The Efficacy of Lexical Stress Diacritics in L2 Training: The English Comprehensibility of Korean Speakers
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Abstract
The study investigates the efficacy of lexical stress diacritics on L2 English pronunciation of L1 Korean speakers. Repeated measurement of sentence-reading tasks was administered to collect and analyze speech samples from 30 L1 Korean speakers. The findings indicate significant improvement in both accentedness and comprehensibility ratings after a training session.

Why Suprasegmental Features?
Suprasegmental errors (e.g., stress and intonation) are as much or more responsible for accentedness and comprehensibility ratings than are segmentals (Derwing & Munro, 1995; Kang, Rubin, & Pickering, 2010).

Why Lexical Stress?
Studies reported that lexical stress errors contributed to both accentedness and comprehensibility ratings (Field, 2005; Gallego, 1990; Trofimovich & Issacs, 2012).

English vs. Korean Prosody
English has lexically contrastive stress accent. Korean does not have lexically contrastive stress accent but Accental Phrase (AP), which is larger than a word level, but smaller than intonational phrase (Jun, 1996).

→ English stress can be challenging for Korean speakers to acquire due to the different prosodic systems of the two languages.
→ Enhanced input that can help them improve their comprehensibility is needed.

The Tasks of the Study
Two types of sentence-reading tasks (one with lexical stress diacritics and the other without lexical stress diacritics) were employed to elicit speech samples.

Hypothesis
Enhanced input was expected to help L1 Korean speakers generate speech with better comprehensibility.

Research Questions
What is the difference in native Korean speakers’ performance on the following three tests: 1) a sentence reading test without lexical stress diacritics, 2) a sentence reading test with lexical stress diacritics, and 3) a sentence reading test without lexical stress diacritics that occurs two days after the first two tests, as measured by comprehensibility and accentedness?

Participants
30 L1 Korean speakers of English (16 female, 14 male) with less than 1 year living in English speaking countries.

TEST 1
Participants read aloud 15 English sentences, each with 13 syllables and 3 lexical stresses without diacritics (e.g., I have announced a recall of the computers.). They were recorded using a high-quality recorder as an mp3 file format at 44100Hz sampling frequency with 256 kbps bit-rate.

Training Session
• Participants were given explicit instruction on the production of increased pitch and extended duration as a marker of English stress.

• Five new sentences written with diacritics to mark stress placement were read aloud.
  e.g., I love the University of Victoria.

TEST 2
Immediately following the training, participants read the same sentences from TEST 1 but with diacritics included.
  e.g., I need to announce a recall of the computers.

TEST 3
Two days after the TEST 1 and TEST 2, participants read the same sentences without diacritics to see if the effects of the training were retained.

Musical notation was used to help participants understand pitch change.

Conclusions
The treatment led participants to produce speech with better comprehensibility.

• TEST 1 vs. TEST 3: participants successfully applied what they learned from the treatment into the task when the diacritics were removed.
• TEST 2 vs. TEST 3: the effects of the training were retained.

Pedagogical Implications
Providing enhanced input with ESL speakers whose L1 does not have contrastive stress can be helpful for learning stress patterns as well as improving comprehensibility.

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