



University of Utah

UNDERGRADUATE RESEARCH JOURNAL

**An Analysis of the Effects of Background Noise and Supportive Context on Speech
Recognition Memory in Older Adults
Allesandra Bergmark (Brennan Payne)
Department of Psychology**

Abstract

Prior research has established the negative effect of background noise and ameliorating impact of linguistic context on sentence recall. However, little scientific exploration has been done into the impact of these same variables on word recognition. The present study aimed to establish any associations between these phenomena in older adults. Researchers predicted that the use of supportive context would reduce the negative impact of background noise on recognition. They concurrently anticipated that older adults would consistently recognize and select incorrect answers when presented with phrases semantically similar to correct options. Based on preliminary data, results do not appear to conclude that there is significant evidence for the first prediction. The data collected does indicate that older adults appear to have higher hit rates and false alarm rates in sentences with supportive context, meaning that the second hypothesis is supported. More data will need to be analyzed to demonstrate a relationship between these variables.