
Clear speech is significantly more intelligible than conversational speech for a variety of listeners and backgrounds [e.g., Payton et al., J. Acoust. Soc. Am. 95, 1581-1592 (1994)]. While clear speech is typically spoken more slowly than conversational speech [Picheny et al., J. Speech Hear. Res. 29, 434-446 (1986); Uchanski et al., ibid. 39, 494-509 (1996)], talkers can produce clear speech at normal rates with training [Krause and Braida, J. Acoust. Soc. Am. 112, 2165-2172 (2002)], suggesting that clear speech has some acoustic properties that improve intelligibility without significantly altering rate. One source of data that could help identify these acoustic properties is how listeners' phonetic level error patterns change from conversational (conv/normal) speech to clear speech at normal rates (clear/normal speech). Any error types that are significantly reduced in clear/normal speech can be assumed to be transmitted more faithfully by the acoustics of clear/normal speech. Because phonetic level error analysis on sentence materials is often difficult due to word omissions and insertions, we first conducted a word intelligibility study to facilitate the error analysis. Words from four talkers were excised from 50 conv/normal and 50 clear/normal sentences and presented to eight normal-hearing listeners in the presence of noise, resulting in a database with exactly one response word from each listener for a given target word. We will present an initial tabulation of phonetic level error patterns evident in this database for conv/normal and clear/normal speech as well as word intelligibility results for both speaking modes.