

**STUDY TITLE:**

Hearing Aid Processing and Working Memory in Realistic Spatial Conditions

**NCT Number:**

NCT04521166

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**Statistical Analysis Plan:**

Primary analyses will assess the main effects and interaction between hearing aid processing (WDRC and directionality) and working memory to determine if the effect of hearing aid processing on the percentage correct (speech intelligibility) is different based on working memory ability. Specifically, a linear mixed effect model will contain fixed effects for working memory, hearing aid processing, and their interaction. A random subject effect will account for repeated measures on a subject and allow for separation of between subject and within subject variance components. Models will also consider adjustment for degree of hearing loss (pure tone average at 0.5, 1, 2, 4 kHz) and age by including both in the model as fixed effects. Residual diagnostics will assess model assumptions and transformations of the outcome may be considered if appropriate. Descriptive statistics will summarize demographic and audiological characteristics of the study population.