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Speech Accommodation to Varying Acoustical Environments MARK BERARDI, TIMOTHY LEISHMAN¹, Brigham Young University — Differing acoustical environments can result in changes to voice use. This study aims to ascertain unhealthy speech accommodations (practices that may lead to voice disorders) that correlate with certain acoustical environments. Understanding of optimal talking environments will enable architectural acousticians to better prepare classrooms or other occupational settings for improved voice health. In this study we recorded native English speakers in an anechoic chamber and variable acoustics chamber at Brigham Young University. The participants were equipped with a headworn microphone near the mouth and a microphone/accelerometer collar on the neck. They were recorded three times in both chambers with undisclosed changes to the variable acoustics environment. The three distinct conditions included changes to both the reverberation time and ambient noise. The results from preliminary analysis of the recordings will be discussed, including any gender-associated speech accommodation differences.

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