



## **Evaluation of the PROMIS® Pediatric Peer Relationships Measure in Children with Autism Spectrum Disorder: A DBPNet Study**

Marisa Toomey, MD<sup>3</sup>, Justin Schwartz, MD<sup>5</sup>, Michele Laverdiere, MD<sup>2</sup>, Ruth Stein, MD<sup>1,2</sup>, Noelle Huntington, PhD<sup>5, 6</sup>, Ellen Silver, PhD<sup>1,2</sup>, Carolyn Bridgemohan, MD<sup>5,6</sup>, Carole Tucker, PT, PhD<sup>3,7</sup>, Katherine Bevans, PhD<sup>3,4</sup>, Christopher B. Forrest, MD, PhD<sup>3,4</sup> and Nathan J. Blum, MD<sup>3,4</sup>. <sup>1</sup>Albert Einstein College of Medicine, Bronx, NY, United States; <sup>2</sup>Children's Hospital at Montefiore, Bronx, NY, United States; <sup>3</sup>The Children's Hospital of Philadelphia, Philadelphia, PA, United States; <sup>4</sup>Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, United States; <sup>5</sup>Boston Children's Hospital, Boston, MA, United States; <sup>6</sup>Harvard Medical School, Boston, MA, United States and <sup>7</sup>Temple University, Philadelphia, PA, United States.

**Background:** The NIH Patient Reported Outcome Measurement Information System (PROMIS) initiative has developed a freely available measure of peer relationships that can be administered efficiently using computerized adaptive testing (CAT). The PROMIS Pediatric Peer Relationships measure has not been evaluated in children with Autism Spectrum Disorder (ASD).

**Objective:** To evaluate the PROMIS parent-proxy Pediatric Peer Relationships measure in 5-12 year old children with ASD.

**Design/Methods:** Participants were parents of 5-12 year old children with ASD at one of three participating Developmental-Behavioral Pediatrics Research Network (DBPNet) sites. These parents completed a demographic form, the Peer Relationships measure, and the Social Responsiveness Scale 2<sup>nd</sup> Edition (SRS-2), a standardized measure of social skills concerns. The Peer Relationships measure was completed using CAT, minimizing the number of items administered while maintaining measurement precision.

**Results:** Sixty-nine parents participated in the study. The mean age of the children was 8.2 years (SD 2.0), ninety percent were male, and mean IQ was 84 (range: 41-129). The SRS-2 Total T-score mean was elevated (76, SD 10). The CAT required just 5 items in 68 of the 69 participants to achieve adequate levels of precision (equivalent to a reliability coefficient of >0.90). The T-scores for the Peer Relationships measure were normally distributed but shifted to the left. The mean T-score was 36 (95% CI [34, 37]; approximately 1.5 SD below the mean in the standardization sample). There was a moderately strong negative correlation between the Peer Relationships measure and the SRS-2 total score ( $r=-0.51$ ,  $p<0.001$ ).

**Conclusions:** The PROMIS parent-proxy Pediatric Peer Relationships measure may be an efficient, precise, and valid measure of peer relationships in 5-12 year old children with ASD.

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