Request #: 644 - COMD - Poster or Presentation

Working Memory Capacity and Talker Variability Effect on Adults' Story Comprehension

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Background

Research has demonstrated that listening to speech spoken by multiple talkers negatively impacts speech perception for various stimuli (e.g., word list recall and isolated word recall). Most explanations for this phenomenon focus on low-level processing of perceptual cues, rather than on high-level cognitive processes (e.g., WMC). Other research suggests the detrimental effect of multiple talkers on word recognition is not robust for complex listening tasks (e.g., sentence and story comprehension). However, little research has examined the impact individual WMC may have on multiple-talker story comprehension. In order to better understand how listeners perceive, process, and comprehend spoken language, we must consider potential influences of both multiple talkers and individual differences in cognition. A better understanding of these components is important when considering the effects both factors have on the ability of listeners with hearing loss to perceive and process spoken language.

Sample

I have collected data from 91 participants.

Hypothesis

- Research questions: Does working memory capacity (WMC) predict performance on a story comprehension task? Does narrator variability affects listeners' story comprehension performance?
- Variables: IV: WMC (high, low); Narrator (single, multiple); DV: accuracy and reaction time
- Hypotheses: Single narrator accuracy will be higher than multiple narrator accuracy; Single narrator reaction time will be less than multiple narrator reaction time; Story comprehension accuracy will be lower for those with lower WMC; Story comprehension reaction time will be higher for those with higher WMC

Progress

I have finished data collection and started data cleaning.

Request

I need help planning the analyses for my project.

Timeline

My deadline is February 1, 2023. I am presenting at a conference that has a poster deadline of February 15, 2023.