

ABSTRACT

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Title: PHONEMIC RESTORATION FOR AUDIOVISUAL SPEECH IN THE BROADER AUTISM PHENOTYPE

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This paper analyzes the behavioral data of college students at a public university in New England, and the role of visual influence on auditory perception. The Social Responsiveness Scale (SRS-2, Constantino & Gruber, 2012) was used to measure autism-like traits in the general population to see if SRS scores were correlated with audiovisual speech perception. Participants performed a perceptual task where they discriminated an auditory /ba/ and a reduced /ba/ (sounds more like an /a/, referred to as /a/) in the context of three videos: a video showing a speaker producing /ba/, a video of the speaker with the mouth pixelated so that it could not be seen, and a video of the speaker's mouth as multiple points, which do not resemble a face. Participants were asked to indicate by button press if they heard /ba/ or /a/ on each trial. There was an interaction of condition x sound for accuracy for responses, indicating that in the audiovisual condition, /a/ sounds were less accurately identified (heard as /ba/) when the speaker's face could be seen, indicating that a visual phonemic restoration took place in this condition.