

Non-Native Speakers' Self-Assessment of English Pronunciation

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### Abstract

Research on self-assessment of pronunciation has shown that learners are often unaware of their pronunciation errors, and the few errors they can describe are often at the segmental level. However, studies of self-assessment to date are limited in their investigation of whether or not a learner's first language (L1) and past pronunciation instruction affect self-assessment. In this study, 19 learners from different L1 backgrounds self-assessed their recording of segmentals, scripted speech, a dialogue, and free speech. Results revealed that these learners were largely unable to find their errors, and L1 and past pronunciation were not statistically significant in the amount of correct errors found. Although the sample size was limited and future research should further investigate the effect of L1 and past-pronunciation training on learner self-assessment of pronunciation, the results do imply the need for educators to individualize their pronunciation training.

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### **Background**

Self-assessment through audio recording playback is an instrument used to practice self-monitoring. According to Oxford (1990), self-monitoring is the skill of hearing and correcting errors in real time. Morley (1991) speaks of self-monitoring as one of the ways in which learners can become actively involved in improving their pronunciation skills: as they talk and listen to themselves, they acquire the skills to independently self-correct their speech, lessening their dependency on teacher correction. These skills, however, are not acquired by chance, and teachers have an important role in shaping these skills at the beginning of the learning process as they give learners one to two concrete areas at a time in which to begin self-monitoring (Morley, 1991). In other words, before the students can begin the adjustment of their pronunciation, they must first be alerted to the areas in which they need to make modifications.

It is generally understood that English language learners find it challenging to perform a self-assessment of their pronunciation skills. Studies have shown that learners are often unaware of their pronunciation errors, and the ones they can name are often at the segmental level (Derwing, 2003; Derwing & Rossiter, 2002). However, because pronunciation and accent in a second language are closely linked with the patterns in which speech is produced in the first language, the L1 should be considered in any self-assessment study to see if it is also linked to how learners assess their own pronunciation.

The present study also looked at how a learner's past pronunciation training played a role in the results of their self-assessment. In addition to the L1, experience and diverse background factors seem to play a role in how listeners perceive accent. Research by Kang, Moran, and Vo

(in press) on perceptual judgments of accented English suggested that along with L1, the focus of pronunciation instruction, especially in an ESL/EFL context, had an effect on accent perception.

### **Research Questions**

- 1.a. Are the perceived errors of NNSs' pronunciation consistent with their real errors?
- 1.b. Are the perceived global rating scores of NNSs' pronunciation consistent with their real global rating scores?
2. Do learners self-assess their pronunciation differently based on their L1?
3. Do learners self-assess their pronunciation differently based on their previous pronunciation training?

### **Methods**

The participants in this study were recruited from intact Listening and Speaking classes (Levels 1, 3 and 5) at the Program in Intensive English (PIE). There were a total of 19 participants (1 female and 18 males). Of the participants, 13 (68.4%) were native speakers (NSs) of Arabic, 3 (15.8%) were NSs of Chinese, 1 (5.3%) was a NS of Maasai, 1 (5.3%) was a NS of both Turkmen and Russian, and 1 (5.3%) was a NS of Spanish.

This study made use of two principal measures to collect data. The first measure was a questionnaire used to collect data about the participants' L1 and past pronunciation training. The second measure, the self-assessment exam, measured the learner's ability to self-assess their pronunciation. It was divided into four main parts. The first part (Part A) focused on segmentals. It contained 20 minimal pairs (or 40 words) which were chosen in two main ways. First of all, problematic sounds in English as an L2 based on contrastive analysis for speakers of Arabic and Chinese were chosen (Avery & Ehrlich, 1992; Swan & Smith, 2001). From those problematic sounds, those which were highest on Catford's (1987) relative functional load (most

important to intelligibility) were chosen first. For this part, each participant read the words, and listened back to the words to assess pronunciation.

The second, third, and fourth parts (Part B-D) were included because, in diagnosing pronunciation, it is best to obtain both a standardized sample of the learner reading aloud and a sample of the learner's free speech (Celce-Murcia et al., 2010). Part B (Celce-Murcia et al., 2010) was a scripted paragraph which focused on *-ed* and *-s* endings, vowel/consonant contrasts, word stress, sentence stress, reduced speech, and intonation. Part C was a scripted dialogue (McCarthy, McCarten, & Sandiford, 2005), which is best for testing intonation and prominence. Finally Part D was a focused prompt which asked the participants to record one minute of free speech. The goal of this part was to evaluate the learner's control of their pronunciation when not being asked to focus on form (Celce-Murcia et al., 2010).

Once the participants finished recording Parts A-D, they were asked to listen to their recording (as many times as needed) to assess their pronunciation. For Parts A-C, every time they found an error, they were asked to circle it on their script, and then note what the error was. For Part D (free speech), the participants were asked to holistically score their pronunciation based on a scale of 0 (poor) to 100 (excellent) in the five recycled areas targeted in Parts A-C: vowels, consonants, word stress, rhythm, and intonation.

## Results

Pearson Correlations for two interval variables were run separately for all parts of the self-assessment exam to determine if the learners' error assessment and global rating scores (0-100) corresponded with the researcher's error assessment and global rating scores.

Table 1

*Correlations among Parts on Self-Assessment Examination*

Part	df	r <sub>critical</sub>	r <sub>observed</sub>
A. Minimal Pairs	17	±.46	.29
B. Scripted Paragraph	17	±.46	.39
C. Dialogue	16	±.47	.12
D.1. Vowels	12	±.53	.12
D.2. Consonants	12	±.53	-.34
D.3. Word Stress	12	±.53	-.05
D.4. Rhythm	12	±.53	-.22

*Note.* alpha = .05

In none of the cases did  $r_{observed}$  exceed  $r_{critical}$  (see Table 1); as a result, the null hypothesis was not rejected for research questions 1.a. and 1.b. which stated no relationship between the learners' count of errors and global rating scores. In other words, the amount of errors learners found, and their global rating scores, were very different from the amount of errors the researcher found, and the researcher's global rating scores.

Independent t-tests for a fairly normal distribution of the dependent, interval variable were run for the second and third research questions of which the null hypothesis stated no difference between the L1 groups and their correct count of errors (research question 2) and no difference between past pronunciation training and correct count of errors (research question 3). For the second research question, the value for  $t_{observed}$  (-.56) did not exceed  $t_{critical}$  ( $\pm 2.11$ ) so that the null hypothesis was unable to be rejected: there was no statistically significant difference between the L1 groups and their correct count of errors. Similarly for the third research question, the  $t_{observed}$  value, .74, did not exceed the  $t_{critical}$  value of  $\pm 2.11$  so that the null hypothesis again could not be rejected. There was no statistically significant difference between the two students who had pronunciation courses and their assessment of errors.

*Post hoc* frequency counts were run to see how learners explained their errors. The majority (n=14) of learners had no explanation of errors. One learner issued errors to segmental problems, three to general “pronunciation” problems, and one learner mentioned both segmentals and suprasegmental problems.

Finally, *post hoc* one-way ANOVA results revealed no statistically significant differences concerning the controlled variable of level (Levels 1, 3, and 5) and the amount of correct errors found.  $F_{\text{observed}}$  (3.09) did not exceed  $F_{\text{critical}}$  (3.63).

### **Relevance to the PIE and Second-Language Learning**

The implications understood from this study apply first and foremost to teachers. As Morley (1991) explained, the role of the student is to adjust his/her pronunciation, but before a student can do this, the educator’s role becomes very important. It is an educator’s role to diagnose students’ pronunciation and assign certain areas in which students can begin to self-monitor and adjust their pronunciation. One way in which teachers can go about doing this is incorporating Morley’s “dual-focus framework” (1994, p. 73) into the classroom. This is a framework in which both micro and macro levels of focus are included in pronunciation instruction. Macro levels of instruction would focus on the communicative use of segmental and suprasegmental features, while the micro level has a focus on specific points of speech production.

PIE students may or may not realize they have pronunciation problems, and if teachers do not diagnose them at the micro-level, these students may be largely unaware as to the nature of their errors. When learners are unable to locate their areas of difficulty in pronunciation, they lack knowledge about where to concentrate their attention for areas of improvement and self-monitoring, or they may focus on areas which are not crucial to intelligibility. As illustrated

directly in this study, most students did not explain the few amount of errors they found, and only one attributed the errors to segmental and suprasegmental issues. Students enrolled in higher levels also didn't seem to find more errors than students in lower levels. This study illustrates the extent to which pronunciation should be individualized.



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