February 2018



# Predicting Optimal Literacy Outcomes in Children on the Autism Spectrum in Their First Year of Schooling





#### Aim

The aim of this study was to describe the early reading skills of a cohort of children on the autism spectrum in their first year of schooling.

We also wanted to find out if children's performance on emergent literacy tasks in the preschool years would predict their reading ability in their first year of school.



#### How we did the research

Children were seen for a one-off assessment session by a research assistant. All children participated in a range of oral language and early literacy tasks, such as story comprehension, letter sound knowledge, single word reading, and a standardised test of reading comprehension.





# Who took part?

41

children on the autism spectrum who had participated in our previous emergent literacy study (CRC 2.024RI) and who met the following inclusion criteria:

- could speak in at least short sentences
- could participate in school type activities
- had completed 6-12 months of their first year of formal school.



#### Who did the research?





## Thank you

The research team would like to thank the children and their families for their time and for generously sharing their home literacy practices.

#### Find out more

Download the full report and executive summary on the Autism CRC website: autismcrc.com.au.

Contact the Project Leader for more information:

**Dr Marleen Westerveld** m.westerveld@griffith.edu.au







## **Key findings**



#### Reading ability

We found that fewer than half (43.9%) of children scored within the typical range on reading accuracy i.e. the ability to read short passages; while 19.5% of the children scored within the typical range on reading comprehension i.e. the ability to answer questions after reading short passages. When asked to read single words, just over 50% of the children demonstrated age-appropriate skills decoding regular words (such as pet and hot).



## Oral language skills and reading ability

Children's performance on a standardised test of oral language was significantly related to their reading accuracy and comprehension skills, indicating the important links between spoken and written language.



#### Emergent literacy skills and reading ability

Children's performance on pre-school emergent literacy tasks, such as letter sound knowledge and print and word awareness, was found to strongly relate to their ability to read single words about one year later when children were in their first year of school. Similarly, pre-school performance in receptive vocabulary (i.e. understanding words) and story comprehension was correlated with reading comprehension ability about one year later.



## Predicting reading ability and reading comprehension performance

Letter sound knowledge during the pre-school years was a significant predictor of single word reading performance in the first year of schooling, even after controlling for non-verbal cognitive skills. For year-one reading comprehension, preschool vocabulary knowledge, story comprehension, and print and word awareness were significant predictors.



#### **Future directions**

Future research should investigate the effectiveness of individualised intervention strategies targeting emergent literacy skills based on individual children's early reading profiles. In addition, following children longitudinally is vital to confirm the causal connections between emergent literacy skills and future reading achievement for children on the autism spectrum.

