

# **Demographic and Clinical Characteristics of 922 Autistic Preschoolers Engaged in Full-time Early Intervention**

### INTRODUCTION

- As the known prevalence of autism spectrum disorder (ASD) continues to rise, there is a growing need to better understand the characteristics of those diagnosed with ASD. This need is particularly pertinent for:
- Children, who represent the fastest growing subgroup of those diagnosed with ASD, and
- Those with high support needs, who are likely to require the most intensive and lifelong care.
- To date, there has been no large-scale profiling study in Australia that specifically targets autistic children with high support needs.

### AIM

• To improve our understanding of autistic children with high support needs by profiling a substantial cohort of children enrolled in full-time early intervention for ASD in Australia.

### METHOD

#### **Participants:**

- 922 children attending one of 11 full-time early intervention centres for ASD (nine in QLD, one in SA, one in ACT) between February 2014 and December 2023.
- Aged between 24-77 months on entry.
- No other pre-screening measures or exclusion criteria were used
- 50.9% of eligible families volunteered their data for research.

#### **Measures:**

Demographic:

- Sex
- Age of first concern, diagnosis and intake
- Culturally and linguistically diverse & First Nations status
- Primary language spoken at home

#### Clinical.

- Autism Diagnostic Observation Schedule 2<sup>nd</sup> ed.
- Mullen Scales of Early Learning
- Vineland Adaptive Behaviour Scale 2<sup>nd</sup> and 3<sup>rd</sup> eds. Family:
- Parenting Stress Index 4<sup>th</sup> ed., Short Form

### CONCLUSIONS

- This study is the first large-scale profiling study in Australia that specifically targets autistic children with high support needs
- By reporting these findings, this study aims to facilitate a more informed and tailored approach to addressing the unique challenges faced by this subgroup of autistic individuals.

J. MEAD<sup>1</sup>, T. LEE<sup>1</sup> and A. BULLOT<sup>1</sup> <sup>1</sup>AEIOU Foundation, Brisbane, Australia

## RESULTS

#### Demographic

• Male: female ratio was 3.8:1

• There were clear delays from the age of first concern to diagnosis (17 months) and diagnosis to intervention (10 months).

Demographic	Μ	SD	Ν	%
Sex				
Female			192	20.8%
Male			730	79.2%
Age (months)				
First concern	18.68	8.42	782	
Diagnosis	35.86	9.33	647	
Entry	46.30	9.46	880	
CALD				
Yes			277	35.7%
No			499	64.3%
Australian First Nations				
Aboriginal			53	7.3%
Torres Strait Islander			3	0.4%
Not Indigenous			656	90.1%
Prefer not to answer			16	2.2%
Primary language at home				
English			607	83.0%
Other			124	17.0%

- The proportion of CALD (35.7%) and Aboriginal or Torres Strait Islander (7.7%) individuals was higher than Australian population estimates (28% and 3.8%, respectively; AIHW, 2023).
- Linguistic diversity (17%) was lower than population estimates (23%; AIHW, 2023).

#### Clinical

- Autism Diagnostic Observation Schedule supported sample expectations, with the vast majority of children (97%) meeting thresholds for "autism" or "autism spectrum".
- Adaptive Behaviour scores were significantly lower than typically developing children (t(848) = 121.28, p < .0001) with a mean difference of 37.9 points. Scores were also 9.5 points lower than a large study using pooled data from 9,067 autistic individuals (Chatham et al., 2018).
- DQ was significantly lower than typically developing children (t(856) = 78.83, p <.0001) with a mean difference of 50.6 points. Scores were also notably lower than other early intervention studies with

### REFERENCES

- https://www.aihw.gov.au/reports-data/population-groups/cald-australians/overview
- 853.
- clinically important differences on the Vineland-II. Autism Research, 11(2), 270-283.
- Autism Spectrum Disorders, 4(3), 425-432.

similar samples (with mean differences ranging from 10 [Dawson et al., 2010] to 23.9 points [Zachor & Itzchak, 2010] six identified studies).

Μ	SD	Ν	
		497	78
		120	18
		19	3
62.08	9.11	849	
49.40	18.79	857	
	62.08	62.08 9.11	497 120 19 62.08 9.11 849



Australian Institute of Health and Welfare (2023, October 25). Culturally and linguistically diverse Australians. Australian Government.

Ben-Sasson, A., Soto, T. W., Martínez-Pedraza, F., & Carter, A. S. (2013). Early sensory over-responsivity in toddlers with autism spectrum disorders as a predictor of family impairment and parenting stress. Journal of Child Psychology and Psychiatry, 54(8), 846-

Chatham, C. H., Taylor, K. I., Charman, T., Liogier D'Ardhuy, X., Eule, E., ... & Bolognani, F. (2018). Adaptive behavior in autism: Minimal

Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: A meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. Journal of Autism and Developmental Disorders, 43, 629-642. Zachor, D. A., & Itzchak, E. B. (2010). Treatment approach, autism severity and intervention outcomes in young children. Research in



in
----

%

78.1% 18.9%

3.0%

#### Family

• A substantial cohort of parents (44.5%) reported 'high' (14.9%) or 'clinically high'(29.6%) stress. These findings are consistent with previously observed ranges for parents of autistic children (Hayes & Watson, 2013).

Family Measures	Ν	%
Parenting Stress Index		
Low stress	9	1.1%
Typical stress	437	54.5%
High stress	120	14.9%
Clinically high stress	238	29.6%

## **ACKNOWLEDGEMENTS**

We extend our heartfelt appreciation to the parents and caregivers who generously shared their child's data for this research. Your generosity and willingness to contribute have made this research possible.

### **CONTACT INFORMATION**

Jessica Mead | jessica.mead@aeiou.org.au