

Physiologic Brain Changes Occur with Early Reading!

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Did you know that reading ability is associated with thicker gray matter cortex in reading-related areas of the brain? Additionally, emergent literacy skills, such as rhyming, expressive vocabulary, and rapid naming are predictive of reading success.

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Did you know that reading ability is associated with thicker gray matter cortex in reading-related areas of the brain? Additionally, emergent literacy skills, such as rhyming, expressive vocabulary, and rapid naming are predictive of reading success. However, there have not been data to correlate emergent literacy skills with thicker gray matter cortex - until now.

This week in *Pediatrics* ([10.1542/peds.2020-1641](#)), Dr. John Hutton et al present results from a validation study in which they correlated emergent literacy screen scores with structural MRI findings in 70 healthy preschool children.

They used The Reading House (TRH), which is a children's book that can also be used as a screener for emergent literacy skills. They validated TRH with more extensive validated tests, and then all children had a non-sedated brain MRI.

TRH scores correlated well with the other test scores. Higher TRH scores were also correlated with greater cortical thickness in the language and visual areas of the brain. There were some differences in children of higher and lower socioeconomic status.

I have not used TRH for rapid screening of emergent literacy skills but am eager to try it out with my patients. Having a reliable but easy screen would be helpful in identifying preschoolers who may need additional support if they are to be successful readers.

- [The Reading House: A Children's Book for Emergent Literacy Screening During Well-Child Visits](#)
- [Ophthalmic Abnormalities and Reading Impairment](#)
- [Elevated Blood Lead Levels and Reading Readiness at the Start of Kindergarten](#)
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