THE EFFECT OF ACCENT ON LISTENING COMPREHENSION: CHINESE L2 LEARNERS' PERCEPTIONS AND ATTITUDES

Wang Zhiying
Faculty of Arts, University of Melbourne, Australia

Abstract

This article investigates the effect of different accents on high- and low-proficiency second language (L2) learners. It begins with testing the English listening proficiency of Chinese students and then compares the influence of three accented English (a British accent, an Australian accent and an Indian accent) on their listening scores. Finally, the findings of this paper indicate that accent has a similar influence on high- and low-proficiency learners. The Indian accent could influence test takers' perceptions of intelligibility, and it influenced low-proficiency learners more. All learners preferred the British-accented English, but more high-proficiency learners accepted the Indian accent than low-proficiency ones. Apart from that, accent familiarity can influence listening comprehension and accent preference, but the effects were not strong in this study.

Keywords: *listening comprehension, accent, second language, listening proficiency, perception, attitude.*

Introduction

For the global diffusion of international communication, English is the most popular additional language, and it has been learned and spoken by over 700 million ESL users in different nations of the world. The emergence and acceptance of different English varieties as a lingua franca have divided English into three concentric circles, which present different features and acquisitions of English in global multicultural contexts. According to the most influential model of English proposed by Kachru (1988), World Englishes has three categories: the inner circle, the outer circle, and the expanding circle. Kachru's model of circles suggests that inner circle represents standard English norms, traditional English-speaking countries such as Britain, America, and Australia are categorized into this circle. The outer circle is developing their norms based on the standard norm for historical or colonial

reasons, which represents by countries like India and Singapore. The expanding circle has developing norms and English in this circle (e.g. China, Japan, and Russia) mainly serves as a lingua franca for business or education purposes rather than historic reasons.

As English has become a global language, the use of English appears to have more individual differences. In addition, accent always has been a controversial criterion in English variation, as there are no clearly norms deciding which accent is superior or inferior.

Large-scale academic English assessments such as IELTS, TOEFL, and PTE are widely accepted as authority means of assessing the English proficiency levels of candidates. These exams are currently adopted by many tertiary education institutions in the inner circle and even outer circle as a basic language entry requirement for outer and expanding circle students whose first language is not English. However, ESL international students in a multicultural English-speaking background may encounter tutors and international teaching assistants with non-native English varieties.

To achieve great authenticity, those tests have introduced a wide range of accents in their listening sections. In the IELTS task design, according to the handbook of IELTS (2007, p6), the accents in the listening recordings are chosen from various native English speakers to reflect contexts in a real-life setting. Accents ranging from Inner circle such as British and Australian to Outer circle such as Indian can be heard on the listening part of IELTS l assessments. However, the introduction of such a broad range of accents also brings some drawbacks related to fairness and test usefulness. Unfamiliar accent is an important variable that could hinder the comprehension process of test-takers. The familiarity of accent thus may threaten the fairness of the tests. Also, as Chan (2016) suggests, the attitudes and perceptions of ESL learners should not be neglected in further investigations of the relationship between accent and listening assessments.

In this paper, the author will investigate the listening scores of Chinese ESL learners by using the recordings of three different accented English. Participants from different English proficiency levels and study experiences were divided into several groups to compare the differences in their listening experiences. Also, questionnaires were followed by the listening tests to further examine participants' perception and attitudes toward accent varieties. Results were analyzed using both quantitative and qualitative methods.

Literature Review

Some researchers investigated the effect of accent on listening comprehension of learners at different proficiency levels. Harding (2008) examined the performance of four groups of students with a combination of different proficiency levels. 44 students as participants in this study came from different territories, and hence they had several different L1s ranging from Spanish to Chinese and Japanese. Speakers from Australian English, Mandarin, Japanese and Bengali language backgrounds were chosen as test speakers. The author tested the performance of four groups having both high- and low-proficiency learners, and the result suggested that the four groups had no significant difference when it came to speakers with different accents.

Harding (2008) also examined the different proficiency learners' perceptions of accent and academic listening assessment. He focused on accent and its influence on learners' perceptions of listening tests. The results indicated that high-proficiency participants clearly noticed that accent played an important role in their listening tests, and they were not disturbed by other factors. However, low-proficiency learners paid attention on many distractors, such as speaking speed, accent, and so on. Chan (2016) also investigated three groups' (junior school, high school and university) perceptions of different accents. The perceptions three groups had resulted from their learning experiences, background knowledge or exposure to English. Although university students were more likely to have higher awareness of accents than other groups, their attitudes to strong accented English were mostly negative. Lev-Ari, van Heugten and Peperkamp (2017) considered the ability to comprehend different accents as a marker of L2 proficiency. They posited that accented speech needs more processing time than native speech, so both grammatical knowledge and enough exposure to L2 were necessary in L2 teaching.

Several studies have examined the effect of accent familiarity on listening comprehension. The studies of Moinzadeh, Rezaei, and Dezhara (2012) and Kang, Thomson and Moran (2018) both focused on the influence of mother tongue on listening comprehension. Moinzadeh, Rezaei, and Dezhara (2012) examined 44 Iranian EFL learners with American accented and Persian accented English. The results showed that these participants were more likely to perform better when they listened to a Persian accent. Therefore, accent familiarity

had an effect on listening comprehension. However, in contrast, the findings from Kang, Thomson and Moran (2018) were more complex. Although the listeners in this later study were more familiar with Indian accents, they obtained higher scores in tests with British and American accents. Additionally, the listeners performed better in the test with an Indian accent than in those with Mexican, Chinese or South African accents. The researchers hypothesized that this was because of the amount of listeners' exposure to those accents.

Similarly, the research of Ockey and French (2014) investigated the relationship among accent strength, familiarity and listening comprehension scores. TOFEL test takers from 148 countries were randomly selected in this study to complete listening tests in Australian and American English. For the learners who were familiar with Australian accent, their scores were higher when they listened to stronger Australian accented English. However, although familiarity with British accents might be an advantage in British accented listening tests, the learners obtained lower scores if the accent was strong. Therefore, familiarity with accent did affect listening comprehension, but accent strength was still an unresolved problem in this study.

Most recent studies on accents and listening have focused on the attitudes ESL learners have towards different accents (Kang, 2015; Chan, 2016; Sung, 2016; Roessel, Schoel & Stahlberg, 2018). In the investigations, most participants held negative attitudes to non-native accents. Roessel, Schoel, and Stahlberg (2018) have analyzed three case studies. They found that more participants reacted negatively to nonnative accents than to native accents. These biases were about trust, affect, or competence. Given this finding, the researchers suggested ESL learners be more open and accept different accents because we live in a real world with a large number of foreign accents. Similarly, Kang (2015) also pointed out that students preferred native accent instructions. He thought that English teaching should not only be concerned with teaching native speaker norms because a variety of World Englishes exist in the real world. Intelligibility is more crucial than accent, so it is necessary to introduce the concept of World Englishes in ESL classes.

These researchers focused on the influence of different English accents on ESL learners and most of them found accents had an effect on learners. Although in some cases students obtained similar scores in different tests with different accents, it turned out the processing time of them in different tests is different. Therefore, accents should be a research

and a teaching focus. This article will investigate three different accents and concentrate on their influence on Chinese students living in China and Australia. These learners' perceptions and attitudes towards different varieties of English will also be considered and analyzed.

This research attempted to answer four question:

1. Are lower-proficiency learners more affected by an Indian accent than higher-proficiency learners?
2. What is the difference between the perceptions of listening difficulty for higher-proficiency learners and lower-proficiency ones?
3. Does accent familiarity influence listening scores?
4. What is the difference between the attitudes of English learners living in Australia and learners living in China towards Australian-accented English?

Methodology

Participants

Speakers

The speeches of three speakers who have different nationalities have been recorded for the materials of the listening tests. One male speaks with a British-accent, and one female is from Australia, and the last one is a male from India. All the scripts they read aloud are materials of IELTS listening tests. They were asked to be in a quiet place for recording the scripts. These three speakers are studying at the University of Melbourne and they are all post-graduate students. They have the ability to read scripts fluently and accurately.

Listeners

The first language of all the listeners is Mandarin Chinese. The author collected the data from 35 participants, but the scores of some of them were too low to use for comparing the three accents. Therefore, the author selected 28 of them to analyze. Among these, 11 of 28 Chinese students have stayed in Australia for more than 1.5 years. These participants are all masters studying in University of Melbourne, and they think they are familiar with Australian accents. The others are post-graduate students studying at Chinese universities, and they have never encountered Australian-accented English. All of the listeners have learned English since they were at primary schools, and now they are about 25 years old. In the process of learning

English, all listeners are used to listening to British-accented and American-accented English. The learners in Australia have started to communicate with professors and classmates who speak Australian-accented English. In contrast, none of the participants are familiar with Indian-accented English.

Instruments

Speaking proficiency measure

IELTS (International English Language Testing System) has been used in this study to assess learners' English listening performance. The three scripts are the fourth sections of IELTS listening tests to avoid any ceiling effect. In addition, because of that, these listening tests are assumed to be at similar degrees of difficulty. All the listeners are graduate students, so they are able to handle academic listening tests. Voice memo app was used in this study to record the speeches of the three speakers. The recording of the British-accented script is 4' 51''; the Australian-accented script recording is 5' 54'', and the Indian-accented one is 4' 30''. The speaking speed of the three recordings is shown in Table 1. The British recording is the fastest one, and the Indian-accented recording is the slowest.

Table 1

Information of the recordings

	British accent	Australian accent	Indian accent
number of words	780	801	539
length of recording	5'54"	4'51"	4'30"
speaking speed (words/second)	2.68	2.26	2

The listening tests used in this research include only fill-in-the-blank items, which may over-represent the students' listening abilities as they may guess answers. However, although filling in blanks can reduce guessing, the tests can only assess listeners' ability to understand key vocabulary or important details rather than to make inferences or integrate information, so the use of these tests is a limitation of this study. This paper focuses on accent, so this limit is a minor one. Finally, the author has rated the answers of the listeners according to IELTS listening rubrics.

Perception & Attitude measurement

This study has employed the survey designed by Scales, Wennerstrom, Richard and Wu (2006) and added some background questions (see Appendix). This survey needed to be completed after listeners finished their listening tests. Some items of this survey are multiple choice, and some are short-answer questions. After finishing each test, every listener would evaluate the accent and their feelings. The participants needed to rate their perceptions of accents on a scale in which 1 indicates *disagree* and 4 indicates *agree*. When they completed the three tests, they answered a survey regarding their background information and self-assessment. In this survey, the perceptions and attitudes towards accents were also elicited.

Research procedure

The listening tests and the survey were sent to the listeners by Google drive and qq mails. The listeners were not informed that the recordings were from speakers with different accents. They could read listening questions in advance but could only listen to the recordings once. These tests were not supervised, and the participants also sent their answers by emails. The author needed to rate the answers from listeners. Every blank was counted as one point. 8 to 10 points were considered as high scores and 5 to 7 points were low scores. After the data were collected, the author selected appropriate data for this research. The British-accented English scores below 5 are referred to as too-low scores, and the test results of 7 of 35 students were deleted because the listening proficiency of these participants was too low to identify the difference among the three accents.

This study used quantitative and qualitative methods to analyze the data. As most materials of IELTS use speakers with British accents, the scores of the British-accented English test were considered as reflections of listening proficiency.

For the first research question, 28 listeners were categorized into two groups in terms of their scores of the British-accented test. The listeners with scores between 8 and 10 were identified as high-proficiency learners, and the others with scores 5 to 7 were considered the low-proficiency group. The Indian-accented recording was used to test these two groups again. Their scores of the Indian-accented listening test were compared with the scores of the British-accented test to determine whether lower-proficiency learners were more affected by an Indian

accent than higher-proficiency learners. Moreover, in order to investigate test takers' perceptions of accent-related difficulties in the two groups, their feelings about these accents were also analyzed, and the difference between the perceptions of listeners with different levels of proficiency were examined.

For the third research question, the test takers who obtained 8 to 10 points in the British-accented test were selected, and these high-proficiency learners were sorted into two groups in terms of their familiarity with an Australian accent. Then the Australian-accented recording was used for their scores in the Australian-accented listening test. Similar to the first question, these scores were also compared with the British-accented scores to find out whether accent familiarity could influence listening scores. After that, the attitudes of the listeners towards their own accent and their preference of accents was analyzed. The difference between the attitudes of learners in Australia and those in China is an additional focus in this article.

Data analysis

This study used quantitative and qualitative methods to analyze the data. All the statistical analysis procedures were conducted using SPSS version 23. The first research question can be answered by the results of comparing the score change of low-proficiency learners with high-proficiency ones. The mean scores and the standard deviations of the scores of the two groups was computed. In order to investigate whether there is a difference between the scores of the British-accented test and Indian-accented one, *t* test was utilized for each group. If there is a difference, the effect size will also be calculated. The effect sizes from two groups will also be compared to find out which group is affected more. In contrast, if there is no difference, it is not necessary to calculate the effect size of the difference between the two groups.

After the effect sizes were calculated, test takers' perceptions of accented difficulties were analyzed. They were asked about the intelligibility and speaking speeds of the recordings as well as their feelings about British and Indian accents. This multifaceted approach to data collection enabled the study to examine the perceptions of test takers with different levels of proficiency. The actual speaking speed has been shown above, so it was also analyzed to determine whether their perceptions of speaking speed was accurate. The number of

individuals in each group is different, so pie charts will be used to show the percentage of leaners with different perceptions.

The third question can be answered by the results of comparing the score fluctuation of high-proficiency learners living in Australia with the high-proficiency learners in China. Similar to the first question, means and standard deviations of scores were calculated and *t* test was used in the process. For each group, was then possible to calculate whether there was a difference between British-accented and Australian-accented scores. The effect sizes of score differences of the two groups were also compared. In addition, test takers' perceptions of an Australian accent were also compared with their perception of a British accent. Not only the perceptions of speaking speed, accent preference and intelligibility, but also the test takers' self-evaluation of their own accents were collected and analyzed. The number of individuals in each group is the same, so bar charts will be used to represent the difference of test takers' perceptions.

Results

The results of the first and third questions are computed by using SPSS and presented in tables for comparison of the scores which different groups obtained in different listening tests. The rest of the results are shown in pie charts and clustered columns. It is easy to analyze the difference among different groups' perceptions and attitudes towards three accents by using these graphs.

Research question 1

The descriptive statistics are shown below to analyze the effect of British and Indian accents on listening scores of the participants.

Table 2.1

Descriptive Statistics (high proficiency & low proficiency)

	N	Minimum	Maximum	Mean	Std. Deviation
HB	18	8.00	10.00	8.9444	.80237
HI	18	2.00	8.00	4.8889	1.52966
LB	10	5.00	7.00	6.1000	.87560
LI	10	1.00	5.00	2.7000	1.15950
Valid N (listwise)	10				

Note. HB (high-proficiency test takers of British-accented test); BI (high-proficiency test takers of Indian-accented test); LB (low-proficiency test takers of British-accented test); LI (low-proficiency test takers of Indian-accented test).

Each high-proficiency and low-proficiency learner was tested twice. One time was for the British-accented listening test and the second time was for the Indian-accented test. As can be seen in Table 2.1, the scores of the Indian-accented test are much lower than the British-accented scores for not only low-proficiency but also high-proficiency participants. For the comparison of the influence of the British accent and the Indian accent, the scores of the British-accented test are regarded as a baseline. Therefore, compared with the British accent, the Indian accent is more likely to negatively influence the listening scores of these learners.

In addition, the standard deviations of both Indian-accented groups are quite high, so the range of Indian-accented scores is quite wide. In contrast, the range of British-accented scores is not as wide as that of the Indian-accented ones. Therefore, the effect of the Indian accent on each learner may not be the same. It is also unclear whether there is a difference between high and low proficiency with regard to the accent effect.

Table 2.2 Paired Samples Correlations
(high proficiency & low proficiency)

		N	Correlation	Sig.
Pair 1	HB & HI	18	.570	.014
Pair 2	LB & LI	10	.580	.079

In Table 2.2, the scores of high-proficiency learners on the British-accented test and the Indian-accented test are moderately correlated to each other (r=.570, N=18, p=.014). Their scores are influenced by the students' proficiency. However, for low-proficiency students, the size of the data is not large enough to calculate a correlation between the British-accented and Indian-accented scores, for the significance level is p >.05 (p=.079).

Table 2.3 Paired Samples Test

	t	df	Sig. (2-tailed)	Cohen's *d*
Pair 1 HB-HI	13.667	17	.000	.867
Pair 2 LB-LI	11.129	9	.000	.856

There is a significant difference between British-accented and Indian-accented scores of high-proficiency test takers t (17) =13.667, p <.001. For effect size, Cohen's d =.867. The effect size is so large. Similar to that, for low-proficiency learners, the British-accented scores is also highly different from the Indian-accented scores t (9) =11.129, p <.001. Additionally, the two effect sizes (d =.856) are so similar that Indian accent perhaps has a similar influence on high-proficiency and low-proficiency test takers.

Research question 2

The test takers' perceptions of listening difficulties are represented by their perceptions of intelligibility, speaking speed and accent preference.

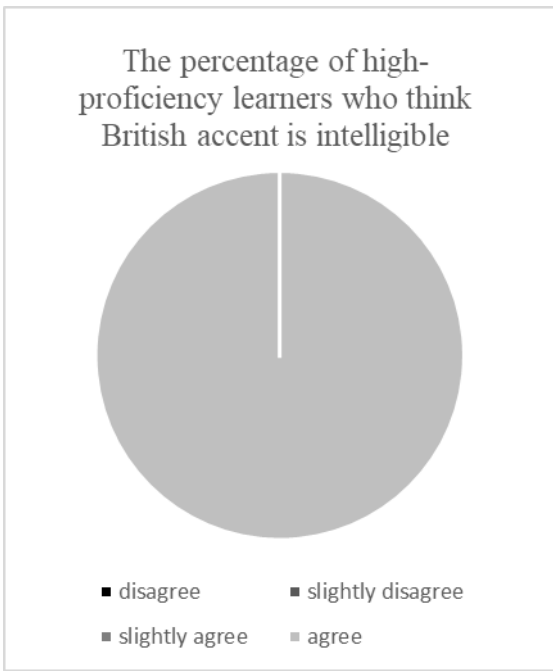


Figure 1.1.1 Intelligibility (High & British accent)

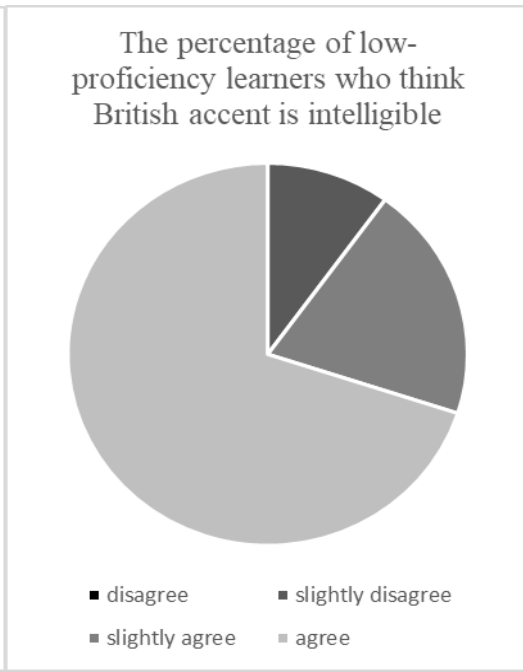


Figure 1.1.2 Intelligibility (Low & British accent)

According to Figures 1.1.1 and 1.1.2, all high-proficiency participants thought the British accent was intelligible while most low-proficiency ones thought it was understandable. In this case, their proficiency may have affected their perceptions of intelligibility.

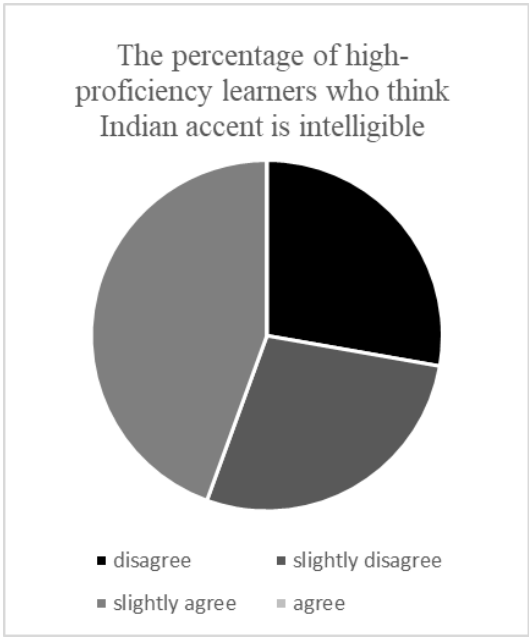


Figure 1.1.3 Intelligibility (High & Indian accent)

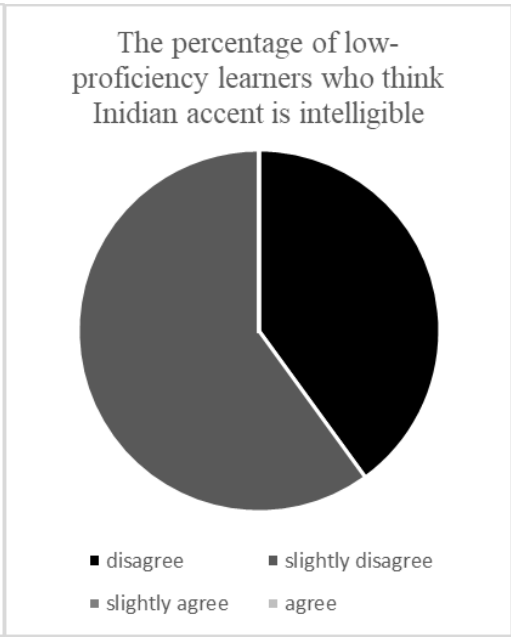


Figure 1.1.4 Intelligibility (Low & Indian accent)

Unlike the results above, more than a half of high-proficiency learners thought the Indian accent was not understandable (see figure 1.1.3). Therefore, at least more than a half of them were significantly affected by the Indian accent. For low-proficiency test takers, the perception of the Indian-accented intelligibility was quite diverse compared with the perceptions of the British-accented intelligibility. They all considered the Indian accent as an incomprehensible accent (see Figure 1.1.4). According to these results, all test takers' perceptions of intelligibility were influenced by the Indian accent, but low-proficiency learners were affected more.

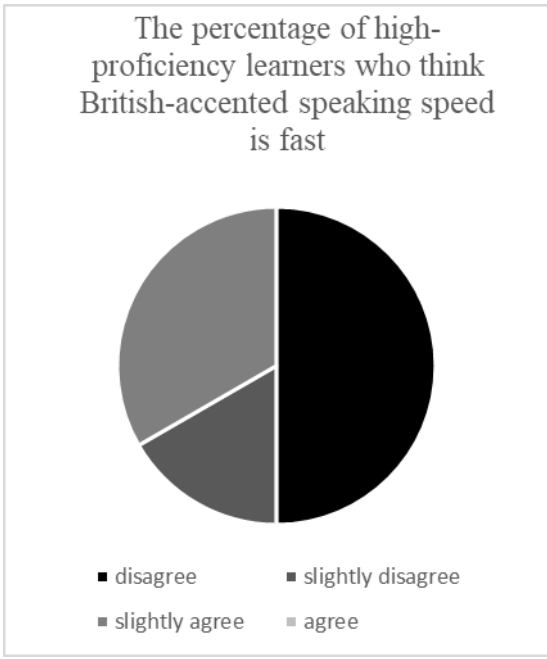


Figure 1.2.1 Speaking speed (High & British accent)

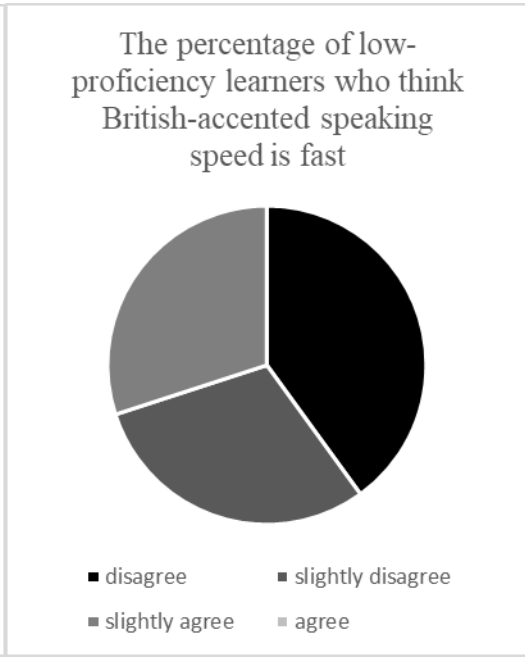


Figure 1.2.2 Speaking speed (Low & British accent)

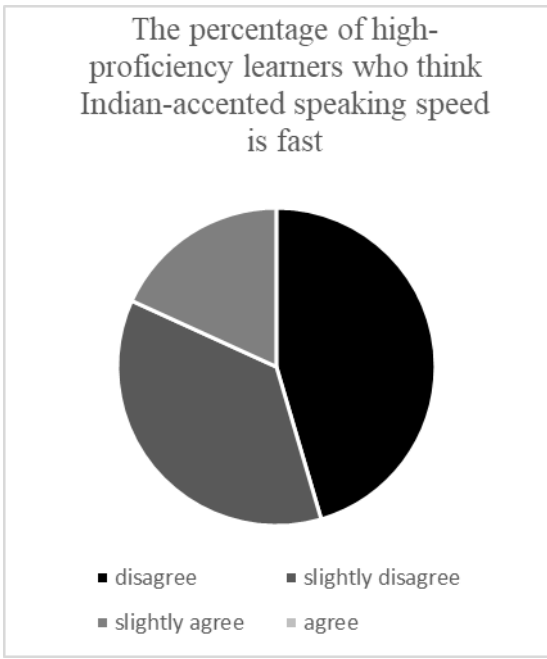


Figure 1.2.3 Speaking speed (High & Indian accent)

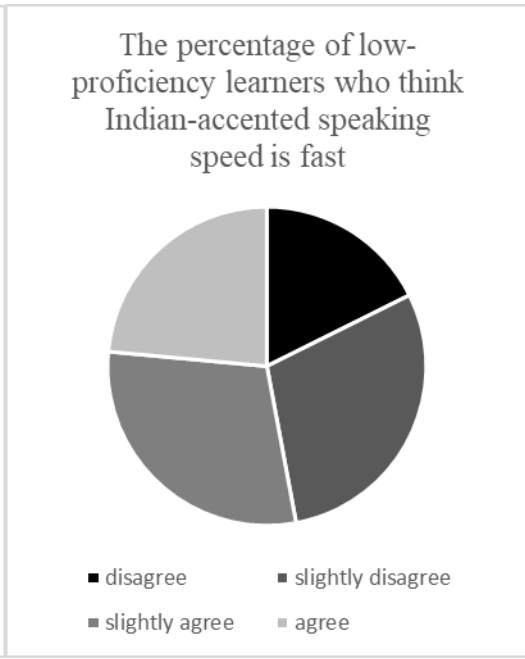
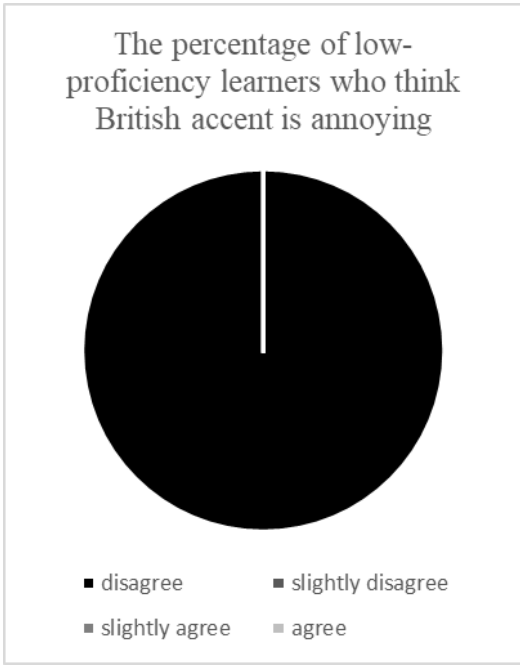


Figure 1.2.4 Speaking speed (Low & Indian accent)

The actual speaking speed of the British-accented recording was much faster than the Indian-accented recording (see Table 1).On this question, the estimate of high-proficiency learners was more accurate than that of low-proficiency ones because more high-proficiency test takers thought that the British-accented recording was fast than that of the Indian English (see figures 1.2.1, 1.2.3). However, , about a quarter of low-proficiency learners thought that the Indian

English was really fast (see figure 1.2.4), which was not the case. Meanwhile, no low-proficiency participants thought of the British-accented English as fast speech (see figure 1.2.2). Therefore, we might conclude that an Indian accent cannot influence high-proficiency learners' perceptions of speech rate, but this accent could affect the perceptions of low-proficiency learners.



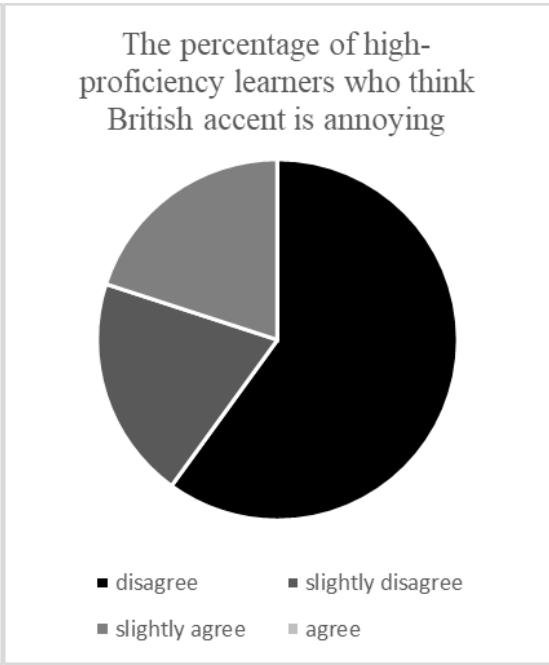
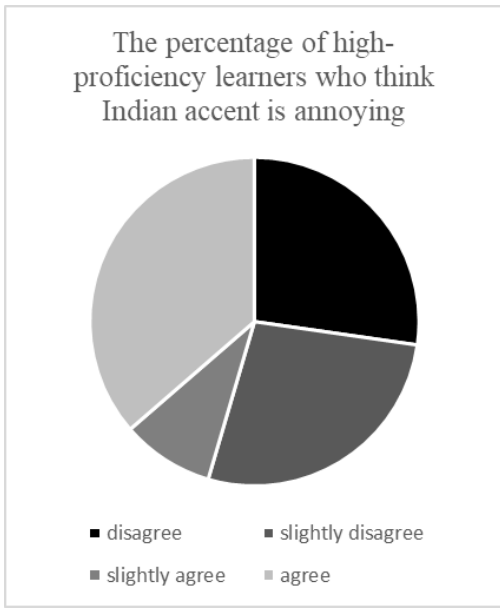


Figure1.3.1 Accent preference (High & British accent) **Figure1.3.2 Accent preference(Low &British accent)**

As shown in Figures 1.3.1 and 1.3.2, all high-proficiency students considered the British accent not annoying while a few low-proficiency ones thought this accent was slightly annoying. Thus, it is possible that different levels of proficiency can influence feelings about accents.



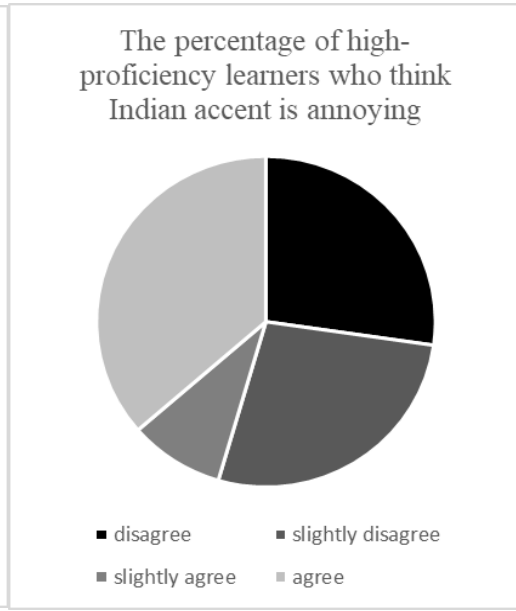


Figure 1.3.3 Accent preference (High & Indian accent) Figure 1.3.4 Accent preference (Low &Indian accent)

All test takers preferred the British accent to the Indian accent. Compared with high-proficiency learners, more low-proficiency ones thought the Indian accent was annoying (see Figures 1.3.3, 1.3.4). However, more high-proficiency participants accent than low-proficiency ones considered Indian accent as quite annoying. Therefore, more high-proficiency learners could accept the Indian accent. Their attitudes towards the Indian accent could have influenced their scores in the Indian-accented listening test.

Research question 3

Table 3.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AUA	9	7.00	10.00	8.6667	1.00000
AUB	9	8.00	10.00	9.2222	.83333
CNA	9	7.00	9.00	7.8889	.92796
CNB	9	8.00	10.00	8.6667	.70711
Valid N (listwise)	9				

Note. AUA (test takers of Australian-accented test in Australia); AUB (test takers of British-accented test in Australia); CNA (test takers of Australian-accented test in China); CNB (test takers of British-accented test in China).

As shown in Table 3.1, all test takers obtained higher scores on the British-accented test than on the Australian-accented test. Thus, it is likely that they were affected by the Australian accent, and the mean scores on the British accent test were also higher than those of the Australian accent test. The standard deviations of these four groups of scores are quite low, so the range of the scores is not wide.

An examination of where the students were living reveals that the mean scores of learners in Australia are higher than learners in China in both British-accented and Australian-accented listening tests. However, all test takers perform better in the British-accented test than in the Australian-accented test. The reason why the learners in Australia are able to get higher scores may be the more exposure to English in Australia and their higher listening proficiency. Although the learners in Australia have higher listening proficiency, they are still more accustomed to the British accent.

Table 3.2 Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	AUA & AUB	9	.400	.286
Pair 2	CNA & CNB	9	.508	.163

The correlation between the scores of the students living in Australia in the British-accented and Australian-accented tests is not significant at the .05 level(p=.286). Similarly, the score of students living in China are also not significantly different from each other (p=.163). The significance levels of two pairs are both above 5%, so the data are not representative.

Table 3.3 Paired Samples Test

	t	df	Sig. (2-tailed)	Cohen's *d*
Pair 1 AUA-AUB	1.644	8	.139	***
Pair 2 CNA-CNB	2.800	8	.023	0.704

As shown in Table 3.3, there is no significant difference between the scores of students living in Australia obtained in the British-accented and Australian-accented listening tests t (8) =1.644, p=.139 (p>.05). Therefore, it is not necessary to compute Cohen's d for this pair. In contrast, the scores which the students living in China had in the British-accented test are significantly diverse from the Australian-accented scores t (8) =2.800, p=.023 (p<.05). The

effect size of this difference is *d* =0.704. This size is not extremely large, but it is larger than medium effect size. Therefore, these students are affected by Australian accent more than the participants living in Australia. If learners are familiar with an Australian accent, they can obtain higher listening scores than those who have never encountered an Australian accent. However, the Australian listeners have not stayed in Australia for a long time, which might explain why they could not reach higher scores in the Australian-accented test than on the British test. Thus, accent familiarity may influence listening scores, but the effect is not strong in this study.

Research question 4

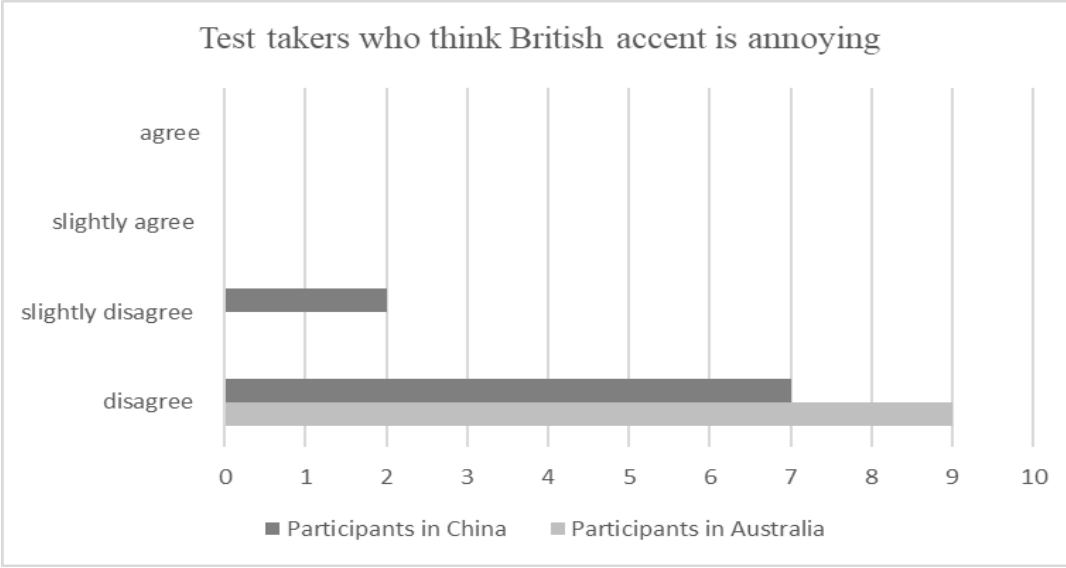


Figure 2.1.1 Accent attitudes (British accent)

As shown in Figure 2.1.1, the attitudes of participants in Australia towards British accent are better than the attitudes of those in China. The scores of listeners in Australia are also higher than those of the learners in China, but this is perhaps due to attitudes or to listening

proficiency.

Figure 2.1.2 Accent attitudes (Australian accent)

Compared with the attitudes to a British accent, the attitudes of listeners in Australia towards an Australian accent are also better than the learners in China (see figure 2.1.2). However, 4 of 9 Chinese participants slightly disagreed that the Australian accent was annoying, but the attitudes do not vary a lot. Therefore, the attitudes towards the British and Australian accents do not appear to influence listeners' comprehension.

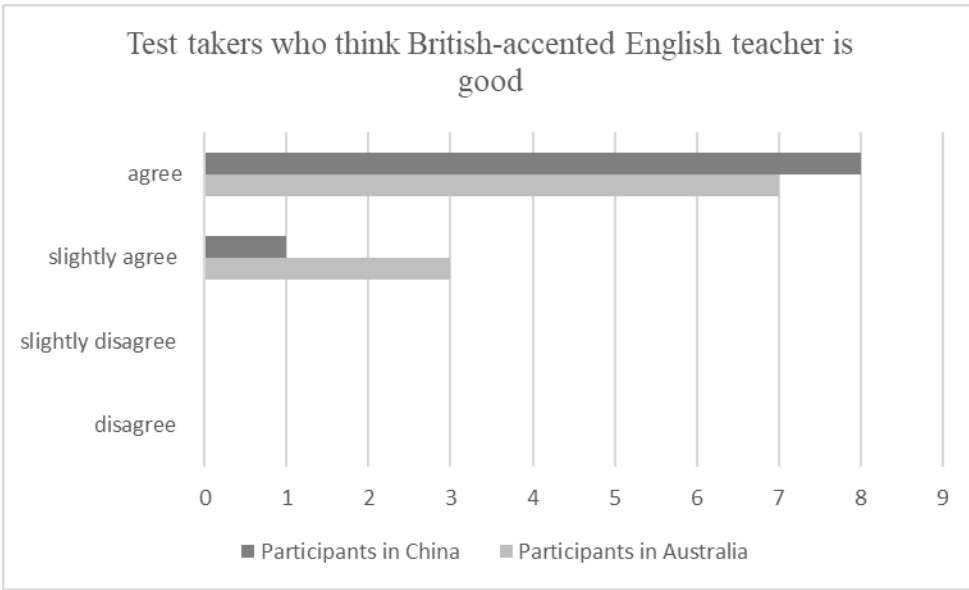


Figure 2.2.1 Accent preference (British accent)

Figure 2.2.2 Accent preference (Australian accent)

We can see in the Figures 2.2.1 and 2.2.2 that more participants in Australia prefer Australian-accented English teachers than students in China, and some Chinese learners did not accept Australian-accented teachers. However, both Chinese participants and learners in Australia all prefer to be taught by British-accented English teachers instead of Australian English teachers. Therefore, accent familiarity may affect accent preference, or maybe the students in Australia prefer the Australian accent just because they chose to live and study in Australia, as well as integrating into the Australian society.

Discussion

The results from research question 1 suggest that the Indian accent has a similar influence on the scores of participants regardless of their proficiency levels. This finding supports the study of Harding (2008), although the scores are much lower than the scores from British accent test, and the data size is small.

When it comes to the perception of learners toward listening to different accents, the results of research question 2 shows that the Indian accent influenced test-takers' perceptions of intelligibility. High-proficiency learners were more likely to have a perception of intelligibility than low-proficiency learners. A number of participants with low-ability considered the British accent as unintelligible while all high-ability learners considered the

British accent as highly intelligible. The intelligibility of the Indian accent showed a similar pattern. That is, although most test-takers thought the Indian accent was difficult, low-proficiency learners' perceptions of intelligibility were more likely to be affected. As the speed of language can lead to comprehension difficulty, the analyses of the speed of British and Indian accent indicated that the actual speed of the British accented speaker was faster than the speaker with an Indian accent in the recordings. In this case, the questionnaires suggest that high-proficiency learners have an accurate perception of speech rate since a quarter of the low-proficiency learners believed that the recording including an Indian accent was faster than the British one. As in the study of Harding (2008), high-proficiency learners had a better perception of intelligibility of accent while low-proficiency learners may have been distracted and did not have an accurate perception of intelligibility.

As for the attitude toward accents, all test takers show a strong preference for British accent. This finding supports the previous research (Kang, 2015; Chan, 2016; Sung, 2016; Roessel, Schoel & Stahlberg, 2018) that students had a strong preference for British accents. A majority of high-ability learners can accept an Indian accent while some low-ability learners considering an Indian accent as an annoying accent. The negative attitude towards Indian accents could influence students' scores because test-takers are likely to think that an Indian English as a non-native accent and that it is difficult to complete test tasks under the non-native recording.

The results for question 3 shed light on the relationship between accent familiarity and listening scores. All test-takers obtained higher scores in the British-accented test than on the Australian-accented test. Even Chinese students who had study experience in Australia achieved higher scores from the British accent test than the Australian one. As test-takers living in Australia for a year or two, they had been more engaged with British English textbooks in previous English classes, and they may have more access to British drama and movies in China, so perhaps we can say that they are not familiar with the Australian accent to a high degree. Although accent familiarity does influence the listening scores in this study, the effect is not strong in the data. On the other hand, this finding supports the view of Moinzadeh, Rezaei, and Dezhara (2012), Ockey and French (2014) and Kang, Thomson, and Moran (2018) that L2 learners score higher when they listen to a familiar accent, and they score lower when listening to unfamiliar accents.

The results for question 4 suggest that test-takers living in Australia have a better attitude towards Australian accents and British accents compared with test-takers living in China. Although test-takers living in Australia have a better positive attitude towards Australian accents, all test-takers prefer to learn from British English accents in classes rather than Australian accented English. In this study, accent familiarity may have affected learners' preference of accent, but this familiarity does not lead test-takers living in Australia to prefer an Australian accent more than students living elsewhere. The British English accents are still popular as English models among Chinese ESL learners, which is perhaps not surprising given that schools in China are providing British accents for ESL learners as a standard sample.

The current study has many limitations. One limitation is that the size of data is relatively small. 35 participants cannot present a clear correlation in some aspects. More participants are required to provide more generalizable results. Secondly, the selection of the listening texts should be more careful. We assumed that all the listening scripts from the IELTS would have equal degrees of difficulty. Test-takers did several versions of listening recordings, and they responded to different test items, but their scores may be higher only because the difficulty level of one of the listening tests was lower than others. Thirdly, the students' proficiency level of listening is not uniform. We could only select test takers with similar proficiency levels for each group. In addition, the background of participants may affect their scores. In the feedback, some participants mentioned that they found one listening text particularly easy because it related to their jobs and majors. Besides, only one speaker from each of three countries was selected in this study, so they cannot be representatives of all different accented English speakers. Sex is also a factor which may influence intelligibility and preference, and this research did not consider this. Finally, the length of participants living in Australia was only 2-3 years, and most of them merely communicate with Australian people in academic environments rather than on a daily basis. To some extent, they are not extremely familiar with the Australian accent.

Conclusion

This research has investigated the effect of accent on listening comprehension and the perceptions and attitudes from L2 participants. In this study, the Indian accent had a similar influence on high- and low-proficiency students. All the scores were much lower when learners took the Indian-accented English test compared with the other tests. Therefore, the

effect of an Indian accent on listening comprehension of learners with different proficiency levels was similar. High and low proficiency learners perceive varieties differently when encountering accents. An Indian accent influences high-proficiency test takers' perception of intelligibility, but it affects low-proficiency ones more. Similarly, High-proficiency learners have a more accurate sense of speech rate than low-proficiency students. In addition, most participants hold positive attitudes towards inner-circle British English accents and view Indian English negatively. According to the scores they had, the attitude towards accent may affect their listening comprehension. Finally, accent familiarity has an effect on listening scores and accent preference, but this effect is not strong in the research.

However, there are lots of limitations in this research, such as the small data size, the assumption of similar proficiency, the number of speakers and the tests' degree of difficulty. Therefore, further large-scale research needs to be conducted to further analyze the relationship between accents and listening comprehension, as well as L2 learners' perceptions and attitudes to accents.

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Appendix:

Survey:

Background Information

Which is your opinion?

a) I want people to understand me easily. Native accent isn't important.

b) I want to speak like a native speaker.

What is your first language? How old are you?

How long have you studied English?

Who do you talk to in English with more? (Chinese people; international students; native speakers)

Reasons for speaking English in the future? (business; travel; study; live in Australia)

What English classes are you taking now?

Do you think accent could influence your listening scores?

Are you happy with your accent?

Have you been to English speaking countries? Which country

How long have you stayed in Australia?

Have you spent a lot of time with Australians? Like your professors, classmates

Do you think you are familiar with Australian accent? What about Indian accent?

(1=disagree; 2=slightly disagree; 3=slightly agree; 4=agree)

This speaker:

• is a native speaker

• speaks fluently

• is intelligible

• has bad pronunciation

• speaks too fast

• has a foreign accent

• is nice to listen to

• has an annoying/irritating accent

• would be a good English (ESOL) teacher

• sounds educated

What country do you think this speaker is from?

How easy was this person to understand? (very easy; easy; ok; difficult; very difficult)

AUTHOR'S BIOGRAPHY

Wang Zhiying graduated from the University of Melbourne in 2018. She obtained her master's degree in Applied Linguistics from this university in Australia. Her research interests include language testing, second language teaching and technology used in second language classrooms. Her email address is wang_zhiying1@outlook.com.

Full name: Wang Zhiying
Email: wang_zhiying1@outlook.com
Cellphone: (+86) 15032508400
Mail address: 3 Unit, 40 Building Lantianlou, Lubei District, Tangshan City, Hebei Province, China.