



Why do older children learn second languages faster than younger children?



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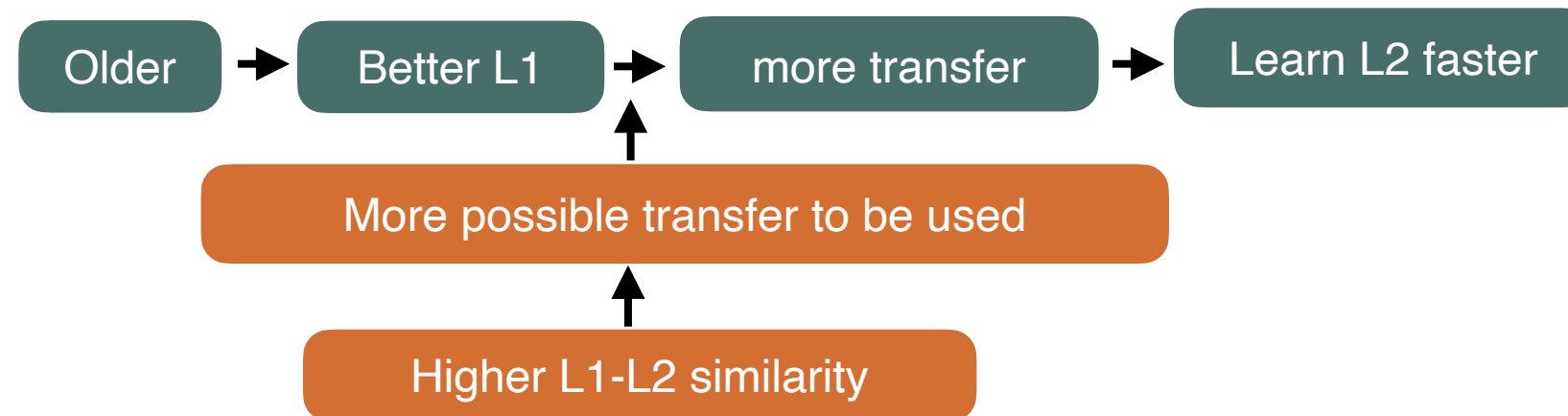
Introduction

Younger children don't learn language as fast as older children/adults

- Initial Dutch immersive learning speeds up with age (Snow & Hoefnagel-Höhle, 1978)
- In the context of instruction, no solid evidence for younger learner advantage, neither short-term nor long-term (Huang, 2016)

Why does second language learning speed up with age?

- Transfer from L1:** phonological transfer, morphological transfer, syntactic transfer, vocabulary



- Older children learn faster than younger children.
- The age effect is strengthened by L1-L2 similarity.

Learning Rate Analysis

- Must have age and at least two observations
- obs = 8,368; n = 3,255; sch= 43; lan = 45
- learning rate \sim age * score * phylogenetic similarity (PS) + (1|school)

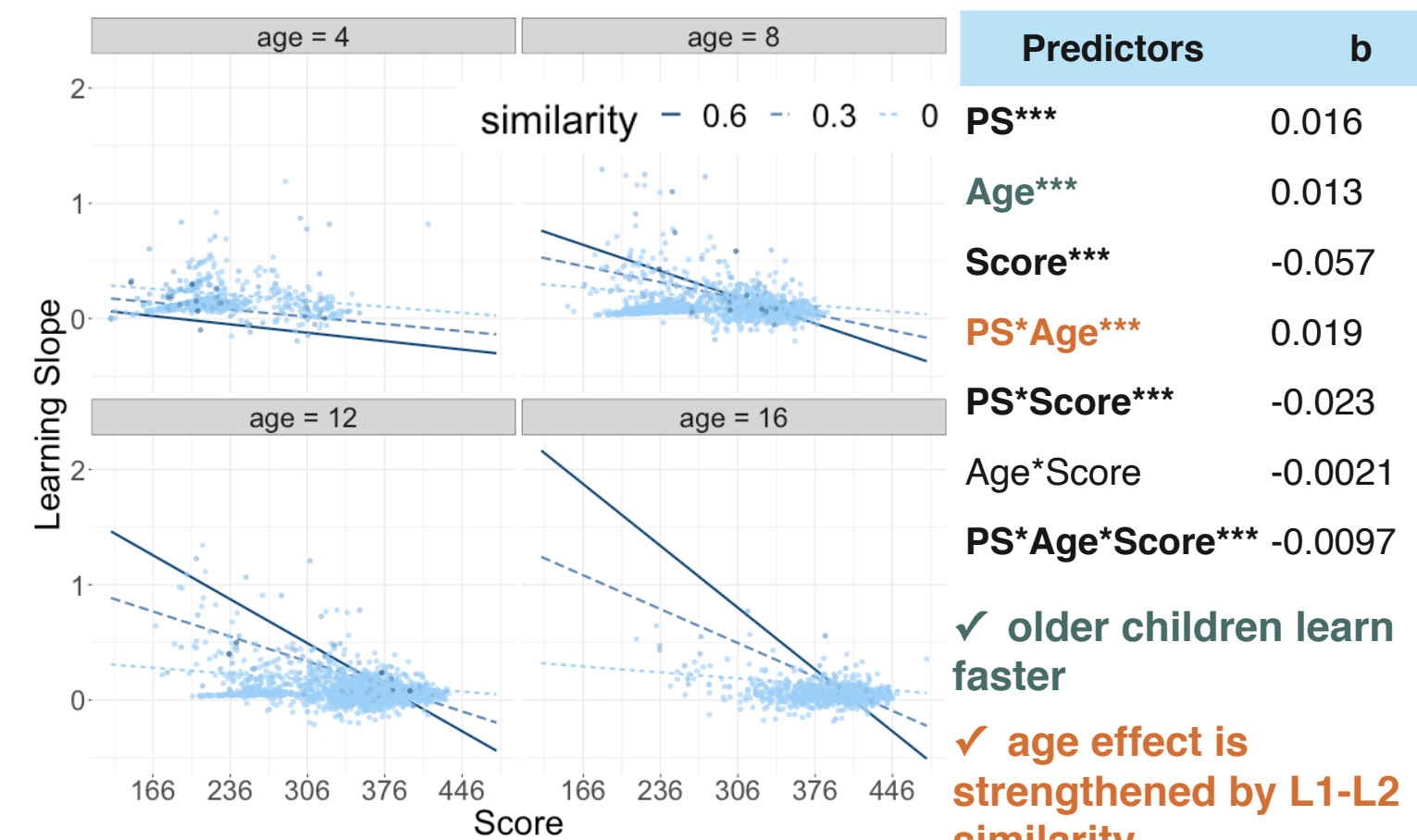


Figure 3: The Effect of Approximation Scores on Learning Rate by Age

Learning Growth Analysis

- Must have Age of Acquisition of English (AoA) and at least 1 observation
- obs = 5,301; n = 2,012; sch= 35; lan = 33
- score \sim Eng Exposure (EE) * AoA * phylogenetic similarity (PS) + (1|school)

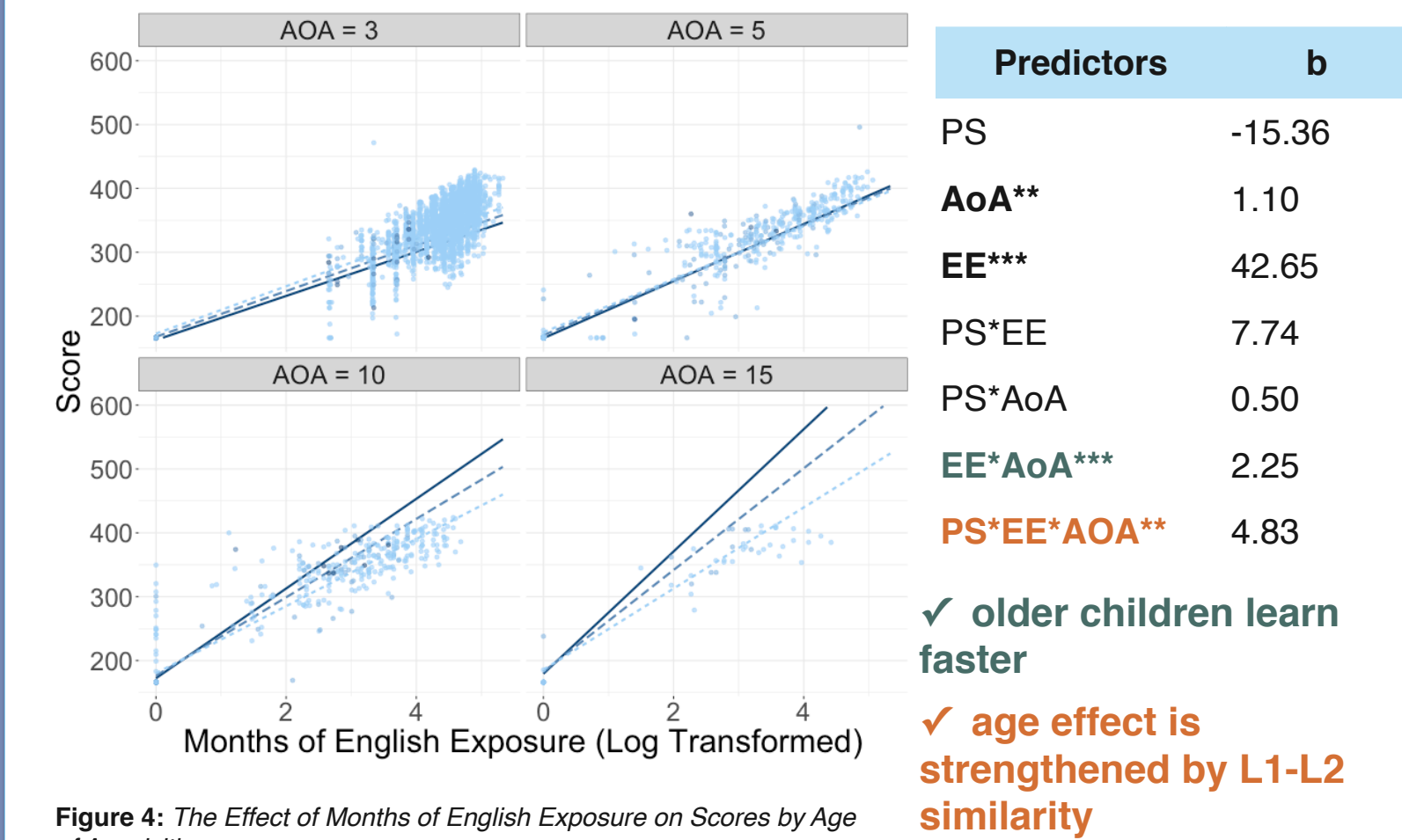


Figure 4: The Effect of Months of English Exposure on Scores by Age of Acquisition

Methods

Data Collection

- Collected secondary data of ELLs' English standardized test (WIDA test) scores and demographic information
- 53 international schools in 35 countries. (obs = 9542, age = 10.92±3.0)
- Participants who were sequential bilinguals Linguistic.

Linguistic Similarity Measures

- Similarity measured as phylogenetic distance between English and the L1 (Littell et al., 2017).

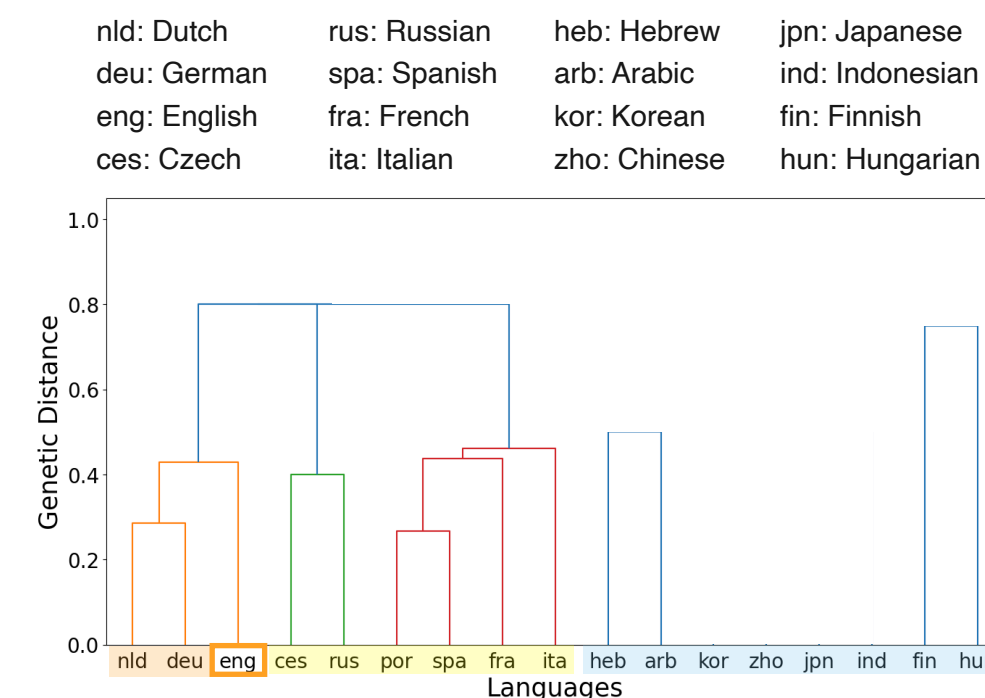


Figure 1: Glottolog hypothesized tree

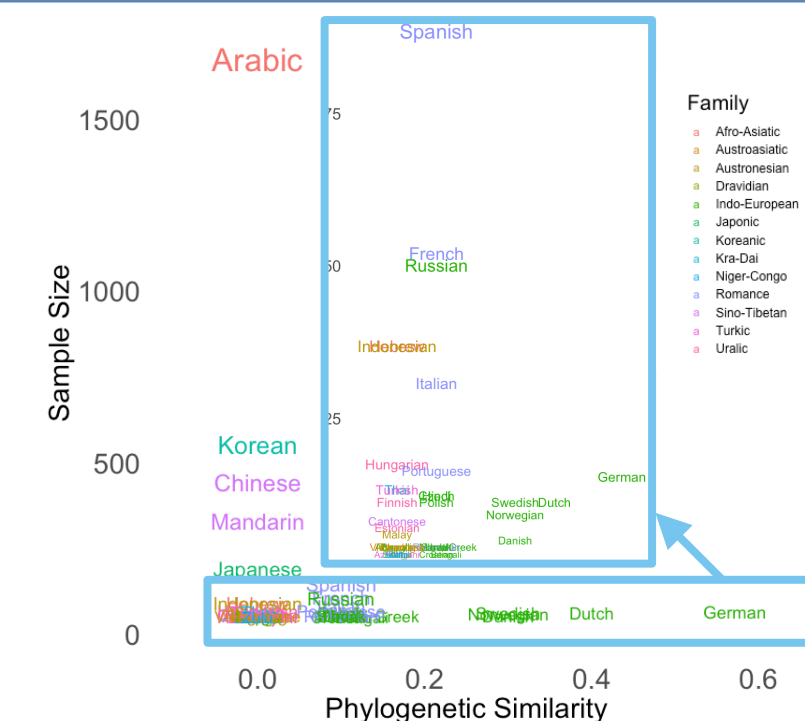


Figure 2: Distribution of Linguistic Similarity and Sample size

Discussion

- Older learners acquire English as L2 faster, particularly if their L1 is more phylogenetically similar to English.
- The study extends previous research Spanish or French native speakers, but rather extends across many L1s.
- If older children learn L2 faster compared to younger children, when is the critical period for children to learn L2?

Reference

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