

Emergent Literacy in Preschoolers with Autism: More Than ABCs

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The Hanen Program® for parents of children with autism spectrum disorder (ASD) is titled "More Than Words", aptly named because communicating is much more than just learning to say words. In fact, some children with ASD can say words but can't use them to communicate meaningfully.

And when it comes to emergent literacy* with this population of children, literacy involves more than just the ABCs. For some children with ASD, learning the letter names and sounds isn't that difficult. It's extracting meaning from stories that is the challenge. And this is exactly what a recent study found when they looked at young preschool-aged children with ASD.

New Study Highlights Strengths and Weaknesses in Emergent Literacy

While emergent literacy skills in typically developing children have been widely studied, there are fewer studies regarding the emergence of these skills in preschoolers with ASD (Kuo, 2017). Four years ago we posted two articles about emergent literacy skills in children with ASD based on Elizabeth Lanter's work, <u>one focusing on a 2012 study</u> she conducted on 41 children, and <u>the other relating to ideas about</u> <u>intervening</u> in this area.

A recent study by Westerveld, Paynter, Trembath, Webster, Hodge & Roberts (2017) studied an even younger cohort of children with ASD

*Emergent literacy refers to the skills that are precursors to reading and writing. These include:

- Code-related skills such as letter knowledge, print concepts, early name writing, early developing phonological awareness
- Meaning-related skills

 such as vocabulary, grammatical ability, story retelling and comprehension

(Westerveld, Trembath, Shellshear, & Paynter, 2016)

(aged 4:0 - 5:10), who hadn't received formal reading instruction. Unlike previous studies, Westerveld et al. took a close look at the children's narrative skills and also considered whether their cognitive abilities predicted their emergent literacy skills. Their aim was to determine the relationship between these young children's emergent literacy skills and their cognitive ability, language skills, autism severity, and home

literacy environment.

The 57 children included in the study spoke in short sentences, were able to participate in preschool-type activities (like pointing to pictures and following short directions), and had a confirmed diagnosis of ASD. Their skills were assessed by a speech language pathologist during two 90-minute sessions using a variety of standardized tests. Information about the children's home literacy environment was collected using a parent questionnaire. Oral narrative skills were assessed using a task developed by the authors, which involved asking the children eight comprehension questions after listening to a story on a computer. Then, after listening to the story a second time, the children were asked to retell the story.

The Authors' Main Findings:



The home literacy environment

• Small but significant positive correlation between frequency of book reading at home and children's oral narrative skills – but book reading frequency was not correlated with other emergent literacy measures

Concurrent predictors of emergent literacy skills

• As a group, children with higher autism severity ratings (more severe) demonstrated better performance with letter name knowledge

 the children's repetitive, restrictive interests (which help them focus on details like alphabet letters) may have helped them excel in this
area
Significant correlations found between most measures (autism
severity, reading frequency, spoken communication, nonverbal cognition,
and emergent literacy)
 this confirms that these factors are interrelated in this population of children, and highlights the important role oral language plays in emergent literacy development
• Taken together, nonverbal cognition, spoken communication, autism
severity, and receptive vocabulary explained a significant proportion
of the variance (34%) in code-related skills
 when considered individually, only receptive vocabulary was a
significant predictor
Taken together, nonverbal cognition, spoken communication and
autism severity explained a significant proportion of the variance
(40.7%) in meaning-related skills
 all three variables were significant individual predictors
When divided into higher versus lower nonverbal cognition abilities,
group differences were found for name writing, letter sound
knowledge, print and word awareness, and oral narrative measures
 statistically significant differences were not noted for phonological
awareness
(Westerveld et al., 2017)

Putting This All Together

Don't Make Assumptions

The fact that the children in this study evidenced great variability is not surprising, based on both the heterogeneous nature of ASD as well as the natural variability seen in typically developing children who are acquiring emergent literacy skills (Westerveld *et al.*, 2017). This variability means that we need to evaluate the emergent literacy skills of children with ASD carefully, without making assumptions, and using multiple measures.

It's interesting to compare the pattern of emergent literacy development noted in preschoolers with ASD with children who have Specific Language Impairment (SLI). While both groups of children have problems with oral language, children with SLI show difficulty acquiring letter names and sounds, while children with ASD show a relative strength in this area (Westerveld *et al.*, 2017). Therefore, delays in oral language do not necessarily imply a delay in learning letter names and sounds when it comes to children with ASD.

Strength in Code-related Skills, Weakness in Meaning

Other studies have found similar results in slightly older groups of children with ASD. That is, that they tend to demonstrate strengths in code-related skills and difficulty with meaning-related skills (Kuo,

2017). The results of this study also fit with other research that has revealed a discrepancy between word-level tasks (e.g. receptive vocabulary) and higher-level integration of semantic information (e.g. narrative skills) (Westerveld *et al.*, 2017). Kuo (2017) summarizes these challenges, saying,

"...many of the literacy-related struggles these children face are in developing and processing skills for analyzing and acquiring meanings" (p. 2)

While young children with ASD may need help with code-related skills, some of our intervention efforts will need to focus on narrative comprehension and story re-telling, especially since preschool oral narrative skills are strongly related to future reading comprehension ability (Westerveld *et al.*, 2017).

More Research Needed

Westerveld et al. explain that because they were only able to account for 34-40% of the variance in emergent literacy skills, more research needs to look at other social cognitive underpinnings of these skills (such as attention, social factors, and print motivation). Kuo (2017) also suggests the need for research into children's home literacy environments, explaining that:

"The development of emergent literacy skills is vital for long-term literacy development, and a supportive home literacy environment has the potential to have a tremendous impact on children with ASD..." (p. 4)

Where to go from here...

The above results tell us that we need to:

- look carefully at the narrative abilities of this population of children
- be detectives when it comes to emergent literacy assessment, and make no assumptions
- think about how ASD symptomology may impact the children's emergent literacy learning (repetitive interests and a preference for rote learning and repetition may promote skills like letter name and letter sound knowledge)

While information about intervening in this area is scarce, Westerveld *et al.* (2017) suggest that our understanding of the children's early strengths and weaknesses can help us better target our early intervention efforts. To this end, we've created a new e-seminar, *Building Emergent Literacy in Children with ASD: The Power of Shared Reading*, which provides information about how to apply Hanen strategies to encourage meaning-related skills in young children with ASD.

Other useful information can be found in the following articles:

- <u>Promoting emergent literacy in young children with ASD</u> tips about intervening
- <u>Autism Spectrum Disorder and Early Literacy: Common Misconceptions</u> geared towards the general public, this article with information and tips, can be distributed to the families and early childhood educators with whom you work

References

Kuo, L. (2017). Language and literacy development among children with autism spectrum disorder. *Journal of childhood and developmental disorders, 3*(3), 1-4.

Westerveld, M. F., Trembath, D., Shellshear, L. & Paynter, J. (2016). A Systematic Review of the Literature on Emergent Literacy Skills of Preschool Children With Autism Spectrum Disorder. *The Journal of Special Education*, *50*(1), 37–48.

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