An Exploratory Survey Questionnaire to Understand What Emotions Are Important and Difficult to Communicate for People with Dysarthria and Their Methodology of Communicating

Authors: Lubna Alhinti, Heidi Christensen, Stuart Cunningham

Abstract : People with speech disorders may rely on augmentative and alternative communication (AAC) technologies to help them communicate. However, the limitations of the current AAC technologies act as barriers to the optimal use of these technologies in daily communication settings. The ability to communicate effectively relies on a number of factors that are not limited to the intelligibility of the spoken words. In fact, non-verbal cues play a critical role in the correct comprehension of messages and having to rely on verbal communication only, as is the case with current AAC technology, may contribute to problems in communication. This is especially true for people's ability to express their feelings and emotions, which are communicated to a large part through non-verbal cues. This paper focuses on understanding more about the non-verbal communication ability of people with dysarthria, with the overarching aim of this research being to improve AAC technology by allowing people with dysarthria to better communicate emotions. Preliminary survey results are presented that gives an understanding of how people with dysarthria convey emotions, what emotions that are important for them to get across, what emotions that are difficult for them to convey, and whether there is a difference in communicating emotions when speaking to familiar versus unfamiliar people.

Keywords: alternative and augmentative communication technology, dysarthria, speech emotion recognition, VIVOCA

Conference Title: ICBRA 2020: International Conference on Bioinformatics Research and Applications

Conference Location : Paris, France **Conference Dates :** March 26-27, 2020