

# Reading Comprehension in the First Year of Schooling for Verbal Students Diagnosed with Autism Spectrum Disorder

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## Why Literacy in ASD?

Children diagnosed with ASD are at risk of significant and persistent literacy difficulties, particularly reading comprehension (Arciuli, Stevens, Trembath, & Simpson, 2013; Brown et al., 2013; McIntyre et al., 2017)



“Learning to read for meaning is one of the most important skills learned at school”  
(p. 37, Westerveld et al., 2016)

## Objectives

Using the Simple View of Reading (Gough & Tunmer, 1986) as a guiding framework, we investigated:

- Concurrent links between reading comprehension and reading accuracy;
- Concurrent links between reading comprehension and listening comprehension;
- Links between school-age performance on reading comprehension and pre-school ability on print concepts (i.e. print and word awareness), listening comprehension, and vocabulary.

### Simple View of Reading

(Gough & Tunmer, 1986)

Reading Comprehension =  
word recognition X language comprehension

## Method

**Time 1: Pre-School**  
N = 57

Verbal pre-schoolers diagnosed with ASD  
Age: M = 57.61, SD = 5.73

**Print and Word Awareness**

(Phonological Awareness Literacy Screening - PreK)

**Listening Comprehension**

(Profile of Oral Narrative Ability [PONA])

**Vocabulary**

(Peabody Picture Vocabulary Test-4 [PPVT-4])

**Time 2: School**  
n = 41

First year of formal schooling  
Age: M = 73.37, SD = 4.54

**Reading Accuracy**

(York Assessment of Reading for Comprehension [YARC])

**Listening Comprehension**

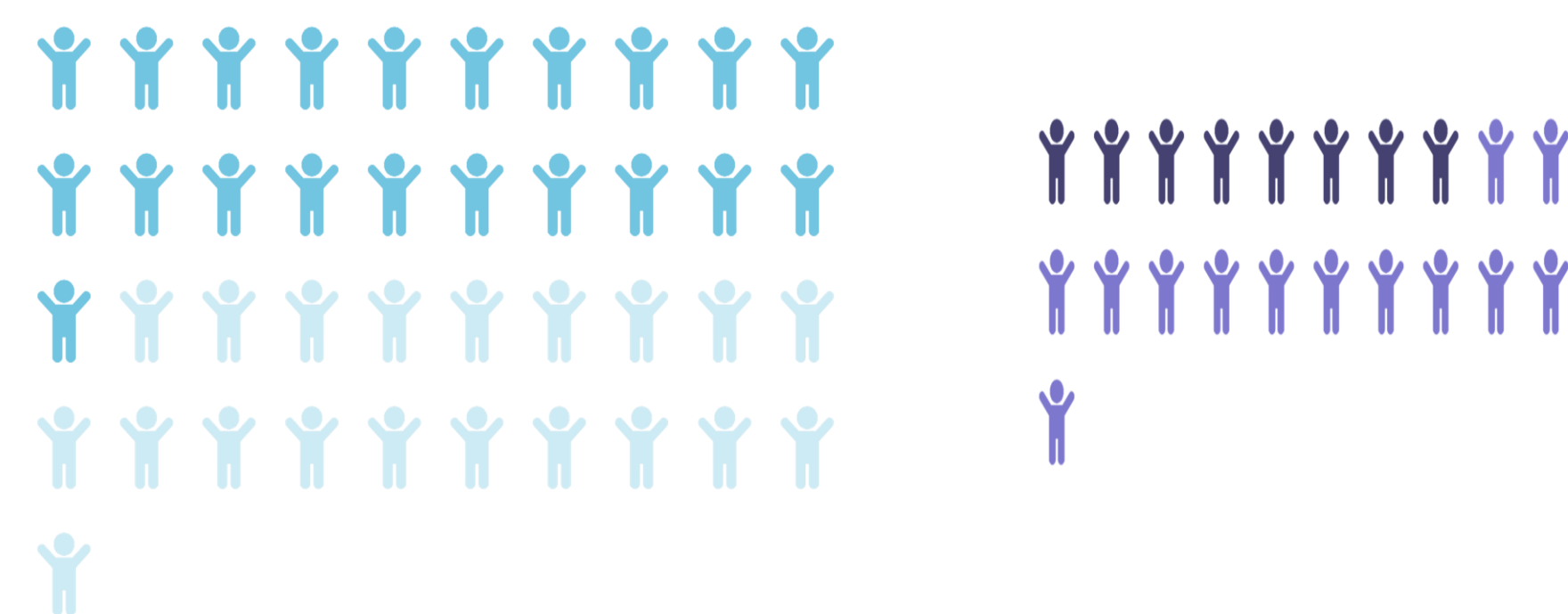
(PONA)

**Reading Comprehension**

(YARC)

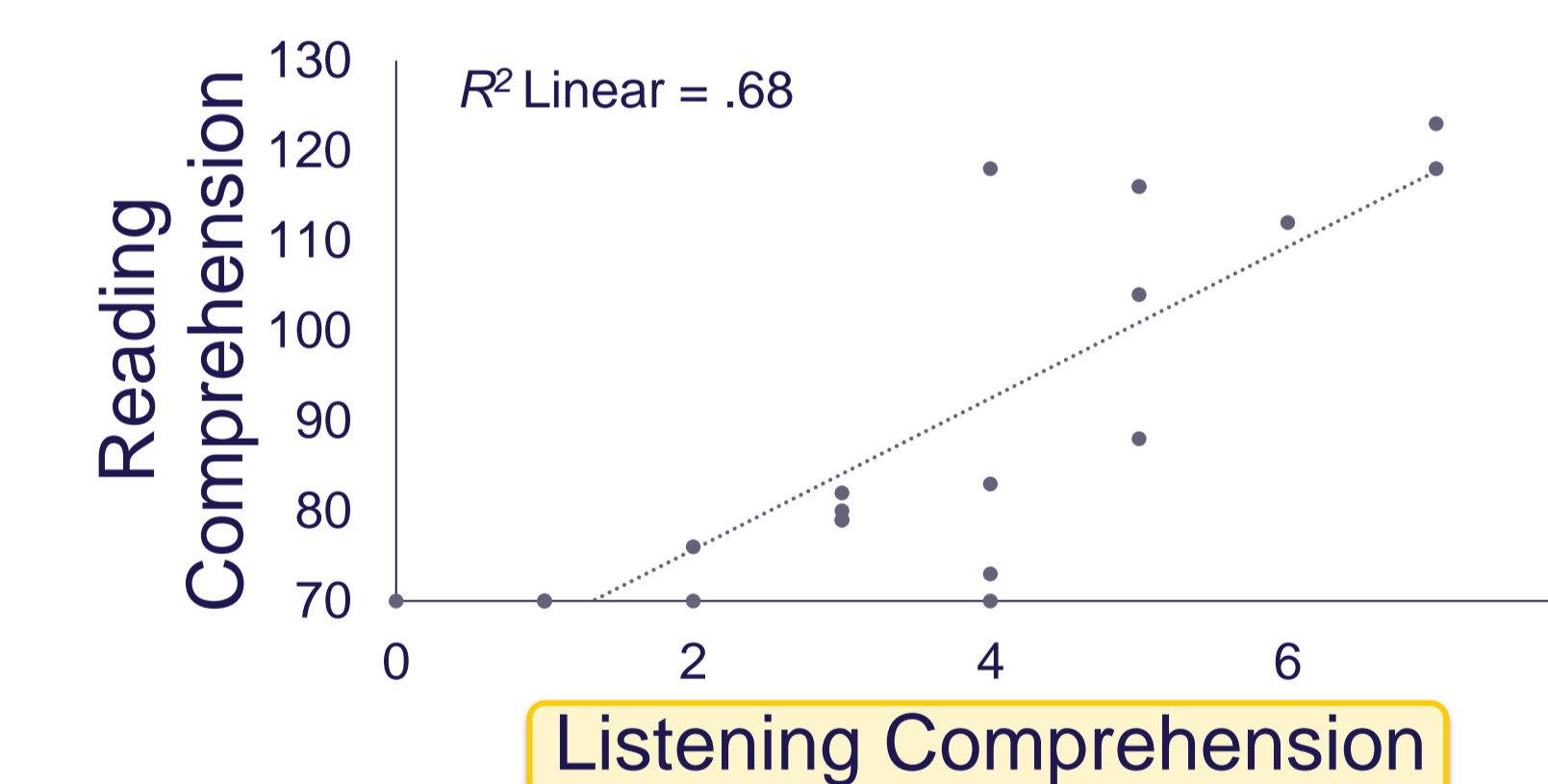
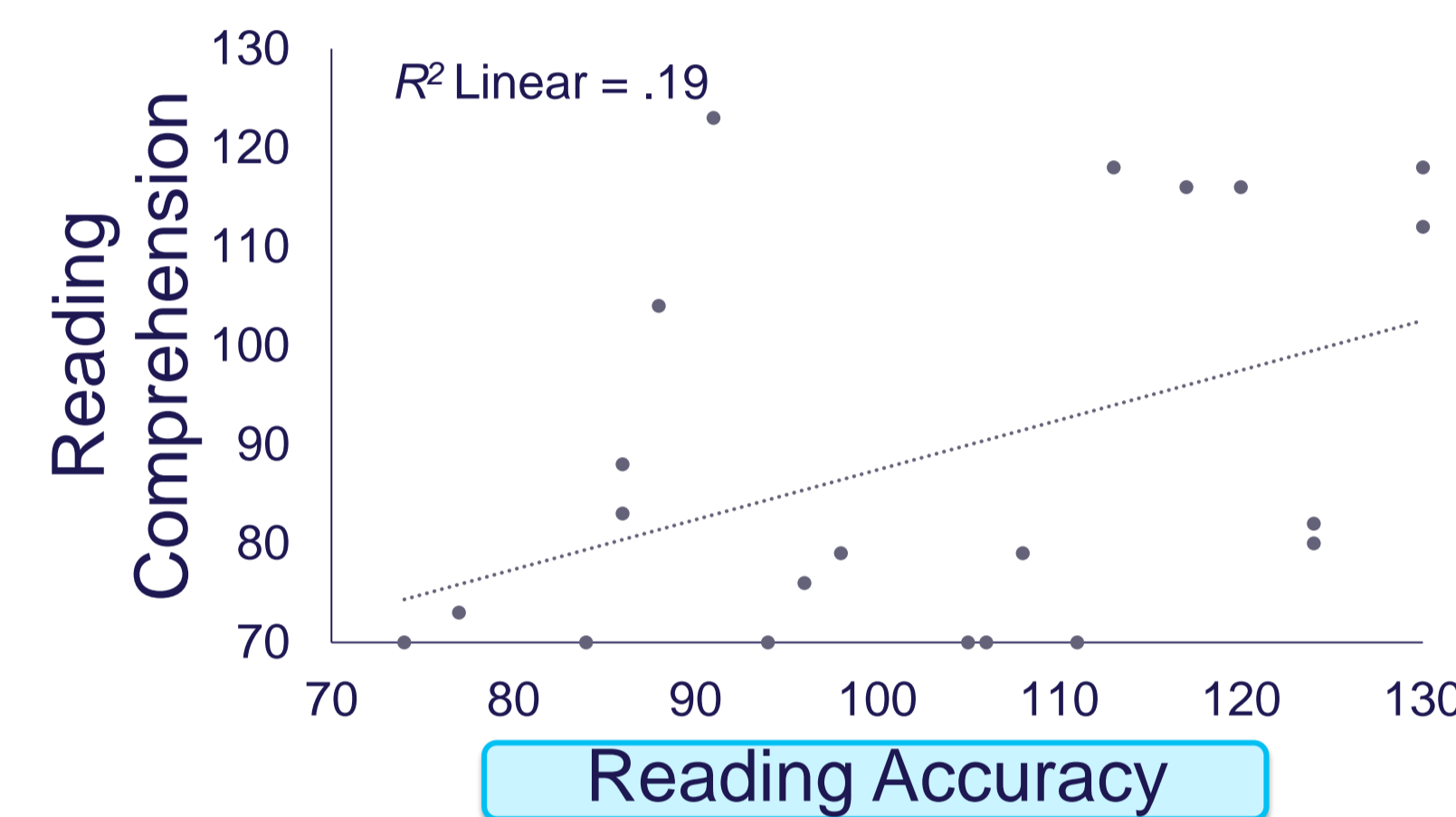
## Results

- In the first year of schooling only 21/41 children showed age-appropriate reading accuracy.
- Only 8 of these children demonstrated reading comprehension within expected limits.

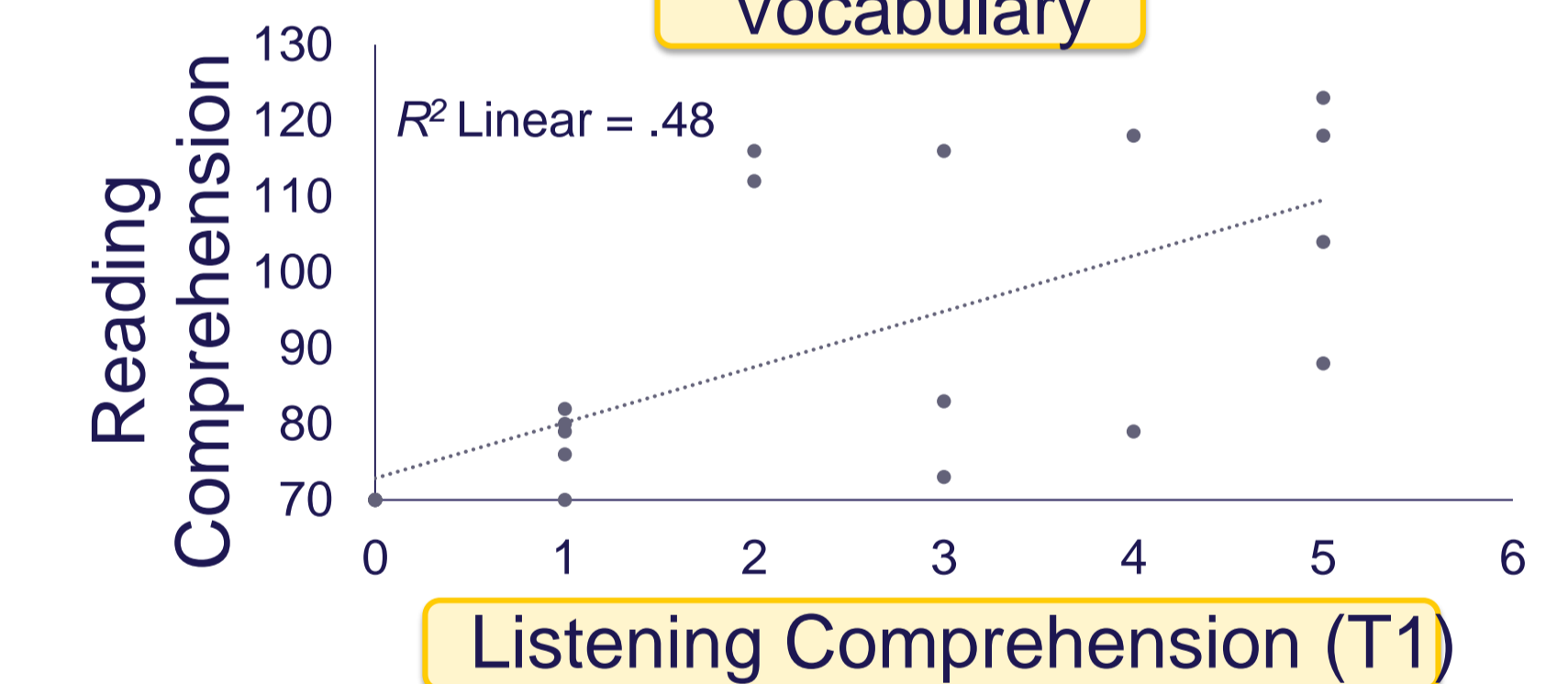
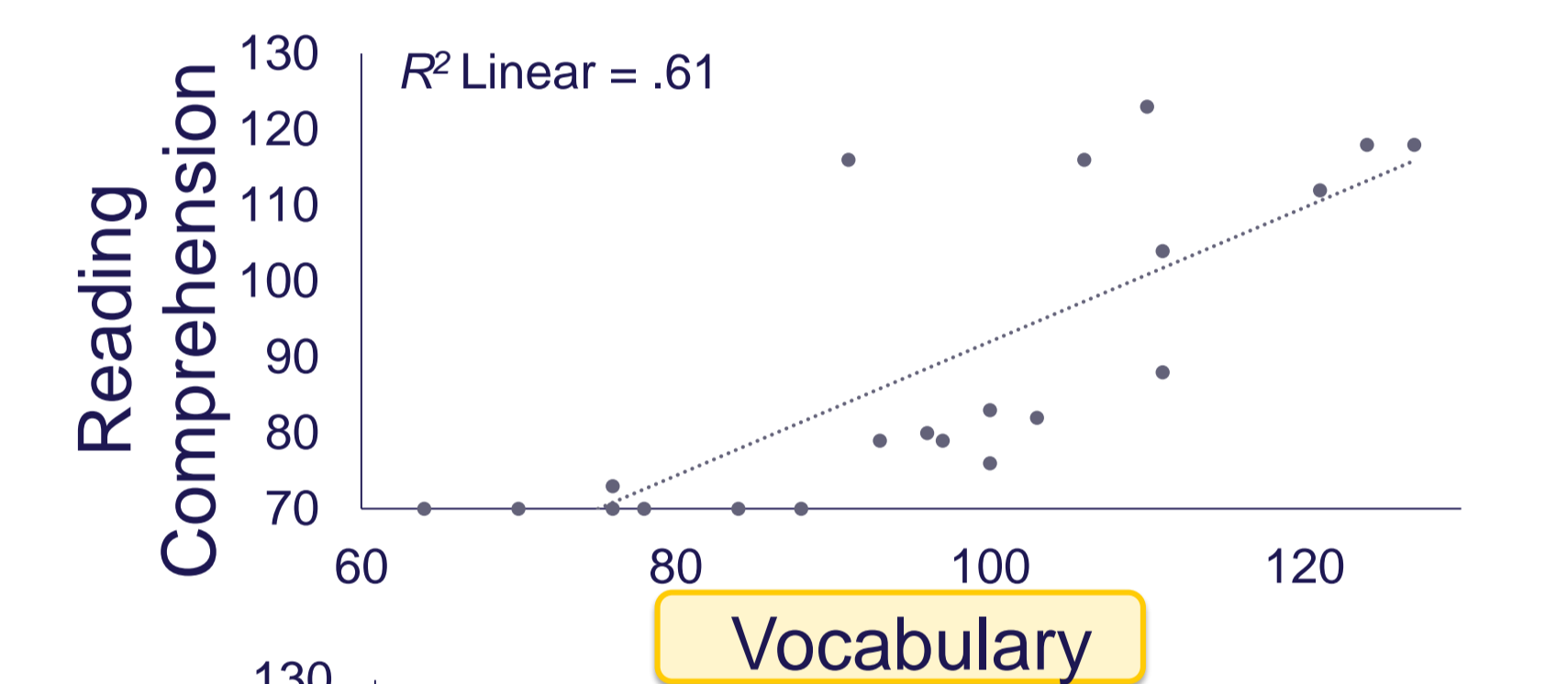
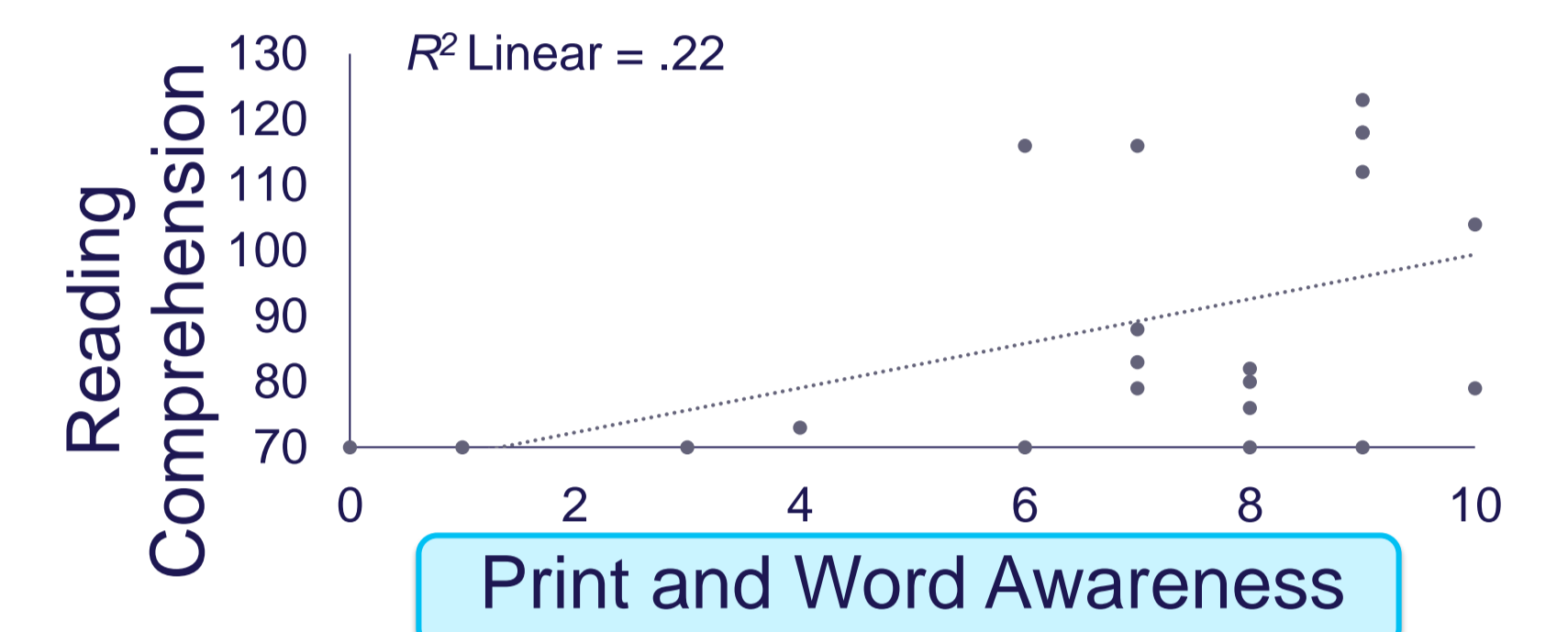


## Concurrent Links

At Time 2, reading comprehension was significantly linked with reading accuracy,  $r = .44$ ,  $p = .048$ ; and listening comprehension,  $r = .83$ ,  $p < .001$



## Reading Comprehension (T2) and Pre-School Ability (T1)



## Conclusions

- Reading comprehension difficulties may be detected in the early years of schooling for children diagnosed with ASD.
- Weaknesses in listening comprehension, vocabulary, and print concepts during the pre-school years are linked with reading comprehension one year later.
- Potential for early assessment and targeted intervention to support later reading success.

For more information

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