

Perception of German fricatives by French dyslexic subjects

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It is generally admitted that dyslexic people have a lower performance than non-dyslexic individuals with respect to the categorization and discrimination of phonemes in their L1 (Ramus et al., 2003). Yet, some experiments tend to show that dyslexic people are more performant in allophonic discrimination (Serniclaes & Seck, 2018), a phenomenon that might be explained by the fact that they would not lose their ability to detect universal features during speech perception development (Serniclaes et al., 2004). With respect to L2 overall comprehension, people with dyslexia undergo strong difficulties (Downey et al., 2000), but few studies, such as (Soroli et al., 2010), tackled the performance of these subjects with respect to new sounds.

We investigated the perception of German fricatives by French dyslexic subjects. The targeted sounds were the voiceless alveolar and post-alveolar /s/ and /ʃ/, present in the French and German systems, and the voiceless palatal /ç/, absent in French. The three fricatives and a distractor (/v/) were presented in an AX discrimination task and a categorization task to 20 non-dyslexic and 20 dyslexic young adults with no knowledge of German. The sounds appeared in final position of iC logatomes and were uttered by a German speaker. Each subject made 120 categorizations and 192 discriminations. Concerning categorization, following Best's procedure (Best et al., 2001), people were asked to choose the French closest sound. Praat scripts were used for experimental tests, and data were submitted to Wilcoxon-Mann-Whitney statistical tests.

Results confirm the existence of a (slight) deficit in categorization for dyslexic people and show that the new sound (/ç/) was more difficult to discriminate for them, which proves, for the sounds investigated here, and provided dyslexic subjects keep universal features, that these features does not help them in discriminating new sounds. Large variations among dyslexic individuals were observed.

References

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