EYE MOVEMENTS DURING SIGN-SUPPORTED SPEECH COMPREHENSION BY DEAF ADOLESCENTS

Eliana Mastrantuono, David Saldaña Sage, Isabel Rodríguez Ortiz
University of Seville – Individual differences, Language and Cognition Lab
Contact email address: emastrantuono@us.es

Thematic Session: 2. Language disorders in monolingual and bilingual speakers
Preferred Presentation: Oral Presentation

ABSTRACT:

Introduction

Sign-supported speech (SSS) has been widely used in the education of deaf children. However, not many studies have explored the efficiency of SSS as an augmentative communication system.

Purpose

In this study we investigate if the use of SSS is a predictor of success in oral language comprehension among deaf adolescents. We also collect data about the area that deaf people look at while they are perceiving language in whatever modality, in order to clarify if there is any relationship between visual perception and comprehension.

Method

Two groups of 30 participants were recruited: deaf adolescents using or not technological advances such as hearing aids or cochlear-implanted and a chronological age-matched hearing group.

Stimuli were a set of short descriptive and narrative texts that described spatial layouts. The texts were videotaped in three versions—with sign language, sign-supported speech or speech only—and presented individually to the participants. Comprehension was assessed with multiple-choice questions. Eye movements were monitored with an SR Research EyeLink 1000 system.

Results

Results stress the potential of SSS in conveying the full meaning of texts to a higher degree than speech for this population. The eye gaze behaviour is expected to be connected to the level of comprehension and influenced by message content, specifically by locative constructions.

Conclusions
The additional resources in speech comprehension offered by the use of SSS address the opportunity to promote a systematic use of SSS within the institutions involved in the care of the deaf person.