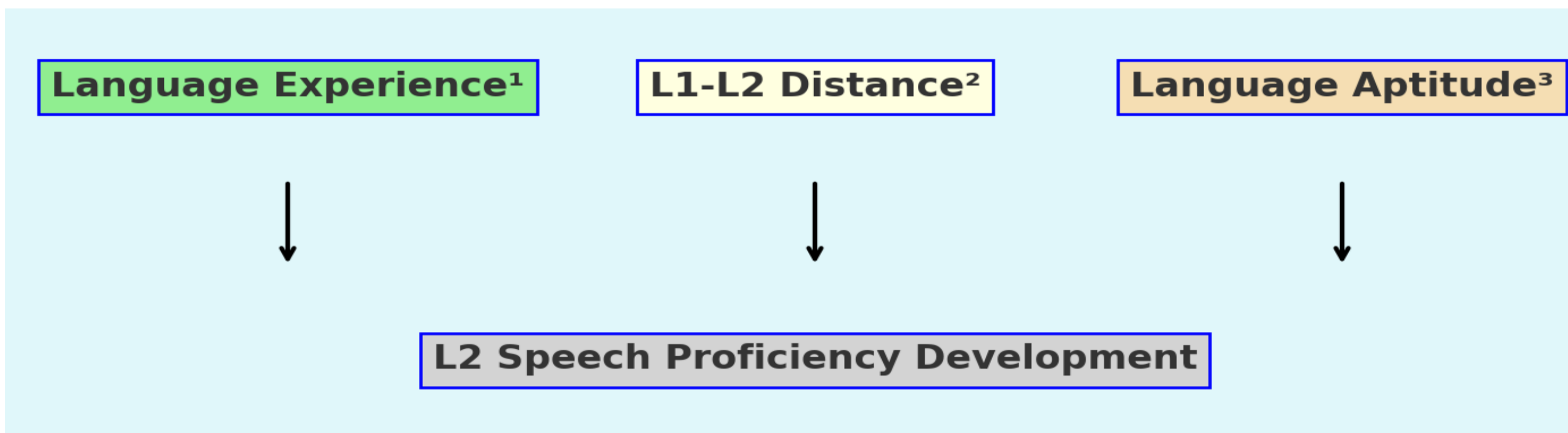




1. Introduction

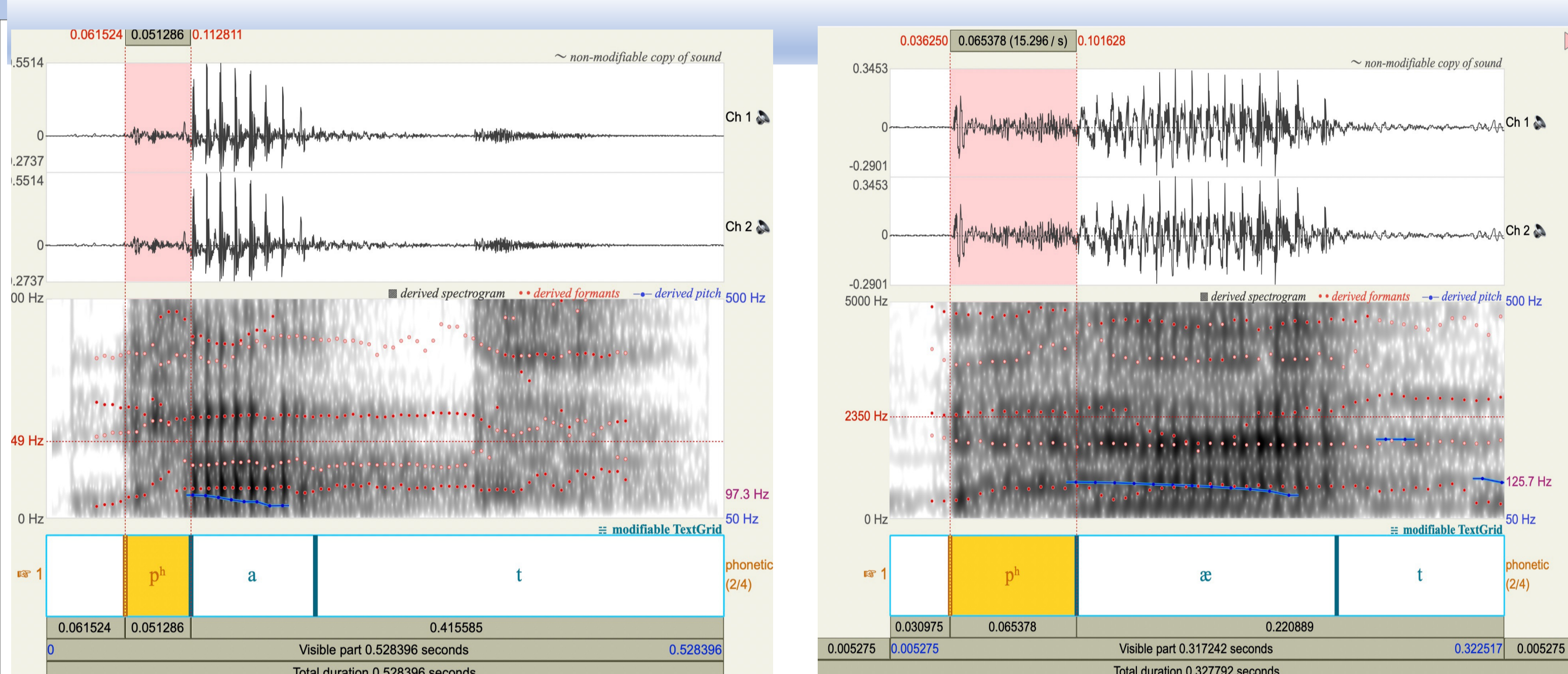
- Achieving native-like L2 proficiency is imperative in today's society
- Despite extensive exposure, L2 speech often remains "accented" even in immersion contexts
- Can L2 learning be tailored to improve this through individual learners' abilities and learning contexts?



❖ Example of English VOT values for initial plosive /p/ produced by:

Intermediate L2 Learners

Advanced L2 Learners



SSBE speakers

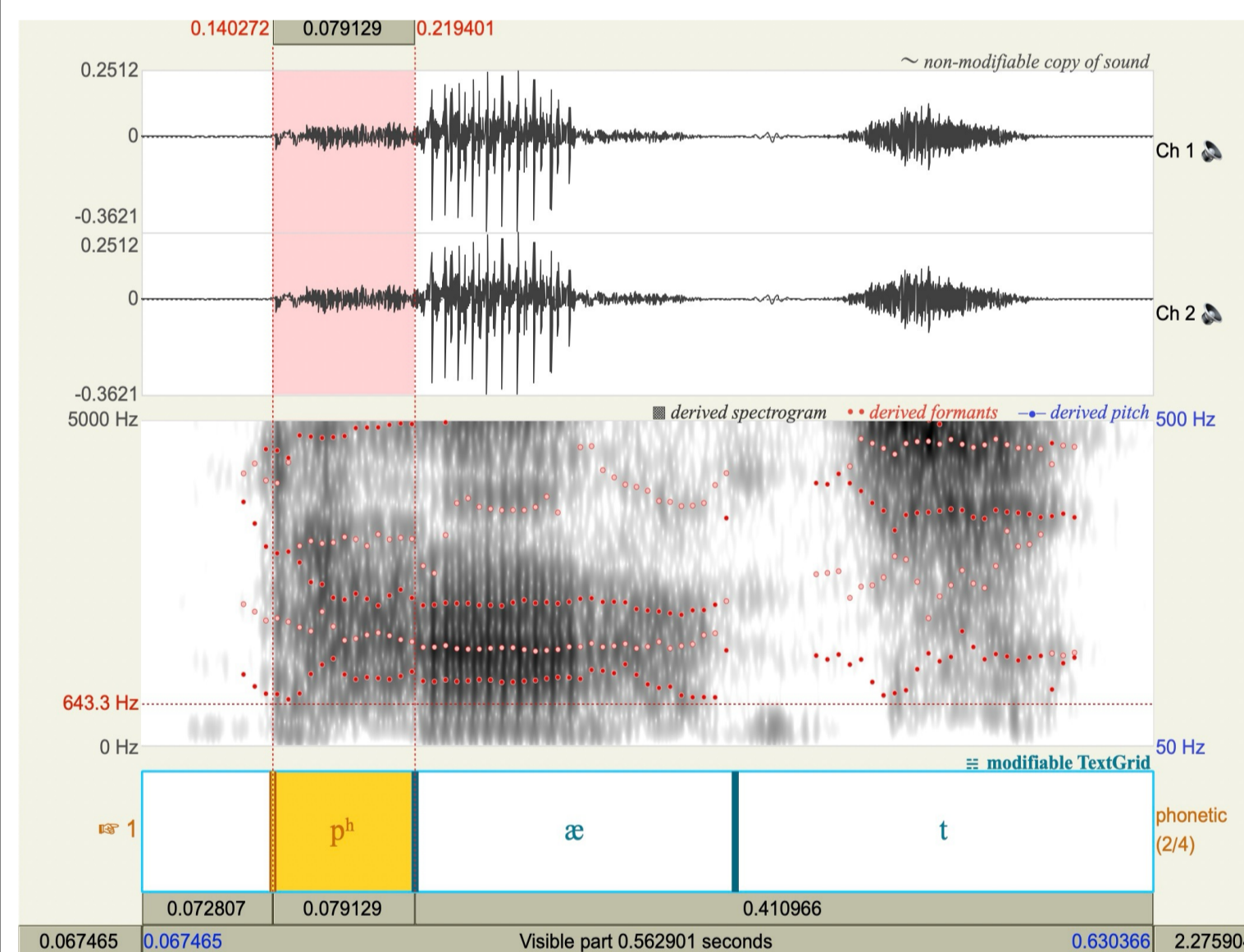


Table 1: Mean VOT values for Polish initial stops (Kopczyński, 1977)

Place_of_Articulation	Voiced	Voiceless
Labial (/b, p/)	-78	37.5
Dental (/d, t/)	-72	33.0
Velar (/g, k/)	-61	49.0

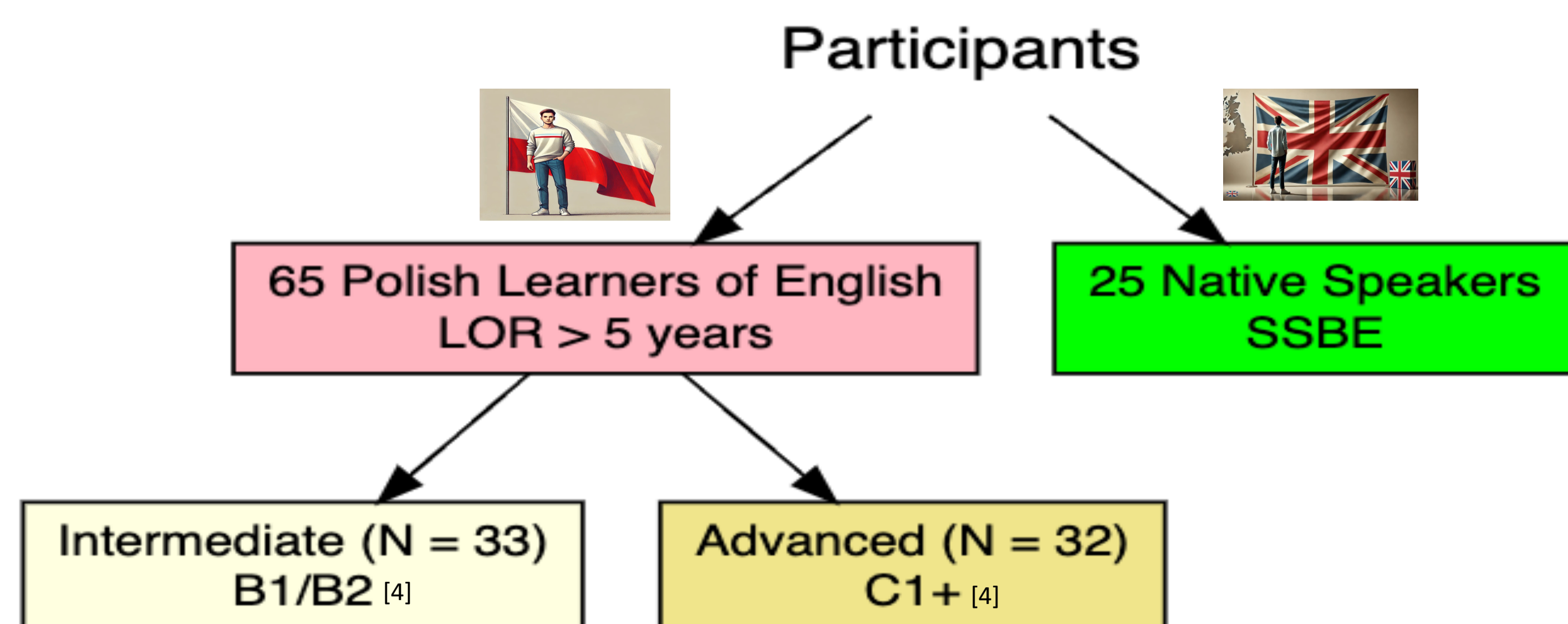
Table 2: Mean VOT values for English initial stops (Kopczyński, 1977)

Place_of_Articulation	Voiced	Voiceless
Labial (/b, p/)	18	82.5
Alveolar (/d, t/)	14	84.0
Velar (/g, k/)	31	71.0

This study:

- To what extent does proficiency level affect the production of more target-like VOT among Polish learners of L2 English (intermediate and advanced)?
- How do language experience (LoR, AoA, Chronological Age), perceptual and cognitive abilities contribute to achieving more native-like L2 VOT production across different proficiency levels?

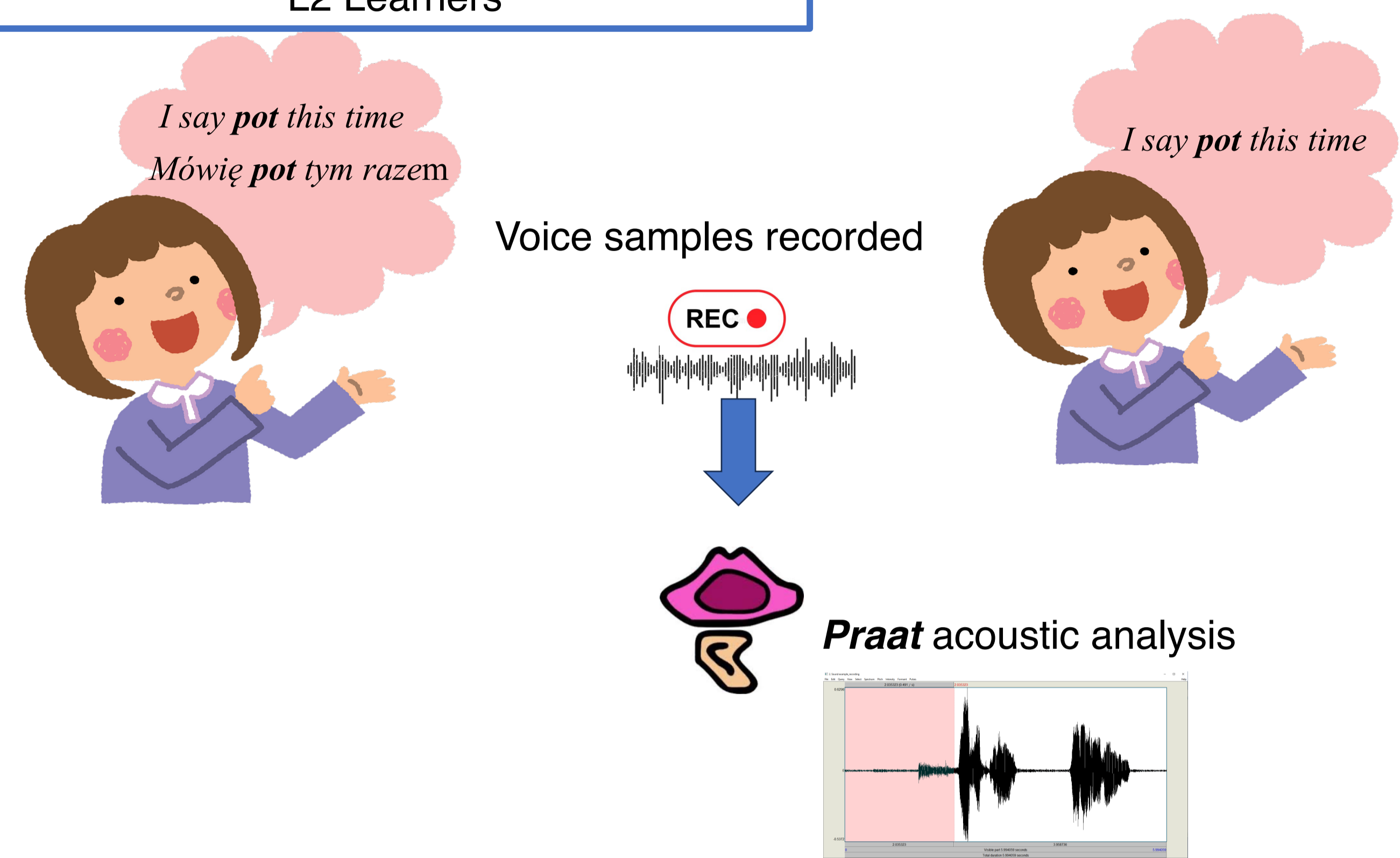
2. Method



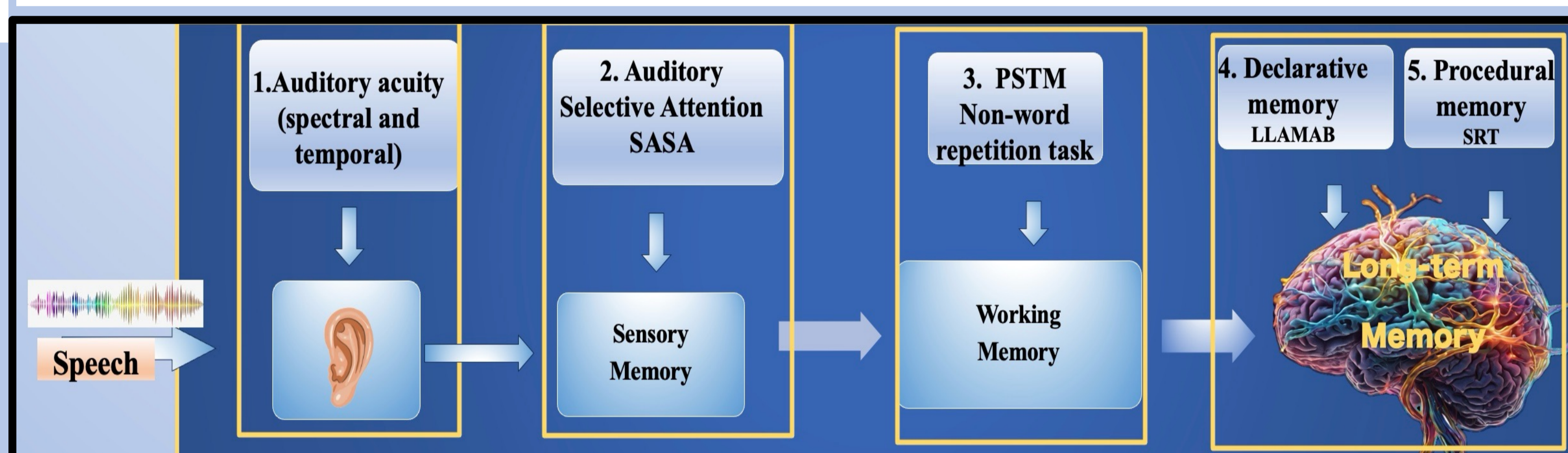
1. Sentence reading: word-initial stops – voiceless /p/, /t/, /k/ and voiced plosives /b/, /d/, /g/

Intermediate (n=33) & Advanced (n=32) L2 Learners

SSBE Native Speakers (n=25)

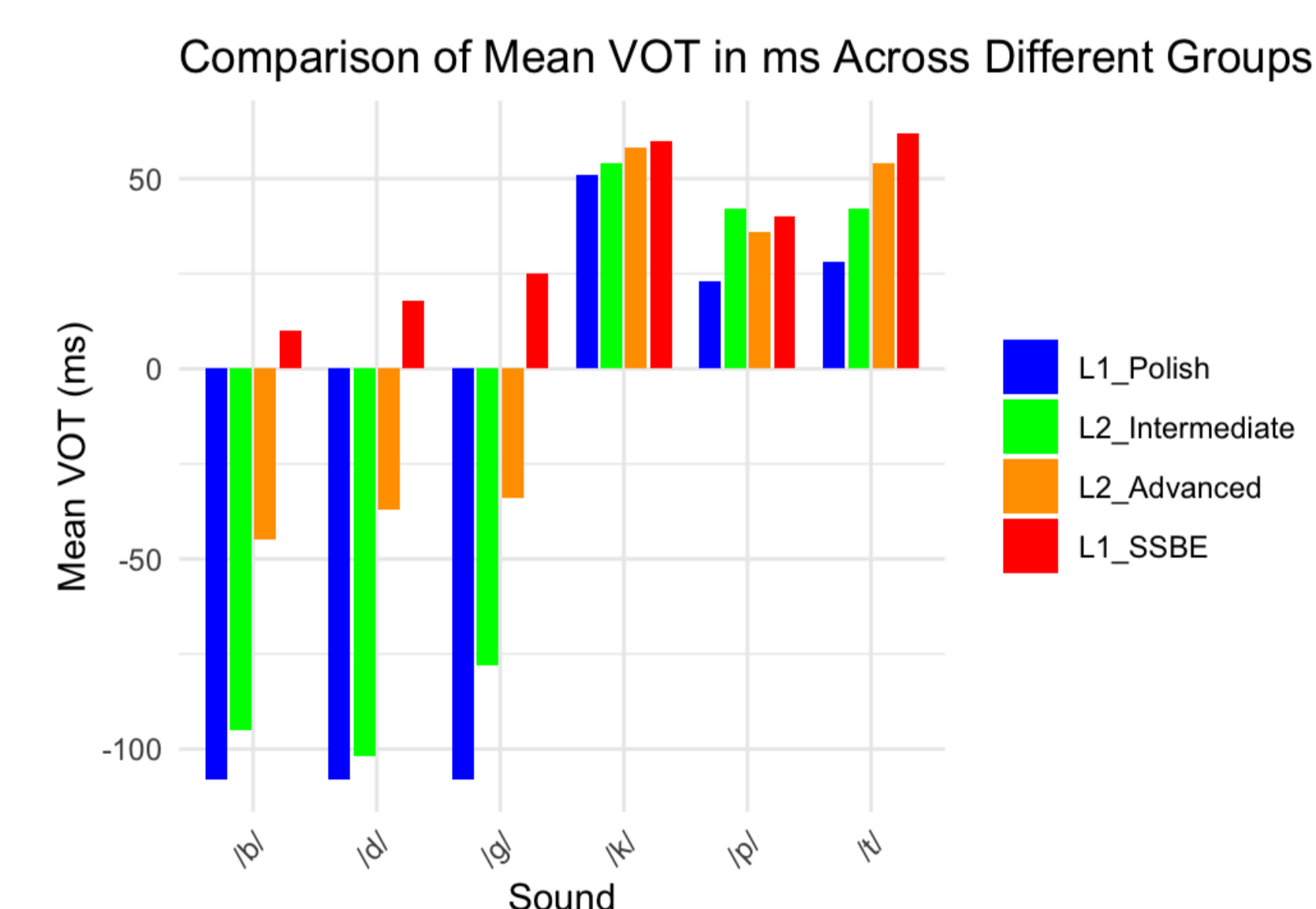


2. Five behavioural tasks to measure participants' abilities

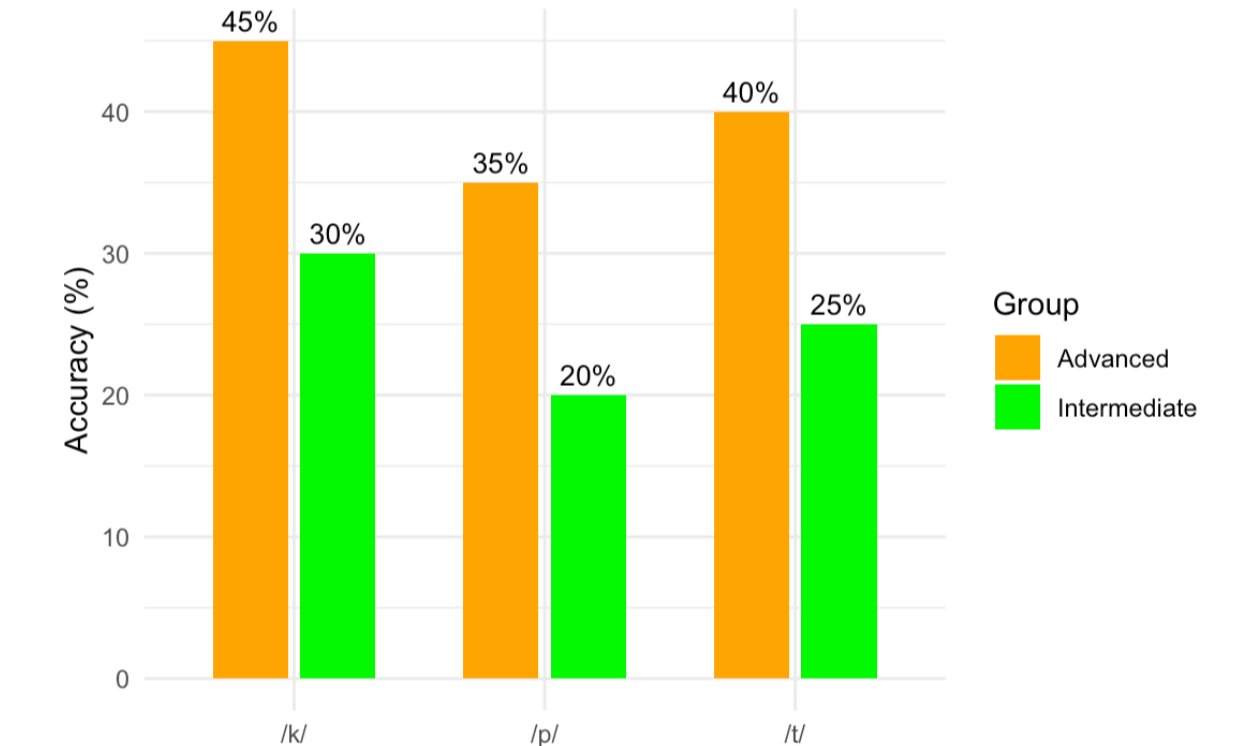


3. Results

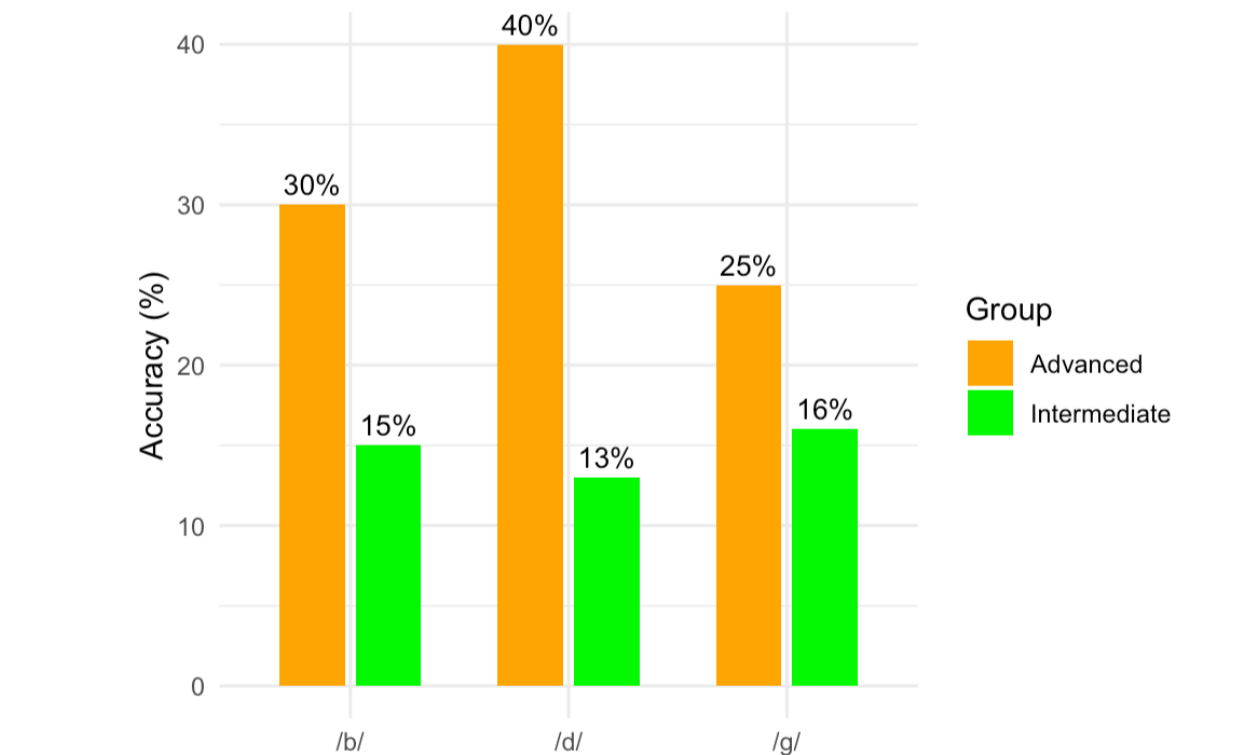
RQ1. VOT accuracy across proficiency levels



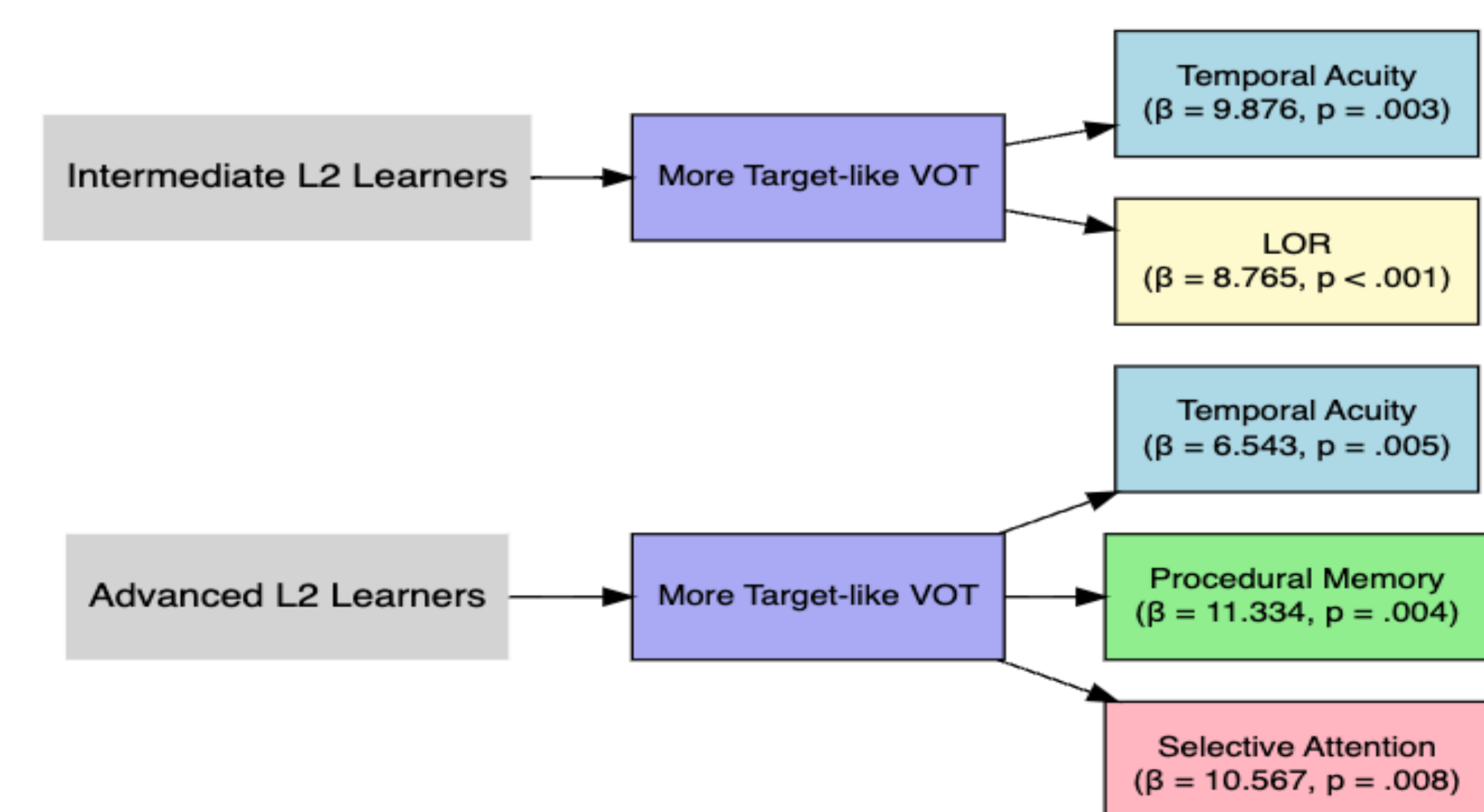
Accuracy of Aspiration in Voiceless Stops (/p/, /t/, /k/)



Production Accuracy of Voiced Stops (/b/, /d/, /g/)



RQ2. Main predictors of L2 VOT production accuracy (mixed effects model)



4. Discussion and Implications

- Language Proficiency did not solely account for higher L2 VOT production accuracy
- Extended immersion (LoR) can lead to more accurate L2 VOT production, particularly in **less proficient (intermediate)** learners
- Temporal acuity aids both proficiency levels, while **procedural memory** and **selective attention** particularly support **advanced learners**
- Different abilities facilitate L2 speech learning depending on the stage of L2 acquisition

References:

¹Saito, K. (2015). *Language Learning*, 65(3), 563-595. ²Best, C. T. (1995). In *Speech Perception and Linguistic Experience*, 171- 204. ³Skehan, P. (2016). In G. Granena et al., *Cognitive individual differences in L2 processing and acquisition* (pp. 15-38). John Benjamins. ⁴Council of Europe (2001). CEFR. <https://coe.int/en/web/language-policy/cefr>

