Exploring articulation rate entrainment: Interactions over Zoom between typical and atypical speakers

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Speakers are known to change their speech to become more similar to the speech of their interlocutor [e.g. 2]. This phenomenon is extensively investigated in typical speakers and is known as entrainment, or e.g., alignment, accommodation. Entrainment has been found to help speakers in multiple ways, e.g., better task success or higher likeability [3, 4]. However, this process has received less attention in atypical speakers, while entrainment may indeed help these speakers [1]. In this study, we explore whether typical speakers entrain more to atypical speakers than to typical speakers when they are in interaction with an interlocutor over Zoom. More specifically, we study articulation rate of typical speakers in conversation with other typical speakers and with speakers who stutter. We furthermore elaborate on the challenges of these analyses using speech recorded via Zoom.

Forty participants (twenty pairs) participated in this study. Ten pairs of typical speakers and ten different pairs of typical-atypical speakers performed two tasks. First, they performed a picture description by themselves, and then interacted with another speaker to find the differences between pictures in three rounds of the Diapix task [5] over Zoom, lasting around 20 to 30 minutes on average.

We will elaborate on the pre-processing steps and challenges of working with speech recorded over Zoom. Moreover, we will compare articulation rate within speaker between the picture description and the Diapix task, and between the speakers of a pair during the Diapix task. Statistical analyses are being conducted and results will be ready before the Day of the Phonetics.

References

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