2. Impact of Speech Rate and Masked Speech on Listener’s Perception and Report of Function Words
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Purpose: Twenty-three undergraduate students from the University of Kansas with proficiency in American English participated in this study. Age ranged from 18 to 20 years. This experiment was a 2 (target rate) x 2 (background rate) between-subjects randomized controlled trials design. The target and background speech rate were matched or mismatched to be either extended or normal, yielding a total of four conditions. Listeners were randomly assigned to each condition. During the experiment, one target sentence was presented simultaneously with the masker over headphones. Listeners were asked to transcribe the sentences as they heard them from the female target speaker.

Results: After analyzing the data, it was apparent that participants performed the worst when the target speech was extended and the background speech continued at its normal rate. They performed best when target speech was left at its normal rate and when the background speech rate was extended.

Conclusions: Background speech rate may have some effect; however, the target rate of speech seems to have the highest impact on the perception and report of function words. More study is needed to follow up on these results and delve into their intricacies.