Abstract

This study explores the difficulties of producing nasals which native English speakers (NESs) may confront when they are learning Taiwanese. The first step is to compare their performance with that of native Taiwanese speakers (NTSs) via acoustic measurements. The second is to compare the degrees of perception among NESs with identification tasks. The study selected 13 NTSs and 13 NESs to record 47 Taiwanese words and 37 English words for extracting numerical data. The amplitude of the first frequency (A1) was the criteria to determine nasal degrees. Statistical results and SLA (second language acquisition) discussion revealed the following major findings.

Firstly, the two groups exhibited some significant differences in producing nasal vowels, especially in mid, low vowels, and syllabic nasal /ŋ/. The two subgroups, the advanced and beginning learners of NESs, performed significantly differently. Secondly, in terms of the SLA theories, the study showed that new contexts cause learning difficulties for L2 learners. The NESs performed better in the context of [N+V] and [ŋ] than in [V] and [ŋ]; that is, positive language transfer accelerated L2 learning. Thirdly, likely to the phenomena that NESs failed to produce native-like nasal vowels and coda /ŋ/, NESs could not distinguish /n/ and /ŋ/ well, either.

Based on the findings, the hierarchical degrees of learning difficulties can be predicted. Therefore, a hierarchy paradigm for teaching pronunciation can be established following a better understanding of acoustic factors.

Key words: Interlanguage, Acoustic Phonetics, Learning Taiwanese, Perception