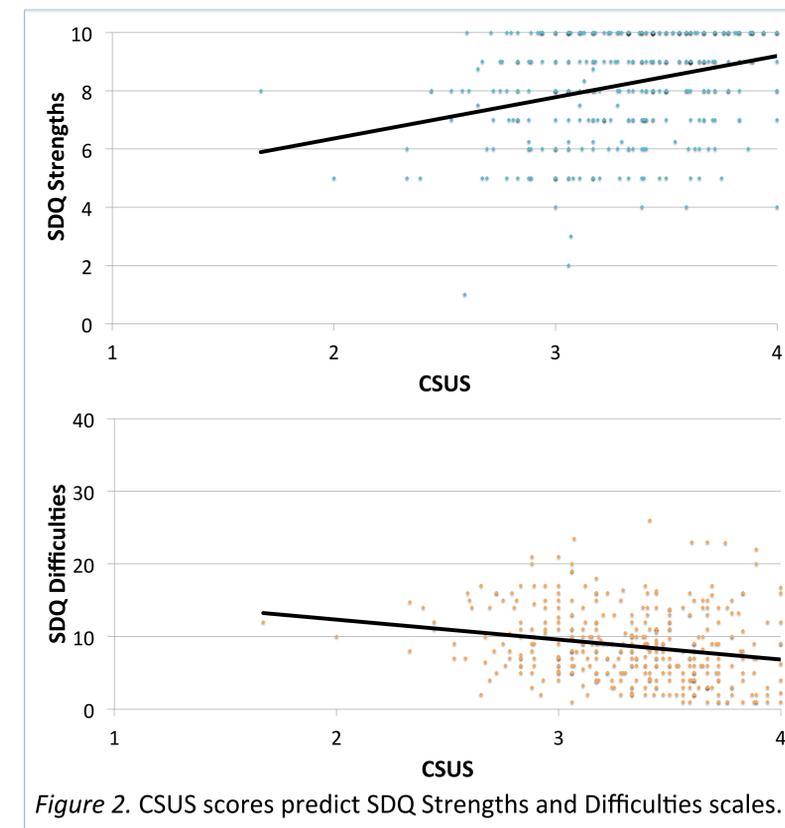


Figure 2. CSUS scores predict SDQ Strengths and Difficulties scales.

Discussion

The critical question of this study was whether children's ToM, as measured by the CSUS, would be related to their social-emotional functioning.

- **We found that CSUS was positively predictive of social-emotional Strengths and negatively predictive of social-emotional Difficulties on the SDQ**, even when controlling for age and sex effects.
- These results indicate the **CSUS is a valid measure for discriminating between the positive and negative aspects of social-emotional functioning**.
- This pattern of results is consistent with data from children's behavioral assessments, **further supporting the CSUS as a valuable new measure of individual differences in ToM**.

References

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