



Sentence Intelligibility for Korean Speakers of English: Program Outcomes

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Background

Services provided by speech-language pathologists in accent modification (also known as accent reduction and accent addition) have been steadily growing within our profession and have been proven lucrative in private clinics around the world (Cecil-Reed, *US News & World Report*, 2008). Further, ASHA clearly supports improvement in the training of future clinicians in accent modification (asha.org/public/speech/development/accent_mod). However, few studies are available for practicing clinicians to evaluate the effectiveness of this type of pronunciation training.

The MU Accent Modification & Pronunciation Program (MU AMP) opened in January, 2006. Since then, nearly 150 individuals from around the world have participated in MU AMP, 112 of which were visiting scholars from Korea. The focus of this training has been on American English intonation and coarticulation as well as pronunciation of General American English vowels and consonants.

Method

- 112 adult Korean visiting scholars
- 12-13 sessions per semester (50-min. sessions, 1x per week)
- Average attendance rate was 94.8%
- Individual, paired and small group sessions

Each semester began with a short evaluation, consisting of a conversational sample and adapted materials from *Speaking Clearly* (Hahner, Sokoloff & Salisch, 2006), *Well Said* (Grant, 2000) and *Proficiency in Oral English Communication* (Sikorski, 2006). For each individual, baseline data using the Sentence Intelligibility Test (SIT; Yorkston, Beukelman & Tice) was also obtained and transcribed by an unfamiliar American listener. Each AMP participant had their own set of unique, unpredictable sentences randomly generated by the SIT program. These same sentences were used to obtain endline intelligibility data for each participant.

Weekly sessions focused on a different aspect of American pronunciation important for Korean speakers of American English. The clinicians provided auditory, visual, and tactile cues when introducing each target phoneme. Visual cues included modeling of tongue placement, pictures of tongue positions (McLeod & Singh, 2009) and hand gestures showing movement of the tongue and other articulators. Additionally, the clinicians often utilized a mirror to model articulatory placement side-by-side and a dry erase board to write out pronunciations phonetically or to provide a visual model of the participant's production of a word or intonation contour. Programs within Kay Elemetrics *Computer Speech Lab* were also used for visual feedback. Written rules and verbal explanations were also used by the clinicians for linking, rhythm, intonation and pausing to assist participants become more proficient in American English communication (Sikorski, 2006).

Results



MU AMP, Spring, 2010; Photo courtesy of the Columbia Missourian



MU AMP, Spring, 2006; Photo courtesy of the Associated Press



MU AMP, Spring, 2009; Photo courtesy of the Columbia Daily Tribune

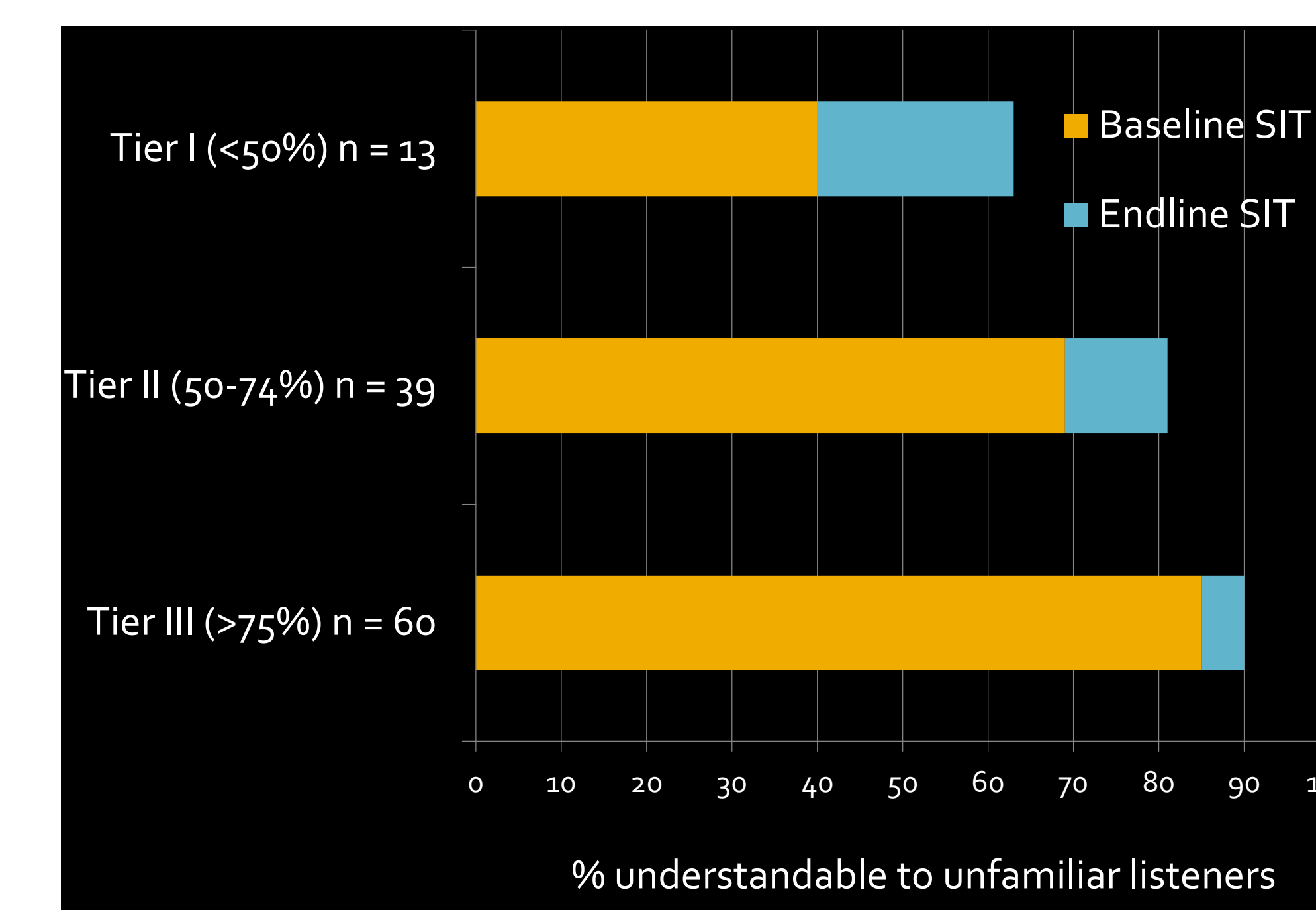
Results

When viewed as a whole, AMP participants had a mean baseline understandability rating of 63.2% and endline understandability rating of 77.1% when using SIT unpredictable sentences evaluated by unfamiliar listeners (SSD; $p < .005$). When this group data was divided into tiers based on baseline understandability and compared using paired samples t-tests, statistically significant gains were also observed ($p < .005$).

Sentence Intelligibility Outcomes

Tier 1	< 50% at baseline	23.2%* average improvement	13 individuals
Tier 2	50-74% at baseline	12.0%* average improvement	39 individuals
Tier 3	75% - 95% at baseline	4.1%* average improvement	60 individuals

* denotes $p < .005$ in paired samples t-tests



Discussion

Learning English is an important aspect of Korean culture. Participants said that learning English was essential to them because they could get better paying jobs and the opportunity to come to America and experience the culture for themselves as well as their children. English is the international language of business, so this also contributed to their desire to become proficient in the language, since many of the participants were involved in international affairs and commerce within the Korean government.

For these reasons, the AMP participants were highly motivated to improve their English pronunciation. This motivation led to high rates of attendance, intense practice inside and outside of the sessions and a willingness to use critiques provided by the clinicians to improve their skills. Something, the participants frequently observed, prominently lacking in all self-study and on-line programs.

Besides notable group data improvements, many factors contributed to individual successes within the MU AMP program. Participants who exhibited better comprehension of the English language, finer auditory discrimination abilities, and a willingness to accept suggested corrections often experienced the greatest gains in their English language proficiency.

While some errors persisted in the participants' American English communication, most exhibited increased abilities to correctly articulate previously difficult phonemes and apply more native-like intonation and prosodic features of English.

The participants consistently expressed that they were not confident with their English pronunciation prior to participating in the MU AMP program and noticed that American listeners had difficulty understanding them. After this explicit instruction, they found they were more likely to be understood by American listeners, and were therefore more likely to talk and interact with Americans, and in so doing, obtain more practice in proficient pronunciation.

Resources & References

- Computer Speech Laboratory (kayelemetrics.com)
- Grant (2000), *Well Said*
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- Kuster, JM (www.mnsu.edu/comdis/kuster4/leader)
- McLeod (2007), *The International Guide to Speech Acquisition*
- McLeod & Singh (2009), *Seeing Speech: A Quick Guide to Speech Sounds*.
- Sikorski (2006), *Mastering Effective English Communication* series
- Wilner & Feinstein-Whittaker (2009), *RULES by the Sound*
- National Public Radio (npr.org)
- Voice of America – Special English version (voanews/learningenglish/home/)
- University College London Department of Phonetics & Linguistics (phon.ucl.ac.uk)

