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Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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Permalink

<https://escholarship.org/uc/item/1333t37d>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 32(32)

ISSN

1069-7977

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Publication Date

2010

Peer reviewed

Declarative and procedural memory abilities as predictors of successful adult language learning

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Abstract: Evidence from two related but independent fields of research, second language acquisition (SLA) and cognitive neuroscience, suggests that some adult learners do reach high proficiency in an L2, as assessed by performance on language tasks. Not much is known about how or why certain adults attain high proficiency while others do not. Certain cognitive abilities, specifically procedural and declarative memory systems, may factor into language proficiency. This research aims to address this question by examining how individual differences interact with implicit language learning. Subjects completed a battery of cognitive tests including the Tower of London task, the Continuous Visual Monitoring Task and the Modern Language Aptitude Task, and learned an L2 under implicit training conditions. After practicing on comprehension and production tasks, subjects were given a grammaticality judgment task. A multiple regression was conducted to determine what cognitive abilities are unique predictors of L2 aptitude (as measured by the GJT).