Editorial Board

Neuropsychologia

November 29, 2022

Dear Editor,

We are pleased to submit for consideration an original article entitled “Intact Forms of Procedural Memory in Adults with Dyslexia.”

This is the first study to examine multiple forms of procedural-learning related tasks in adults with and without dyslexia. We implemented two well-established procedural learning tasks -- mirror tracing and rotary pursuit and two non-linguistic auditory and visual statistical learning tasks. Adults with dyslexia exhibited typical learning on the two procedural learning tasks and on the visual statistical learning task. Participants with dyslexia had impaired learning on the auditory statistical learning task. Importantly, auditory statistical learning proficiency correlated positively with single-word reading performance across all participants and within the group with dyslexia, linking a major difficulty in dyslexia with impaired auditory statistical learning.

Thus, these findings suggest that instead of a pervasive deficit in procedural learning, learning deficits in dyslexic adults are specific to the domain that shows the most consistent impairment in dyslexia: auditory processing. Our study has important implications for informing etiological theories of developmental dyslexia.

This manuscript has not been published and is not under consideration for publication elsewhere.  We have no conflicts of interest to disclose.

Thank you for your consideration,

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