

Session: SIRCA Poster

(80 - 09) The Knowledge, Attitudes, Beliefs, and Prevalence of English as a Second Language Middle and High School Students Regarding Noise Exposure



Saturday, February 4, 2023



11:00 AM – 1:00 PM CST



Location: Main Foyer

Level of Difficulty: Intermediate

Student(s)



Maria Angel, n/a

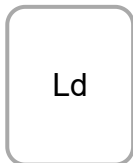
Student
Eastern Illinois University
Charleston, Illinois, United States

Professional(s)



Heidi Ramrattan, AuD

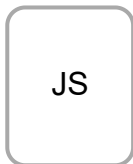
Associate Professor, Department of Communication Disorders and Sciences
Eastern Illinois University
Charleston, Illinois, United States



Lauri deRuiter-Willems, PhD

Assistant Professor, Department of Public Health and Nutrition
Eastern Illinois University
Charleston, Illinois, United States

Student(s)



Jayci Stewart, n/a

Student
Eastern Illinois University
Charleston, Illinois, United States

Disclosure(s):

Maria Angel, n/a: No financial or non-financial relationships to disclose

Heidi Ramrattan, AuD: No financial or non-financial relationships to disclose

Lauri deRuiter-Willems, PhD: No financial or non-financial relationships to disclose

Jayci Stewart, n/a: No financial or non-financial relationships to disclose

Abstract: Hearing loss can have an impact on an individual's quality of life, especially if left untreated. Studies have shown that ESL (English as a Second Language) students struggle in education settings; hearing loss can increase their struggles as well. Many already have trouble communicating in a different language, yet it adds more difficulty for those who also have hearing loss. Goals of this study include: (1) to determine the knowledge, attitudes, and beliefs of Spanish-speaking middle and high school students regarding noise exposure prevention/hearing health, and (2) determine if there is a higher-than-average prevalence of noise induced hearing loss (NIHL) among middle and high school (ESL) students who have Spanish as a first language.

Summary of Presentation : Forty-four subjects were included in the study: twenty-two Spanish-speaking middle and high school students, and twenty-two English-speaking middle and high school students. The participants were assessed with a pure tone audiometry test. Afterwards, the participants were asked to complete a 32-question survey regarding their knowledge, attitudes, and beliefs on noise exposure. The results concluded that NIHL at 3000 and 4000 Hz is more prevalent in the Spanish-speaking middle and high school students as opposed to the English-speaking middle and high school students. However, the data showed that there is a presence of low-frequency hearing loss in the left and right ear at 250 and 500 Hz in the Spanish-speaking middle and high school students which was unexpected. These results could be due to environmental exposure within the Arcola population, or even a post COVID-19 symptom. Further research is needed to try to figure out why there is such a high presence of low-frequency hearing loss in this specific group and what it is from. These results demonstrate the need for intervention programs to help educate ESL middle and high school students of how to prevent NIHL.

Learning Objectives:

At the completion of this activity, participants should be able to:

- Participants will be able to describe three different beliefs between Spanish-speaking middle and high school students compared to English-speaking middle and high school students.
- Participants will be able to describe the differences between the prevalence of noise induced hearing loss in the Spanish-speaking middle and high school students as opposed to the English-speaking middle and high school students.
- Participants will be able to state the need for intervention programs to help educate ESL middle and high school students of how to prevent NIHL.