

## No moderation by number of children in the family Elizabeth L. Leong, Carly A. Parsons, Joanne L. Park, & Charlotte Johnston

## Introduction

- Correlations among multiple informants on measures of child behaviour problems are typically low to moderate (De Los Reyes et al., 2015).
- Rater characteristics may be a possible explanation for lack of informant concordance (Smith, 2007).
- Based on the assumption that teachers have greater knowledge of developmental norms due to their increased experience working with children, we investigated whether parents' level of experience with children would influence the agreement between parent and teacher ratings of child behaviour problems.

**Hypothesis:** Having more children increases parent knowledge of developmental norms and thus results in stronger correlations with teacher ratings.

## Method

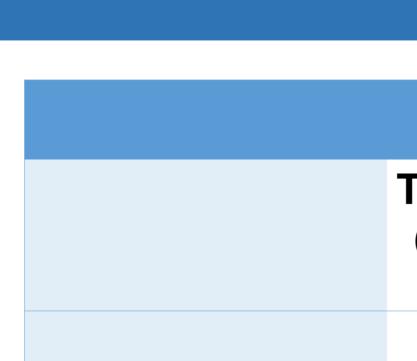
- We tested our hypothesis in five data sets using two well-validated measures of child behaviour problems.
- We used parent ratings, number of children in the family and their interaction as predictors of teacher ratings. In addition, we looked at a number of covariates (e.g., family income, parental occupation).

**Measures**: ADHD Rating Scale – IV (DuPaul et al., 1998) Average of Inattention and Hyperactivity/Impulsivity items. Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997)

otal Difficulties scale.					
<b>Descriptive Statistics</b>	Data	Data	Data	Data	Data
	Set 1	Set 2	Set 3	Set 4	Set 5
Ν	101	46	52	36	84
Target Child Mean Age (years)	9.54	9.87	9.72	9.49	5.88
Total # of Children in the Family	2.02	2.09	2.20	2.22	2.01
% Boys with ADHD	100%	100%	0%	0%	7%
% Caucasian	75%	61%	62%	62%	61%



# **Correlations Between Parent and Teacher Ratings of Child Behaviour Problems:**



Parent Ratings

Total # Children in the Family

**Target Child Mean** Age (years) Family Income

**Parent Rating X Total # Children** 

R<sup>2</sup> change with addition of interaction term

Summary: Across two measures of behavioural problems, clinical and community samples, and gender of parent informant we found no evidence that having more children is associated with better rater agreement between teachers and parents. Number of children only moderated parent-teacher agreement in dataset 2, but this result was in the opposite direction to that hypothesized.

## Results

Data Set 1			Data Set 2		Data Set 3		Data Set 4		Data Set 5		
Teacher ADHD-IVTeacher ADHD-IV(Mother ratings as predictor)(Father ratings as predictor)		<b>Teacher ADHD-IV</b> (Mother ratings as predictor)		<b>Teacher SDQ</b> (Mother ratings as predictor)		<b>Teacher SDQ</b> (Father ratings as predictor)		<b>Teacher SDQ</b> (Mother ratings as predictor)			
β	p	β	p	β	p	β	p	β	p	β	р
.16	.01	.10	.12	.15	.33	.65	.03	.22	.33	.47	.00
02	.81	.06	.37	03	.79	28	.14	14	.49	.09	.35
.02	.82	.01	.95	14	.29	.12	.40	.18	.34	.08	.45
.07	.48	.06	.58	19	.16	23	.12	29	.13	10	.37
05	.62	.06	.37	47	.00	.01	.96	.24	.21	.02	.81
∆ <b>R² =</b> p =	•	∆ <b>R² =</b> <i>p</i> =	0.01, .37	∆ <b>R² =</b> <i>p</i> =	0.18, .002	∆ <b>R² =</b> p =	0.00, .96	∆ <b>R² =</b> p =	•	∆ <b>R² =</b> <i>p</i> =	•

## Discussion

Possible explanations for our findings include: (1) Context or setting (i.e., home vs. school) has a greater impact on observed behaviours and/or behaviour ratings than the number of children within that setting; (2) There is less behavioural variability within families than within classrooms, so more children does not necessarily broaden parental knowledge of behavioural norms.

• We did not directly measure parent and teacher knowledge of developmental norms, rather it was assumed that having more children or being employed as a teacher automatically increases this knowledge – future studies could directly measure knowledge of developmental norms.

More research in this area is needed to develop a better understanding of the factors that contribute to low concordance between informants.

