

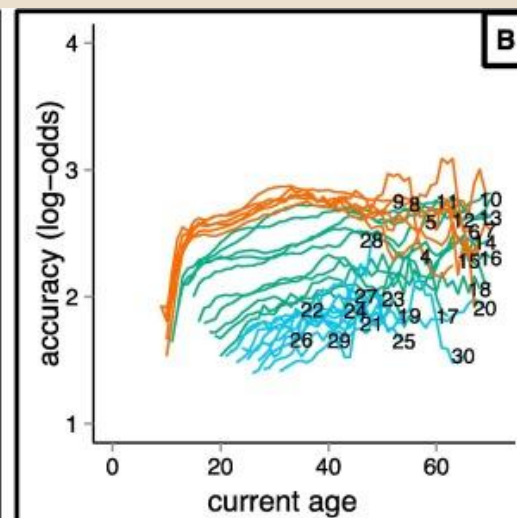
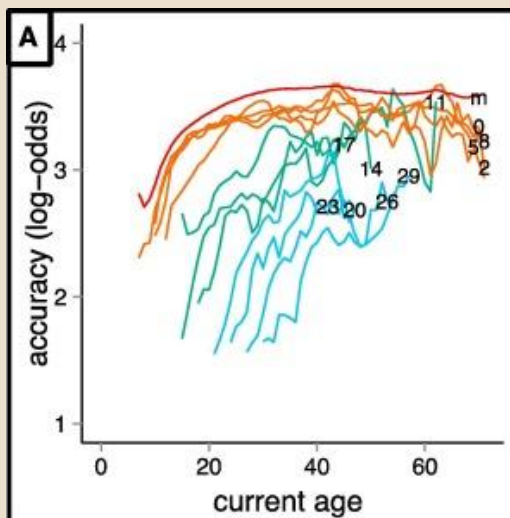
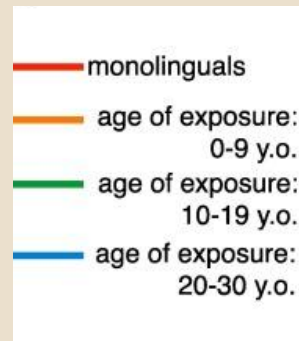
Adults & New Languages

Sarah Mohammed Ali



Parsing the Data Graphic

- 680,333 participants
- A graph: monolinguals & immersion learners
- B graph: non-immersion learners
- X-axis: age of participants
- Y-axis: accuracy on quiz
- Red line: monolinguals
- Orange, Green, Blue: age at which participants were exposed to English

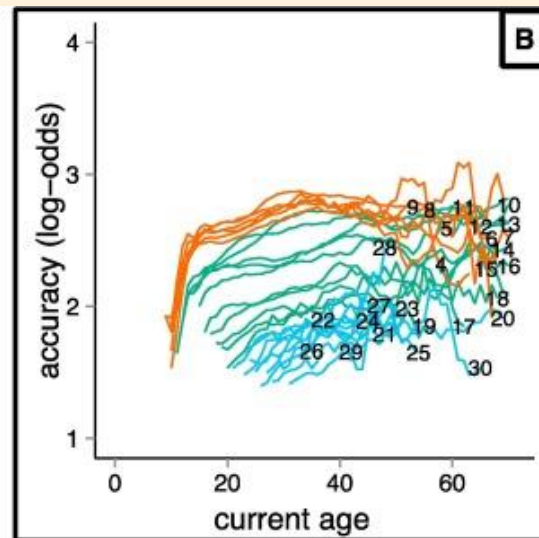
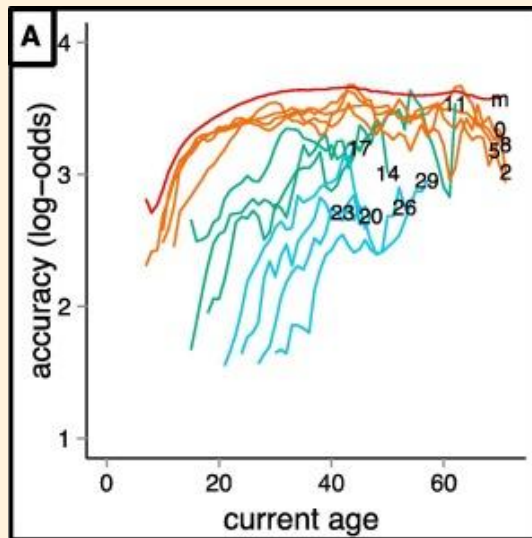


Interpretation Question

Which group had the highest accuracy levels?
Lowest?

What does this tell us
about the correlation
between age and
accuracy?

- monolinguals
- age of exposure:
0-9 y.o.
- age of exposure:
10-19 y.o.
- age of exposure:
20-30 y.o.



Answer

Highest accuracy levels → Monolinguals

Lowest accuracy levels → non immersion learners

Correlation: greater age of exposure when learning a new language correlates to lower accuracy on grammar quiz

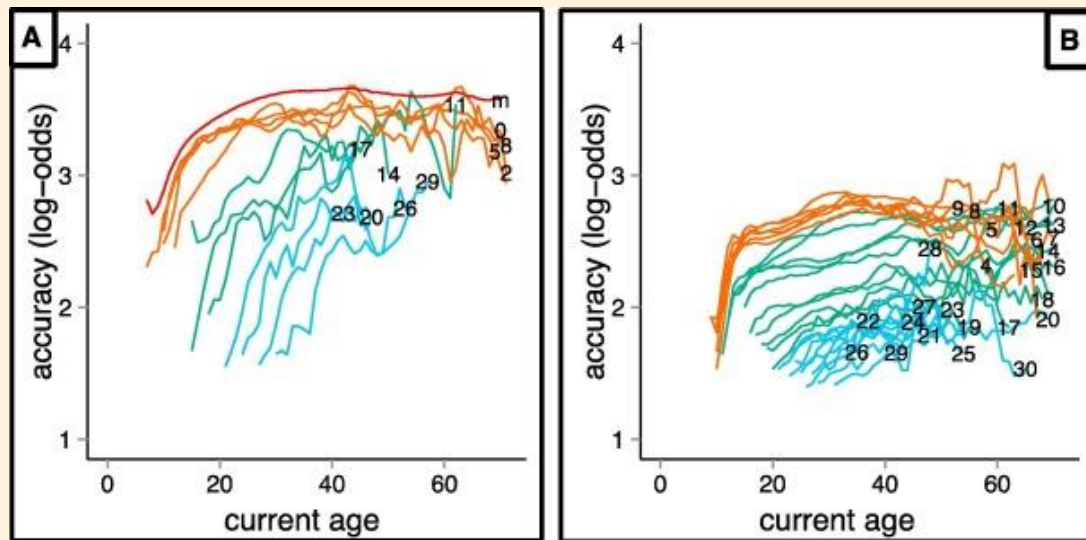
However... EVERY group demonstrated an increased accuracy (even if it's slight) after being exposed to the new language for the first time

Relation to Myth

Kaplan's Myth: Adults can't learn a new language

- *Critical Period Hypothesis*: language learning with native-like fluency decreases after childhood

Based on the data, is there a specific age group where learning a language becomes 'impossible'? How can you prove that based on the graph?



Answer

No, there is no clear age that the data found where learning a language as an adult is impossible.

Since every group demonstrated an increased accuracy rate over time right after exposure, there is strong potential in gaining second language fluency, but not necessarily native-like.

Overall, the rate of learning a language gradually decreases as age of exposure increases. Which does not mean that learning a language fluently is not possible.

Citations

Hartshorne, Joshua K., Joshua B. Tenenbaum, & Steven Pinker. 2018. *A critical period for second language acquisition: Evidence from 2/3 million English speakers*. Cognition 177: 263-277.

Kaplan A. *Women Talk More Than Men: ... And Other Myths about Language Explained*. Cambridge University Press; 2016. pp 111-131.