Organization for Fundamental Education

Key words

Asian Studies, World Cultures, History, Technology, Dialects and Accents, Facemasks



B.A. East Asian Languages and Cultures Studies / Assistant Professor

Main research themes and their characteristics

Education

Bachelor of Arts in East Asian Languages and Cultures Studies, minor in Comparative World Religions, Rutgers University

Professional Background

JET Programme ALT 2006-2011

English Language Instructor, International English School (Fukui) 2011-2014 Assistant Professor, Fukui University of Technology 2014-present

Consultations, Lectures, and Collaborative Research Themes

Use of Technology in the Classroom; Lessons and Strategies for Non-Academic Senior High Schools; Introduction to American English Dialects

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Edwin Hart

[Facemask occlusion's impact on L2 listening comprehension]

Since the start of the COVID-19 pandemic, the wearing of face masks during all interpersonal contact has become our "new normal." Though an indispensable part of our daily outings, it is indisputable that masks impede verbal communication by both muffling speech sounds and blocking visual cues (e.g., facial expressions, emotional information) from view. However, while past studies have suggested that these factors do not cause significant impediments to comprehension among speakers of the same first language, this study sought to investigate the impact that masked speech had on language learners' comprehension of a second language. A sample of 192 Japanese university students were divided into groups of 64 and asked to listen to a short (89 second) speech in English. In order to isolate the effects of visual cues on listening comprehension, the same audio recording was used for all of the experimental groups. Condition One was a video of a speaker with no mask (the audio from this recording was used in the subsequent groups). Condition Two was a video of the same speaker wearing a mask, with the audio from the unmasked video dubbed over it. Condition Three was just the audio recording. Results indicated that learners had significantly more difficulty comprehending the speech when viewing a masked speaker, even more so than when they were just listening to voice recording (i.e., with no accompanying picture).

Though the wearing of facemasks makes it more difficult for students to understand what is being spoken, one should not infer that the best solution is to abolish the use of masks in the learning environment altogether. Rather, it is important for educators to adapt and develop pedagogies which can work around such difficulties in order to best serve the students and their learning (e.g. online/video lessons).

Tab1. Descriptive Statistics of Comprehension Quiz Scores

	Group NM		Group M		Group AO	
	M	SD	M	SD	M	SD
English Proficiency	31.65	10.45	31.14	10.09	32.14	9.44
Quiz Score	5.92	1.24	4.84	1.87	5.56	1.51

Note. All groups n = 64. English proficiency scale = 0: min, 50: max. The scoring scale was = 0: min, 10: max.

Tab.2 Pairwise Mann-Whitney Test Output(with Bonferroni corrections

	z	p	r	95% CI
NM - M	3.45**	< .001	.31	[.13, .45]
M - AO	-2.14*	.03	.19	[.01, .35]
NM - AO	1.48	.14	.13	[04, .30]

Note. * denotes significance at the p = .05 level. ** denotes significance at the p < .001 level.

Major academic publications

Lee, B. J., & Hart, E. T. (2022). Facemask occlusion's impact on L2 listening comprehension. Speech Communication, 139 (2022), 45-50. https://doi.org/10.1016/j.specom.2022.03.005