

de Lacy, Paul (1998). The effect of consonant clusters on vowel duration in American English, ms. University of Massachusetts, Amherst. (<http://ling.rutgers.edu/~delacy>)

This study examines the effect of word-final consonant clusters on vowel duration in American English. The duration of the high front lax vowel [ɪ] was measured with respect to 64 different word-final consonant

sequences of one, two, and three segments in length. A set of 960 [tɪC(C)(C)] words were produced by three speakers and analysed. In accordance with previous studies, it was found that both voicing and continuancy of a single word-final consonant affects vowel duration.

In comparison, for Sonorant+C clusters the effect of the C's voicing was evident but its continuancy had no effect. All other consonants blocked the effect of continuancy as well as voicing. The number of consonants was found to have a small but systematic effect on vowel duration, with sequences of two and three consonants causing shortening of 10-20ms except in sequences beginning with voiceless stops.