

## Background

- Individuals with Developmental Disabilities (DD) are characterized by limitations in cognitive ability as well as adaptive behavior, which may include difficulties in self-care, communication, and social skills (APA, 2013)
- Compared to typically developing children, those with DD also tend to display more behaviour problems (Baker, 2003)
- The Scales of Independent Behavior-Revised (SIB-R; Bruiniks et al., 1996) is a widely used measure of adaptive and maladaptive behaviour; however, even in its short form (40 items), takes a long time to complete for survey research
- A recent alternative measure for adaptive behaviour is the Waisman Activities of Daily Living (W-ADL) Scale, a 17-item measure of daily activities for adolescents and adults with DD, available at no cost. Analyses indicate strong reliability and validity for the W-ADL (Maenner et al., 2013)
  - However, this measure does not address maladaptive behaviour and was not designed for a younger sample
- It is important to effectively and efficiently measure the levels of adaptive and maladaptive functioning in children with DD for many research applications

## Purpose

The purpose of this study was to investigate the reliability and the validity of the GO4KIDDS Brief Adaptive and Maladaptive Scales (Perry & Weiss, 2009):

1. Examine the reliability of the GO4KIDDS measures
2. Examine the validity of the GO4KIDDS measures in relation to the SIB-R Short Form

## Method

- The Great Outcomes for Kids Impacted by Severe Developmental Disabilities (GO4KIDDS) is a project which explores the health, well-being, and social inclusion of Canadian school-aged children with severe DD and complex needs

### Objective 1: Reliability of the GO4KIDDS measures

- N = 432 parents of children with DD completed the GO4KIDDS Basic Survey
- 11% completed the survey in French
- Diagnosis: 42% DD, 55% ASD and DD
- Age: 3-20 years (M = 11.3)
- Gender: 71% boys

### Objective 2: Validity of the GO4KIDDS measures

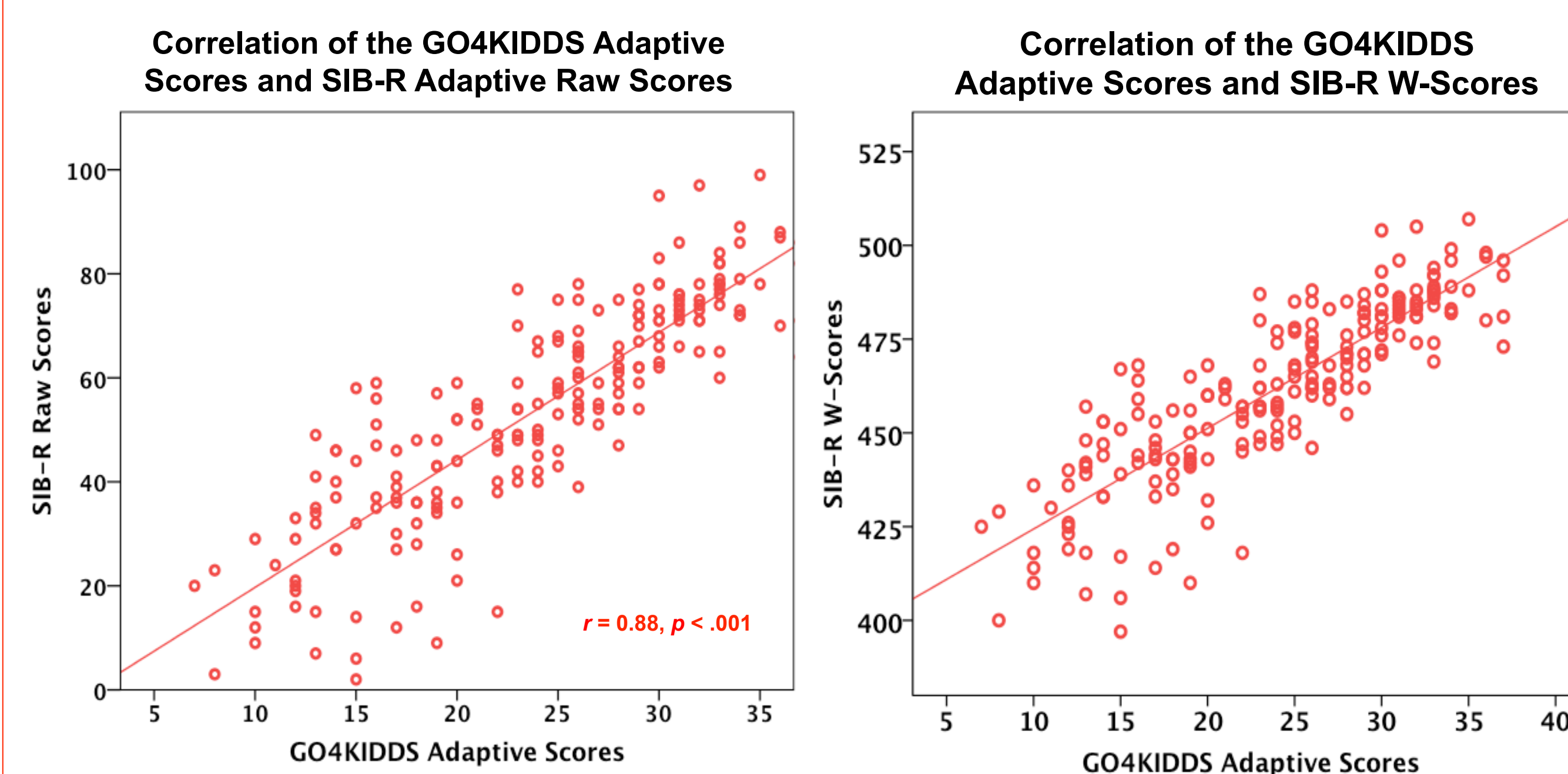
- N = 204 parents of the larger subgroup (n = 432) completed the GO4KIDDS Extended Survey
- Diagnosis: 40% DD, 58% ASD and DD
- Age: 3-19 years (M = 10.9)
- Gender: 71% boys

## Measures

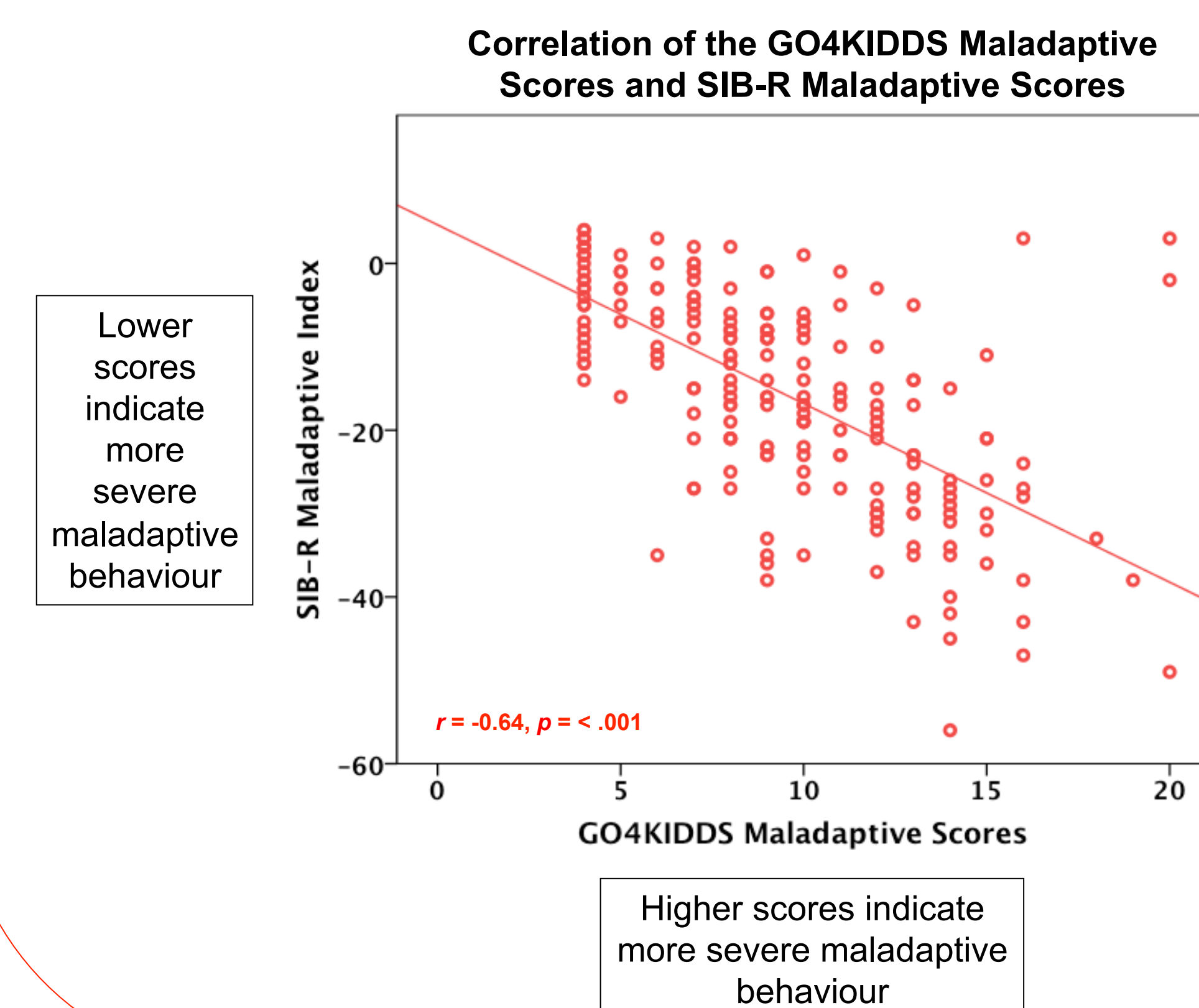
- The GO4KIDDS Brief Adaptive and Maladaptive Scales were developed for research purposes, based on knowledge of other adaptive measures and clinical experience, especially for children and adolescents with DD who have more severe needs
- **Adaptive Scale:**
  - 8 items covering support needs, communication, socialization, and self-help skills
  - Each item is rated on a 5-point scale, with higher scores indicating greater skill level and independence
- **Maladaptive Scale:**
  - 4 items regarding self-injurious behaviour, stereotyped behaviours, aggressive/destructive behaviours (Rojahn et al., 2001), and mental health issues
- **Scales of Independent Behavior-Revised Short Form (Bruiniks et al., 1996):**
  - Standardized measure of adaptive and maladaptive behaviour with good reliability and construct, content and predictive validity
  - Included in the GO4KIDDS Extended Survey (with permission of the publisher)

## Results (Cont' d)

### Criterion-related Validity of the Adaptive Scale



### Criterion-related Validity of the Maladaptive Scale



## Results

- Internal consistency for the Adaptive Scale:  $\alpha = .87$
- Internal consistency for the Maladaptive Scale:  $\alpha = .64$

### Inter-Item Correlation for Adaptive Scale

	Rec Lang	Exp Lang	Socialize (children)	Socialize (adults)	Eating	Toileting	Dressing
Level of Support	.50*	.56*	.35*	.25*	.56*	.55*	.61*
Receptive Language		.62*	.40*	.41*	.46*	.45*	.47*
Expressive Language			.43*	.40*	.51*	.52*	.54*
Socialize with children				.65*	.29*	.23*	.30*
Socialize with adults					.28*	.18*	.21*
Eating						.64*	.72*
Toileting							.70*

\*  $p < .001$

- There were moderate inter-item correlations, with 13 of 28 correlations  $> .50$ , nine between  $.30$  and  $.49$  range, and six  $< .30$

### Inter-Item Correlation for Maladaptive Scale

	Stereotyped Behaviours	Aggressive/ Destructive Behaviours	Mental Health Issues
Self-Injurious Behaviours	.25*	.45*	.29*
Stereotyped Behaviours		.25*	.37*
Aggressive/ Destructive Behaviours			.35*

\*  $p < .001$

## Discussion

- Results indicate that the GO4KIDDS Adaptive Scale has good reliability and validity
  - The internal consistency of the scale was very high ( $\alpha = .87$ ) with item-total correlations ranging from  $.44$  to  $.73$
  - The correlation of the total score of the Adaptive Scale with the SIB-R Broad Independence W score was high ( $r = .81, p < .001$ ), suggesting good validity of the new measure
- The GO4KIDDS Maladaptive Scale has moderate reliability and validity
  - The internal consistency of the scale was acceptable ( $\alpha = .64$ ) with item-total correlations ranging from  $.25$  to  $.45$
  - The correlation of the total score of the Maladaptive Scale was negatively correlated with the SIB-R Maladaptive Index
- The GO4KIDDS Brief Scales appears to be efficient and practical for quantifying adaptive and maladaptive behaviour for children with DD
- It is not intended to be used for clinical purposes but seems to be useful for survey research where brief measures are needed

## Acknowledgments

We would like to thank the families who contributed their time by completing the survey.

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([www.go4kidds.ca](http://www.go4kidds.ca))