

UC Davis
Psychiatry and Behavioral Sciences

Title

The Uses of the BOT-2 for Children with Autism Spectrum Disorder

Permalink

<https://escholarship.org/uc/item/14z0d1bv>

Authors

Booker, Michaela

Acosta, Axie

Publication Date

2021

Data Availability

The data associated with this publication are not available for this reason: N/A

The Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (BOT-2) SHORT AND LONG FORMS

IS THIS USEFUL FOR EVALUATING CHILDREN WITH AUTISM SPECTRUM DISORDER?

Main Finding:

The BOT-2 is a valid and reliable tool to measure motor function in children with ASD for initial diagnostic evaluation and for therapeutic interventions.



The Uses of the BOT-2 for Children with Autism Spectrum Disorder

Michaela Booker, MS2 and Axie Acosta

University of California, Davis, School of Medicine

INTRODUCTION

- Autism Spectrum Disorder (ASD) is a common diagnosis in children and is characterized as a neurodevelopmental disorder defined by core deficits of social communication, the presence of restricted and repetitive behaviors, and unusual sensory sensitivity
- Motor impairments are not a core feature of ASD but are often present and can serve as early markers in the evolution of symptoms as they often appear before social and communicative deficits
- Valid and reliable motor assessment tools are necessary for accurate and timely evaluation in ASD.
- The BOT-2 is a questionnaire-based motor assessment that analyzes 4 different areas of movement: fine motor control, manual coordination, body coordination, and strength and agility.
- The BOT-2 has a Complete Form and an abbreviated Short Form
- AIM: To explore the best uses of BOT-2 in children with ASD

RESULTS

- The BOT-2 was found to be reliable and valid for use in typically developing children from the ages of 4-21 but research is limited on the accuracy of BOT-2 in children with ASD
- BOT-2 is commonly used in children with ASD during initial evaluation of motor function
- BOT-2 is also often used as a pre and post-test motor evaluation tool during therapeutic interventions and treatment
- The Short Form is commonly used for children who may struggle with the length of the Complete Form due to testing fatigue or shorter attention spans

DISCUSSION

- BOT-2 is appropriate for use in children with ASD but must be evaluated within a clinical context and on an individual basis
- A total composite score within the normal range cannot rule out abnormal motor function within specific sub-tests for fine or gross motor
- Although BOT-2 provides a global understanding of motor function, it should not be used solely to determine medical intervention or primary diagnosis

Limitations

- A handful of studies demonstrated a ceiling effect,
- BOT-2 may be confounded by intellectual disabilities