# Undergraduate Research Symposium May 19, 2017 Mary Gates Hall

# Online Proceedings

## POSTER SESSION 1

**Commons West, Easel 8**

*11:00 AM to 1:00 PM*

**Dialects Accents and Intelligence: A Study on Dialectal Perceptions**

*Taylor Moore, Junior, Speech and Hearing, Cleveland State University*

*McNair Scholar*

*Mentor: Myrita Wilhite, Cleveland State University*

The United States of America is becoming more and more diverse. There are many ethnicities and as such people across the country speak with many different dialects. It is well-documented that there are linguistic stereotypes and biases associated with the perception of people who use speech that contains certain dialects (Franklin & Hixon, 1999, Reinhard & Messner, 2009). Dialectal speech is not a disorder and Speech-Language Pathologists are trained to recognize these differences but not to correct them. Dialect reflects culture but does not define intelligence. There is a wealth of research on AAVE (Baugh, 1983, Pearson, 2013, Robinson, 2011, Carter, 2010). Many of the researchers compare AAVE to Standard American English (SAE). Very few studies, however, compare AAVE to other dialects. Due to the biases and often negative perception of dialects other than SAE, this focus of this study was to explore perceived likability and intelligence of various dialects. Thirty adults listened to three different voice samples: AAVE, SAE and Arabic accented speech. They then completed a survey rating each speaker's likeability and intelligence. I hypothesize that (1) The speaker of AAVE will be perceived as less intelligent and less likeable than other dialectal speakers, (2) The speakers of SAE will be perceived as more likable and more intelligent than the dialectal speakers, and (3) The speaker of accented speech will be perceived as more intelligent and more likeable than AAV, but less intelligent and likeable than speakers of SAE. These findings may be useful reducing societal linguistic stereotypes and unknown biases.

## POSTER SESSION 2

**Balcony, Easel 92**

*1:00 PM to 2:30 PM*

**The Relation between Early Music Training and Working Memory**

*Hiu Tung Gloria (Gloria) Lam, Senior, Speech and Hearing Sci (Com Disorders)*

*Mary Gates Scholar, UW Honors Program*

*Mentor: Patricia Kuhl*

*Mentor: Christina Zhao, Speech and Hearing Sciences*

Working memory is a cognitive skill that allows temporary storage and manipulation of information. It is an important skill as previous studies have shown relations between working memory and various cognitive abilities, such as reading comprehension and speech perception. So far, evidence have suggested that working memory can be enhanced with training. One of the training experiences that has been extensively researched is early music training. Most studies have shown that music training experience has a positive correlation with working memory while other studies has shown no difference in working memory capacity for musicians and non-musicians. For this study, our aim is to further delve into this controversial topic and seek more information and data to find out whether early music training could enhance working memory. We recruited a group of musicians (N=20) and non-musicians (N=20) and compared working memory capacities between the two groups with two tasks: Memory Updating and Operation Span, targeting slightly different aspects of working memory. We hypothesized that those who had early music training would have higher scores on both tasks. Data analysis has been completed and the initial results from the data shows that there is no significant difference in working memory capacity between musicians and non-musicians. Currently, further analysis of data is still ongoing to help understand the results we observed. We will be discussing the similarities and differences of the tasks compared to previously published studies and how our results contribute to this field.

## POSTER SESSION 4

**Balcony, Easel 86**

*4:00 PM to 6:00 PM*

**Auditory Processing in Children with Autism Spectrum Disorder**

*Rayna Yi (Rayna) Yang, Senior, Speech and Hearing Sci (Com Disorders)*

*Mary Gates Scholar, UW Honors Program*

*Mentor: Adrian KC Lee, Speech & Hearing Sciences*

*Mentor: Bonnie Lau, Otolaryngology-Head and Neck Surgery*

It has been well documented in the literature that many children with autism spectrum disorder (ASD) display abnormalities in sensory processing, which is often displayed through hyper- or hyposensitivity to sensory stimuli. Auditory processing difficulties in particular are shown to be the most common. However, there is limited research into the association between abnormal auditory processing with other factors like language and cognitive ability. This study aims to further examine auditory processing difficulties in children with ASD by first looking at the auditory items on the Short Sensory Profile (SSP), a 38-item caregiver questionnaire measuring sensory reactivity. While the SSP is a measure often used in studies to quantify sensory behaviors and has commonly shown atypical behaviors within the Auditory Filtering domain in children with ASD, it should be noted that additional auditory items are also present within other SSP domains. This study examines all of the items on the SSP that have to do with auditory processing, and scores will be compared between two groups: children (nine to ten years old) with ASD and children with other developmental disorders within the same age range. This study also investigates the relationship between SSP auditory scores with receptive and expressive language scores from the Peabody Picture Vocabulary Test and the Expressive Vocabulary Test, as well as cognitive scores from the Differential Ability Scales. Data analysis is ongoing, and it is hoped that the results will help to increase conversation around this topic and the need for further research into the functional impact of sensory processing difficulties in children with ASD.