The Impact of Proficiency and Familiarity on Listening Comprehension of English Accented Speech

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Abstract

This study investigated whether English proficiency levels affected second language (L2) listeners' accented speech perceptions and whether there was a relationship between accent familiarity and listening comprehension scores. Thirteen L2 listeners including 9 high-proficiency and 4 low-proficiency participants were recruited from an American university. Three instruments were used to collect the data: listening comprehension tests with 3 American speakers and 3 nonnative English speakers as listening input, an accent familiarity rating scale, and a questionnaire. The mean scores when listening to American speakers and nonnative speakers between the high- and low-proficiency groups were compared. The results revealed that the high-proficiency group outperformed the low-proficiency group; however, the different mean scores of the high-proficiency group when listening to native and nonnative speakers were slightly wider than that of the low-proficiency group. There was a positive, significant relationship between accent familiarity and listening comprehension scores. The findings would be useful in designing L2 listening teaching and testing materials and training L2 listeners to be more adaptive in their nonnative speech perceptions.

Keywords: accent, English proficiency levels, familiarity, listening comprehension, second language

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Background

Accented speech is one of the main variables that have an impact on English listening comprehension of nonnative speakers of English (Flowerdew, 1994). Previous research studies have shown that listeners' academic listening performance was affected by the accented speech input (e.g., Harding, 2011; Major, Fitzmaurice, Bunta, & Balasubramanian, 2002, 2005). Due to the familiarity effect, having nonnative accented speech in listening tests could create test bias for particular second language (L2) test takers who share the same first language (L1) background with the speakers, whereas others argued that there was no bias when test takers listened to a speaker who shared the same native language (e.g., Abeywickrama, 2013; Gass & Varonis, 1984; Harding, 2012; Major et al., 2002; Munro, Derwing, & Morton, 2006; Ortmeyer & Boyle, 1985; Tauroza & Luk, 1997).

In addition, previous research also suggested that another factor that may influence the way accented speech was perceived is L2 learners' English proficiency levels. Interestingly, even though it was reported that low-proficiency L2 learners did not perceive accents as one of crucial aspects in listening comprehension, they were found to be affected the most when listening to either native English speakers or speakers from their own L1 (Goh, 1999; Harding, 2008; Ortmeyer & Boyle, 1985). To the best of the author's knowledge, a line of research study related to impact of proficiency levels on accent judgment is still limited.

This study investigated whether the proficiency levels of L2 learners would have an impact on the accented speech perceptions when taking listening comprehension tests and whether the familiarity with a variety of accents related to the listening performance. The results

of the study could provide implications in terms of the inclusion of diverse accents into classroom listening materials and/or listening tests. Also, the findings would be invaluable for L2 teachers in listening material development so that they could tailor their materials to appropriately suit students' proficiency levels.

Research Questions

Two research questions were posed:

Research Question 1. Does English proficiency affect the learners' academic listening comprehension when listening to the accented speech?

Research Question 2. To what extent does learners' familiarity relate to their listening comprehension of accented speech?

Methods

Participants in the study were of two main groups: 4 ESL learners enrolled in Listening and Speaking courses level 4 in an intensive English program (IEP) classified as the low proficiency group and 9 ESL graduate students enrolled in either Master's or Doctoral program at an American university comprised the high proficiency group. With a total of six speech files, six speakers were selected to record listening input. The speakers included three American speakers (one female and two male) and three ITAs (a Russian male, a Spanish female, and a Chinese female). All speakers were pursuing their Doctoral degree in Applied Linguistics program, except 1 American male who was in his first year of Master's degree in the same program.

This study employed three main measures: six sets of academic listening comprehension tests, a familiarity with accents rating scale, and a questionnaire. The listening comprehension tests were taken from three different TOEFL preparation textbooks (Educational Testing Service,

2013; Gear & Gear, 2006; Philips, 2006). Each set has 6 questions in the format of either 4-option-multiple-choice questions or choose the correct column in the charts provided. Each question was worth 1 point and the maximum score was 36. For each set of listening comprehension tests, after completing 6 multiple-choice questions, participants were asked to rate their familiarity with accent they just heard in a 7-point Likert scale which was adapted from Harding (2011). After completing the tests and familiarity rating, participants were asked to complete a questionnaire, adapted from Harding (2011), asking for general information.

Results

The first research question asked whether English proficiency affected the learners' academic listening comprehension when listening to the accented speech. To answer this question, the descriptive statistics of listening comprehension scores were reported. Overall, participants had higher scores when listening to native speakers (M = 9.85; SD = 4.02) than nonnative speakers (M = 7.23; SD = 2.80). Specifically, when listening to native speakers, the higher proficiency group performed better (M = 11.78; SD = 3.15) than the low proficiency group (M = 5.50; SD = 1.29). Likewise, their scores on accented speech were higher (M = 8.56; SD = 2.24) compared to that of the low proficiency group (M = 4.25; SD = 0.96). To further examine the mean score differences within each proficiency group, the Wilcoxon signed-rank test was conducted. For the high proficiency group, their scores when listening to native speakers were significantly higher (Mdn = 14.00) than when listening to nonnative speakers (Mdn = 9.00), z = -2.32, p = .020, r = -0.77. However, for the low proficiency group, although they scored higher for native speakers (Mdn = 5.50) than nonnative speakers (Mdn = 4.50), the difference was not significant, z = -1.89, p = .059, r = -0.95.

A correlation matrix was constructed in order to answer the second research question attempting to find out the relationship between the accent familiarity and the listening comprehension of accented speech, using Spearman's correlation coefficient. The analysis found that the accent familiarity (with a scale ranging from 1 to 7 with 1 = not familiar and 7 = very familiar) was significantly related to the listening performance, r_s = .30, 95% BCa CI [.09, .50], p = .007. The results suggested that as the accent familiarity increased, the listening comprehension of accented speech also increased.

Relevance to the PIE and Second Language Learning

The implications of the study could be useful in designing teaching listening materials and/or listening tests. Taylor and Geranpayeh (2011) suggested that for higher proficiency level, we could possibly include a variety of English accents in listening tests because, as regarding real academic settings, L2 listeners have been exposed to more diverse accents from professors, international teaching assistants, and international students. However, a variety of accents should be limited at the lower levels "because it deprives listeners of a major set of phonetic cues" (Taylor & Geranpayeh, 2011, p. 98). In turn, the washback effects from testing could be found in L2 teaching. Perhaps, we could start with a small inclusion of a variety of accents at the lower level as a complement to the mainstream accents and increase more accent input as they progress to a higher level. This approach would train L2 listeners to become more familiar with and more flexible in their nonnative speech perceptions through a variety of accents in teaching materials similar to Bradlow and Bent's (2008) study in experimenting with native speakers to become more adaptive when being exposed to multiple nonnative speakers. This way, L2 listeners would ultimately gain more understanding when listening to accented speech and be equipped with listening skills essential in real academic contexts.

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