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Perceptions of Native and Non-native English Varieties by Chinese EFL Learners: An Investigation of the Effects of Study Abroad



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Abstract

This study investigated Chinese EFL learners' perceptions of different varieties of English, and compared the perceptions of learners with and without experience of Study Abroad (SA) in Anglophone countries. A total of ninety Chinese university students majoring in language studies participated in an online survey. They listened to seven English varieties (RP, Glaswegian, Liverpudlian, Indian, Italian, Chinese and Malaysian) and evaluated these using four criteria (comprehensibility, social-attractiveness, foreign-accentedness and variety recognition) on a series of six-point Likert scales and two open-ended questions. According to statistical analysis, all participants regarded the standard variety (RP) and the local variety (Chinese) highly in terms of comprehensibility and social-attractiveness. Participants were generally sensitive towards the native and non-native accentedness. With regard to variety recognition, participants consistently and accurately identified the standard variety and the local Chinese variety. Participants were less certain about the origin of the regional UK varieties and the international varieties. When adding in the factor of different learning contexts (at home and Study Abroad), the results revealed that study abroad in the UK has a positive influence on participants' perceptions of international and regional UK varieties. Listeners with study abroad experience perceived Italian-accented speech as more comprehensible and more attractive and they were more likely to accurately identify the origin of regional UK varieties. The findings imply that study abroad may have value in helping learners to understand and accept non-standard or unfamiliar varieties of English. Based on participants' responses, there were highly positive attitudes towards linguistic diversity and willingness to learn nonstandard varieties, suggesting a demand for the inclusion of nonstandard varieties in the classroom.

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List of Abbreviations

The following abbreviations are used in this study.

ANOVA	Analysis of Variance
CEFR	Common European Framework of Reference
EFL	English as a Foreign Language
IELTS	International English Language Test System
NNSs	Non-native speakers
NSs	Native speakers
SA	Study Abroad
NSA	Non-Study Abroad
TEM-4	Test for English Major-Band 4
TEM-8	Test for English Major-Band 8
TOEFL	Test of English as a Foreign Language
TOEFL iBT	Test of English as a Foreign Language Internet-Based Test
L2	Second language
L1	First language
RP	Received Pronunciation

Chapter 1. Introduction

1.1 Global Englishes and Study Abroad

The paradigm of Global Englishes views English as plural in terms of linguistic, cultural and functional aspects to legitimize different varieties of English around the world (Galloway & Rose, 2015). The idea of plurality of English overturns the impractical notion of having a homogenous, invariant and monolithic standard English and challenges fundamental assumptions of desirable native models in language teaching that cannot represent global usage of English (Matsuda & Friedrich, 2012). It has been estimated that approximately 80% of communication in English occurs between non-native speakers (NNSs) (Carter, 1998) and the number of NNSs has been increasing exponentially. Therefore, it may be argued that a major aim of communication in English should be bridging the gap of understanding across individuals and cultures.

Under this circumstance, it is important to shift focus from native models to easy comprehensibility in communication for learners who learn English as a Foreign Language (EFL). Moreover, understanding different uses of English across countries and regions may help in enhancing learners' awareness of linguistic and cultural diversity and broadening their world outlook.

Study Abroad (SA) remains a prized context to afford learners immersion for both language and culture (Shiri, 2013). SA learners were believed to outgain academic-year learners at home not only on oral proficiency (Dewey, 2007), but also learners' sociolinguistic competence, language attitude and motivation (Churchill & DuFon, 2006). However, whether this SA effect still has the same effects in a digital world, where information around the world and communication with people in other countries are easily accessible on the Internet, remains a question for further investigation.

1.2 Aim of this study

Situated within the Global Englishes paradigm, this study focuses on the perceptions of different English varieties among Chinese EFL learners, the largest group of EFL learners in the world (Zhang, 2019). Further, the perceptions of learners with and without experience of SA in Anglophone countries are compared. The main aim of this study is to raise the awareness of linguistic diversity and challenge the notion of "standard" English, which has been argued to be incompatible with the diversity and complexity of Englishes spoken around the world (Galloway & Rose, 2015). Openness to linguistic

diversity within English was also examined in this study to understand Chinese EFL learners' acceptance of nonstandard varieties.

1.3 Structure of this study

This paper is organized as follows: Chapter 2 discusses previous research on comprehensibility and foreign accentedness, and on the social evaluation of different language varieties. It also outlines the proposed research questions of this study. Chapter 3 expounds on the methods used to collect data and the rationale of employing those methods for the current study. Chapter 4 and 5 explicates the results and interprets the implications of the findings. Chapter 6 summarizes the findings, study limitations and suggestions for future research.

Chapter 2. Literature Review

2.1 Definitions of Accent, Dialect and Variety

Variety refers to a distinct form of a language (McArthur, 1998). It is more general and neutral than the following terms. Dialect refers to a language variety with systematic use of vocabulary and grammatical features that are associated with people from a regional or social background (McArthur, 1998). By contrast, an accent is the way people in a particular geographic area or social group pronounce words (Wells, 1982), which specifically refers to differences in pronunciation. It should be noted that there is no clear-cut dividing line between the concepts of a language variety, a dialect and an accent. The focus of English language studies is on how different varieties are perceived by listeners and the influence of accented speech. Accent is salient in individual's speech (Giles, 1970). Social evaluations of an accent can have a major influence on behaviour and lead to stereotyping (Bohner & Dickel, 2011). Listeners are likely to give evaluative assessments on the speaker's personality, prestige or ethnicity (Giles, 1870; Hanani et al., 2013) denoted by an accent and the social evaluations behind it. This issue drove the rise of language attitude studies, and research into awareness of linguistic diversity (e.g. Giles & Billings, 2004; Xu et al., 2010; Galloway, 2017; Mirshahidi, 2017).

2.2 Comprehensibility and Foreign-Accentedness of Different English Varieties

2.2.1 Definition and Measurement of Comprehensibility

Many studies have conceptualized how people process speech on different levels of understanding (e.g. Smith & Nelson, 1985; Munro & Derwing, 1995; Field, 2019). Among them, Smith and Nelson (1985)'s tripartite paradigm, and Munro and Derwing (1995)'s three types of spoken language understanding, have been the most widely adopted.

The tripartite paradigm from Smith and Nelson (1985) provides clear definitions of three terms that are often confusing: intelligibility, comprehensibility and interpretability:

(1) intelligibility: the ability to decode the particular words used in a speech;

(2) comprehensibility: the ability to understand the meaning of the utterance;

(3) interpretability: the ability to grasp the speaker's intentions behind the speech.

Munro and Derwing(1995) embraced Smith and Nelson's (1985) definition of intelligibility and comprehensibility and added another construct of accentedness.

(1) intelligibility: the ability to decode speech;
(2) comprehensibility: the degree of effort needed to understand the speech;
(3) accentedness: the degree of difference from a referential accent.

Munro and Derwing (2015) regarded their paradigm as more inclusive and practical for empirically measuring the constructs and understanding L2 communication compared with Smith and Nelson (1985), and thereby proposed assessment tools for the three constructs. Intelligibility is often measured by transcription or dictation of a speech sample (Bradlow & Bent, 2008; Derwing & Munro, 1997). Comprehensibility and accentedness are typically evaluated via Likert scales (Matsuura et al., 1999).

With regard to the measurement of comprehensibility, Likert scales have been widely used in previous studies (Matsuura et al., 1999; McKenzie, 2004; Zhang, 2019a). Listeners are asked to evaluate a speech's comprehensibility on a Likert scale. This method is convenient for measuring the extent to which a speech sample is comprehensible to listeners through a scalar rating. Other than Likert scales, the technique of magnitude estimation in psychophysics, which is a continuous sliding scales, has also been used by many applied linguistics studies (Saito, Trofimovich, & Isaacs, 2015; Trofimovich & Issacs, 2012). This method was used when researchers would like to compare different aspects of perception with more precise scores.

However, there are some possible weaknesses of using either a Likert or sliding scales. Firstly, the term comprehensibility might not be well-understood by participants and thus affect the reliability of the measure (Nelson, 2011). Under this circumstance, statements may be used to contextualize the term. Secondly, self-report ratings from listeners can possibly overlook other potential intelligibility issues that listeners did not indicate (Trisitichoke et al., 2019). In this case, Kennedy (2012) suggested that interactive tasks are a better option to examine listeners' actual understanding through their responses. For instance, listeners can translate the listening material or summarize the gist in their native language, while teachers or researchers evaluate their depth of understanding according to their response. Nevertheless, this method requires a large amount of time for training participants before the experiment and analysing the data.

2.2.2 Definition and Measurement of Foreign-Accentedness

As one of the three dimensions of speech understanding in Munro and Derwing (1995), accentedness is how different a speaker's speech sounds compared to some reference variety. It is usually measured through a Likert scale. Foreign-accentedness is a

particular category of accentedness. Munro (1998) defined foreign accent as the speech produced by NNSs that "differs in partially systematic ways from the speech characteristics of NSs of a given dialect" (p.139). As mentioned in 2.1, a foreign accent is salient in communication, as it differs from a local or native speech norm. Because of its saliency, foreign-accentedness can bear stereotypical bias, as native norm has often been a benchmark of a speaker's language proficiency (Derwing & Munro, 2009). However, it is likely that individuals who learn a L2 at later ages are likely to exhibit certain accented speech (Long, 1990), which means that it is common that L2 learners have detectable accents (Flege et al., 1995).

Under the galloping trend of Global Englishes, research focus was shifted towards the use of English by NNSs and global ownership of English (Galloway & Rose, 2015). Altering the spotlight from reduction of foreign accents, more recent studies have begun to focus on the comprehensibility of foreign-accented speech (e.g. Jenkins, 2000; Derwing & Munro, 1997, 2009). The most common way to evaluate foreign-accentedness is to record contrasting accents and allow listeners to evaluate their levels of foreign-accentedness on a Likert scale.

2.2.3 Relationship between Comprehensibility and Foreign-Accentedness

In terms of the relationship between foreign-accentedness and comprehensibility, these are partially independent, in that completely comprehensible speech can nonetheless be evaluated as having a heavy foreign accent (Derwing & Munro, 2009). Munro and Derwing (1997) obtained evaluation data of four non-native speech samples from 26 native English listeners. It has been found that accent ratings were harsher than the ratings for perceived comprehensibility and for intelligibility. In addition, some speech samples were accented and also fully intelligible but require more effort or processing time for comprehension. Although these three constructs were correlated in that study, accentedness did not necessarily interfere with intelligibility and comprehensibility, which implies the need to dissociate foreign-accentedness and comprehensibility in language assessment that usually confound the two dimensions.

2.2.4 Factors Affecting Comprehensibility and Foreign-Accentedness

2.2.4.1 Speaker's Factors

Studies on the speaker factors affecting comprehensibility and foreign-accentedness have painted a complex picture with conflicting results.

Numerous studies have explored which segmental and suprasegmental features in pronunciation contribute to foreign-accentedness. It has been found that variations in prosody (Liu & Lee, 2012), affected by first language (L1) transfer, can lead to foreign accent. Similarly, Anderson-Hsieh, Johnson, and Koehler (1992) found that prosody cues such as speech rate were evaluated as a strong factor affecting accentedness and perceived comprehensibility. However, these studies did not control for segmental factors, which could make it difficult for listeners to judge prosodic cues independently of other pronunciation features.

In consideration of this weakness, Munro and Derwing (1997) used a filtered speech that removed most of the segmental messages from the recordings while keeping intonational features intact. The technique was also used by Munro (1995) and Van Els and De Bot (1987). They looked at how different linguistic features influence accentedness and comprehensibility. The following linguistic features were involved: grammatical errors, phonemic errors, nativelikeness of prosody and speaking rate. Listeners were required to respond to open-ended questions asking their beliefs about factors affecting comprehension and perceived accentedness in four non-native speech samples. Interestingly, although statistically only 15% of the ratings were correlated with phonemic errors, most participants still believed that segmental deviations were the primary source of foreign-accentedness. For comprehensibility, none of the listeners clearly identified any segmental errors affecting comprehensibility, whereas more grammatical errors and fast speech rate led to lower comprehension scores.

This result was reminiscent of Dahl (1981), who studied NNSs' comprehension of native speakers (NSs). In Dahl (1981), NNSs complained that some speech samples were not comprehensible, with a fast speech rate, but in practice, their speech rate was no faster than the one with higher comprehensibility scores. The findings confirmed that the increased processing time caused by a particular accent might lead the listeners to believe that the speech is less comprehensible. The linguistic features in an accent might be perceptually salient but not necessarily affect comprehensibility.

2.2.4.2 Listener Factors

A wide range of listeners' individual differences also account for different levels of understanding of accented speech. Most factors that have been studied, such as shared L1 effect and exposure to L2, can be accounted for by familiarity.

A large body of research indicates that familiarity with a particular variety facilitates comprehension of a foreign accent (Gass & Varonis, 1984; Derwing & Munro, 1997) . Familiarity with an accent may restrict or strengthen listeners' depth of understanding in an accent and the sociocultural implications behind it.

A large-scale research by Ockey and French (2016) included 21,726 TOEFL iBT test takers from 148 countries as participants, representative of the TOEFL test-taker population at large. They were randomly assigned to listen to a lecture given by one of nine speech recordings (one US, four Australian and four British English speakers) and were asked to assess the strength of accent of each speech sample and complete the test. The results demonstrated that as the strength of accent increased, listening comprehension scores decreased. The less familiar international accents had an adverse impact on comprehension and test scores. This study shed light on the inclusion of multiple dialects and accents in listening comprehension tests, to parallel similar variety in the target language use domain. Similar findings were shown in Major and colleagues (2005), who also pointed out that this familiarity effect was more prominent among non-native listeners. The effect was not affected by listeners' proficiency levels (Munro & Derwing, 1995).

Zhang (2019) investigated Chinese EFL learners' comprehensibility judgments of nine English accents. The ranking of comprehensibility was as follows: American, British, Australian, Singaporean, Philippine, South Korean, Japanese and Indian/French. This ranking also reflected the familiarity with native standard English varieties in the classroom.

It should be noted that factors such as age of arrival, length of residence abroad, the speaker's gender, and frequency of using L2 are all associated with degree of familiarity and thus may affect perceived comprehensibility and accentedness (Flege et al., 1995; Coupland & Bishop, 2007).

2.3 Language Attitude Studies on Different English Varieties

2.3.1 Definition and Measurement of Language Attitudes

In social psychology, attitude refers to "a disposition to react favourably or unfavourably to a class of objects". Attitudes are influenced by individuals' upbringing and experience in respective sociocultural milieu. It is important to understand attitudes towards language varieties from sociolinguistic research because they can reflect general social evaluations of the perceived groups of speakers (McKenzie, 2010) that contribute

to stereotyping in education, employment and the community (Carranza, 1982). A listener' stereotypes towards a perceived social group can be triggered by an accent from the group, which may or may not be the realities the accent represents (McKenzie, 2008a). Moreover, for L2 learners, attitude towards the target language plays a key role in determining success for the language acquisition (Dörnyei et al., 2006). In this case, research into language attitude can raise learners' awareness of the linguistic diversity in the target language.

Language attitude research typically requires participants to listen to several speech recordings and then index information about the perceived groups of speakers either using scripted recordings or spontaneous speech in picture narrative tasks (Crowther, Trofimovich, Saito, & Isaacs, 2015; Trofimovich & Issacs, 2012). Picture narrative tasks can control the passage content and avoid revealing speaker's personal information (McKenzie et al., 2016).

There are two main types of technique used in collecting data in language attitude research: the verbal-guise technique (VGT) and the matched-guise techniques (MGT). VGT involves participants listening to recordings of several speech samples and evaluating each speaker's personality traits, usually on a bipolar semantic-differential scale or a statement Likert scale (Dragojevic et al., 2021). MGT requires participants to listen and evaluate several speech recordings of the same text being read aloud by the same speaker, but using different language varieties (Lambert et al., 1960; Hiraga, 2005). Both techniques have their strengths. For instance, VGT may better retain distinctive prosodic cues from different speakers, whereas MGT may better control variables such as pronunciation and voice quality. There are two typical aspects that were under consideration in this context: status and social-attractiveness. Status is sometimes termed as competence and prestige and social-attractiveness is also termed solidarity or warmth.

2.3.2 L1 English Speakers' Attitudes towards Different English Varieties

Spoken English shows great variation across regions in the place where English is the predominant language, such as the US and UK. A great majority of language attitude studies on English varieties have been conducted amongst L1 speakers. For both L1 or L2 listeners alike, standard English varieties tend to be judged positively in terms of status or positive personality traits, such as being ambitious or intelligent (e.g. Hiraga, 2005; Xu et al., 2010). Non-standard varieties were generally evaluated negatively in terms of status. In the US context, past studies showed that whether a variety can be considered as

standard or non-standard was influenced by regional social prejudice such as poverty in the rural area and undesirable quality of education (Milroy, 2001; Fought, 2002). In the UK context, previous studies suggested that most stigmatized varieties are those spoken by working-class speakers in industrial areas such as Liverpool, Birmingham and Glasgow (Coupland & Bishop, 2007; Giles, 1970). However, regional standard varieties such as Scottish Standard English enjoys the same high ratings of prestige and attractiveness as RP-type varieties, because of its association with educated and middle-class speakers (Coupland & Bishop, 2007). The evaluations of non-native varieties by L1 speakers were largely dependent on the attitudes towards the target language and culture.

Giles (1970) investigated aesthetic, communicative and status perceptions in various English varieties among 177 speakers. He used both vocal and conceptual stimuli of speech samples. It was found that RP and participants' own accent were rated positively in terms of all aspects, whereas Birmingham, Cockney and Liverpool were rated relatively negative. There was a gap between the evaluations of vocal and conceptual stimuli in the Indian-accented speech. Below are the full results for the three dimensions in two conditions.



Figure 1. Results of Giles (1970) - Vocal Stimuli



Figure 2. Results of Giles (1970) - Conceptual Stimuli

In response to Giles (1970), Hiraga (2005) carried out an experiment among 32 subjects (22 female and 10 male) from southern England who were students at the University of Oxford. The results were highly consistent with Giles (1970) in terms of status. Participants expressed most solidarity with the regional Yorkshire accent, which is not shown in Giles (1970). The ranking of all varieties under consideration was as follows:



Figure 3. Results of Hiraga (2005)

2.3.3 EFL Learners' Attitudes towards Different English Varieties

More recent studies have examined L2 English users' social evaluations of different English varieties. There are numerous studies concerning attitudes amongst Asian university students (e.g. McKenzie et al., 2016; McKenzie & Gilmore, 2017; Xu et al., 2010; Zhang, 2019). McKenzie and Gilmore (2017) found that Japanese students tend to evaluate the varieties of L1 speakers of both standard and non-standard English positively, especially the US varieties in terms of both status and solidarity whereas they expressed solidarity towards the Japanese-accented variety. This finding is broadly compatible with other studies in Asian contexts. For instance, McKenzie, Kitikannan and Boriboon (2016), who focused on social evaluations of Thai students, found that Thai students regarded L1 English varieties positively for both competence and warmth, whilst among all non-native varieties, only the Thai local variety was rated positive for warmth.

Interestingly, for social-attractiveness of L1 English varieties in the two studies discussed above, both Japanese and Thai students rated standard US varieties (Mid-West US English) less favourably. This finding is compatible with the research undertaken amongst listeners in Malaysia and Indonesia (Tan & Castelli 2013), who evaluated US standard varieties as with less warmth. Besides, the Asian varieties except the local ones were downgraded on both status and social-attractiveness dimensions in the two studies, suggesting some degree of prejudice against the perceived social groups (Fiske et al. 2002), despite the large Asian communities within Japan and Thailand. The full results of both studies are shown below.



Figure 4. Results of McKenzie and Gilmore (2017)



Figure 5. Results of McKenzie, Kitikannan and Boriboon (2016)

Xu, Wang and Case (2010) probed into the attitudes towards multiple non-native English varieties within a country, which overturned previous categorizations of non-native English varieties only by countries. 108 college students in China evaluated six English varieties by two American English, two British English and two Chinese English speakers for status and attractiveness. The results showed that L1 English varieties were favoured over non-native local varieties, influenced by the entrenched native models in the classroom. Within the local varieties, the Mandarin-accented speech was rated as more favourable in terms of attractiveness an prestige than the Cantonese-accented speech, maybe because Mandarin is viewed as the standard language in China.

2.4 The Role of Variety Recognition

Language attitude studies have tended to assume that listeners were able to recognize the varieties of English under investigation. However, if there is any misidentification, the validity of the results could be questioned since there might be a gap between listeners' belief of an English accent conceptually and their actual perceptions of the accent with only vocal stimuli (Giles, 1970). Recent language attitude studies introduced the variable of variety recognition to study listeners' accuracy and depth of understanding in different English varieties (McKenzie, 2008b, 2010; Yook & Lindemann, 2013; Zhang, 2019).

In the study by Derwing and Munro (1997), 26 native English listeners were asked to identify four English varieties by four speakers. The results showed that Cantonese

was the easiest to identify, followed by Spanish, Polish and Japanese. It was also found that familiarity instead of proficiency was the determinant of identifying the speakers' background, which concurs with the findings in McKenzie (2010) that when the Japanese learners are more familiar with a variety of English (US and Japanese varieties), they are more likely to recognize the variety and rate it highly in terms of status and solidarity.

In the study by Zhang (2019), it was found that Chinese EFL learners could recognize standard American English and the majority of them could also identify standard British, Australian and South Korean English. In contrast, they could hardly recognize Indian, Philippine, Singaporean, French and Japanese English. This finding again corroborates the familiarity effect on variety recognition. As the researcher points out, standard native models are prominent in language teaching in China, that leads to the accurate identification of the origin of standard varieties. The accurate identification of South Korean English may be due to the popularity of South Korean pop culture across Asia.

2.5 The Role of Openness to Linguistic Diversity

The awareness of variation in the target language among EFL learners gained increasing attention recently as a crucial variable in language perception and attitude studies. It has been found that openness to linguistic diversity interplays with, and influences, perceptions of nonstandard and regional language varieties (McKenzie, 2008a; McKenzie et al., 2016; Xu et al., 2010).

Investigating awareness of linguistic diversity was initially developed for perceptual dialectology that is concerned with how non-linguists understand dialectal variation in a language (Inoue, 1999). For instance, Coupland and Bishop (2007) gathered data from a large online survey of 5010 UK residents' reactions to 34 different accents of English in terms of social attractiveness and prestige. It was found that participants favoured their own or linked varieties and younger participants attributed less prestige to standard varieties.

Employing the data-gathering technique from perceptual dialectology, McKenzie (2008a) used a Japan map-labelling task to gather information on Japanese nationals' evaluations of varieties of Japanese speech. They generally had a broad tolerance towards non-standard Japanese speech. In contrast, in terms of competence rating, participants with lower levels of awareness of Japanese linguistic diversity were less likely to accept Japanese-accented English.

McKenzie, Kitikannan and Boriboon (2016) investigated this variable by asking participants to respond to the statement "I like to hear varieties of Thai different from standard Thai" on an 80-point scale. The results revealed a positive perception of linguistic diversity in Thai speech. For both competence and warmth dimensions, participants with heightened awareness of L1 diversity tended to rate Thai English more positively.

In light of attitudes towards linguistic diversity in English, in the Chinese context, previous studies painted a more complex picture with conflicting results. Based on 24 semi-structured interviews among Chinese university students, Wang (2013) investigated learners' awareness of English as a lingua franca (ELF) and concluded that a majority of learners still affiliated to the idealized notions of monolingual origin of native English. Wang (2013) revealed that this may be explained by the nature of language education in China, which conforms to native English norms instead of comprehensibility and clarity. This idea of monolithic native English norms is also prominent in other contexts (Lippi-Green 1994; Shohamy 2006).

In contrast with Wang (2013), Xu, Wang and Case (2010) conducted an interview to look into attitudes towards English linguistic diversity among Chinese EFL learners. Their responses showed that they were willing to learn more about less standard varieties of English and improve their English on the basis of having more clarity and comprehensibility in communication.

2.6 Study Abroad and English Language Acquisition

2.6.1 Study Abroad and English Production

SA was defined as learners following language or content courses and carrying out a series of social and leisure activities during a period of residence in a target language community (Housen & Pierrard, 2005). With the increase of SA Programs, the number of research studies on language learning in SA contexts is also on the rise. The research agenda has expanded from a focus on language gains to the development of sociolinguistic competence and learner motivation (Churchill & DuFon, 2006).

Studies on language gains are mainly concerned with whether learners' oral proficiency levels change as a result of their SA experience, comparing the performance of SA learners and learners at home who received classroom instruction for the same period of time(Llanes & Muñoz, 2013; Martinsen, 2010; Muñoz & Llanes, 2014). There

have been conflicting results on this issue, on account that the effects of SA differ across individuals.

Muñoz and Llanes (2014) explored the age effects and learning context on learners' degree of foreign-accentedness. There were two age groups of participants: children and adults who learnt English in two different conditions: at home and abroad. They were asked to narrate a story in an interview. Listeners rated the degree of foreign-accentedness for each learner. The results demonstrated that learning context plays a crucial role, with learners of SA having significantly milder foreign-accentedness in the post-test, which corroborates with Martinsen (2010) who found a significant SA effect for improvement of spoken Spanish. Although age did not have significant effect in Muñoz and Llanes (2014), children achieved the greatest improvement of language and they spent more time speaking with NSs compared with adults.

Despite confirming the positive effect of SA on L2 production, Muñoz and Llanes (2014) also shed light on different language performance within the SA group and how learners can optimize their SA experience. Meara (1994, p.37) pointed out that whether SA has potential effect on learners' production is "associated with one other factor: time spent talking with NSs", which coincides with the research interest of some studies that found some positive relationship between EFL learners' linguistic gains and social network during their SA time (Mitchell, 2015; Wong & Babel, 2017).

2.6.2 Study Abroad and Perceptions of Different English Varieties

Despite the breadth of research on SA influence on learners' production, there remains a dearth of studies investigating whether there SA has any effect on learners' perceptions of different accents in a target language, especially in English learning context.

There is some evidence showing that extensive exposure to regional accents can help listeners adapt to foreign-accentedness speech (Clarke & Garrett, 2004; Floccia et al., 2006; Bradlow & Bent, 2008; Floccia et al., 2009). SA is likely to increase such exposure. Foreign-accentedness speech is a unique category that underlies listener adaptation, as it includes a variety of speech that differs from the pronunciation norms in the standard native model. Since the foreign-accentedness features typically arise from the phonological interaction between a speaker's native language and the target language, these features are often highly systematic and consistent across speakers from

the same L1 background (Bradlow & Bent, 2008). Therefore, the listener's adaptation to foreign-accented speech can be developed through accumulation of experience.

Bradlow and Bent (2008) conducted two experiments to examine native American English listeners' perceptual adaptation to Chinese-accented English. In one of their experiments, listeners were presented with the foreign-accented speech varied in their speech intelligibility. There were two conditions involved in the comparison: single and multiple-speaker presentation formats. It was found that listeners were more able to tune into the foreign-accented speech of a novel voice when they were exposed to multiple speakers rather than a single one, suggesting that generalizing information of foreign accent features needs to be facilitated by different levels of representation. These findings are consistent with Floccia and colleagues (2006, 2009), who found that extensive exposure contributes to full adaptation. This implies that if EFL learners in a SA context optimize their exposure to various forms of language in different environments, they may have more linguistic and cultural gains from the SA experience.

Shiri (2013) investigated the impact of short-term SA on the language attitudes of Arabic learners at university level in the US towards regional dialects and the factors affecting their perceptions. 371 participants responded to a survey. The results indicated that learning Arabic in the local community, even for a short stay, generally had a favourable impact on learners' attitudes towards linguistic diversity. It was reported that 80% of learners became more open to learn different forms of Arabic instead of learning the standard one exclusively. These findings accord with previous studies, which found that learner's language attitudes are subject to influence by the learning context instead of being static (Csizér et al., 2010; Wesely, 2012).

2.7 Summary of Previous Studies and Rationale of This Study

The above discussion has shown the potential value of conducting in-depth research into Chinese EFL learners' perceptions of different varieties of English, and any differences that may be observed between the perceptions of learners with and without experience of SA in Anglophone countries. This will be the research interest of current study.

Despite the volume of research undertaken in Asia, there seems to be no in-depth studies investigating the perceptions of regional and international English varieties from the aspects of social-attractiveness, comprehensibility, foreign-accentedness and variety

recognition. These four dimensions of perception integrate linguistic, cultural and emotional elements that are required in successful communication.

The emerging picture has shown that SA provides learners with more opportunities to expand their exposure to and familiarity with different varieties of the target language, which plays a critical role in enhancing comprehensibility and foreign-accentedness perception as mentioned in section 2.2. However, few studies have focused on the influence of learning contexts on perceptions towards different English varieties despite the global spread of English.

2.8 Research Questions

Based on the above review, the followings are the research questions:

1. Are there any differences between the perceptions of different English varieties among Chinese EFL learners?
2. Are there any differences in the perceptions of a variety of English varieties, between Study Abroad (SA) and Non-Study Abroad (NSA) Chinese EFL learners?
3. Are there any differences in the openness to linguistic diversity in English between SA and NSA Chinese EFL learners?
4. Which English varieties would Chinese EFL learners be happy to adopt in their own spoken production?

Perceptions are operationalized as four aspects: comprehensibility, foreign-accentedness, social attractiveness and variety recognition in this study.

Chapter 3. Methodology

This chapter addresses the methodological approach used in this study. Firstly, an overall description of the research design is given. Secondly, the participants' linguistic and educational backgrounds are introduced. Thirdly, the information regarding the text of speech samples is provided, followed by the detailed reasons for choosing the seven English varieties and how these speech samples are collected. Lastly, a large proportion of this chapter expounds on the online questionnaire design, focusing on the rationale for the verbal-guise technique (using a six-point statement scale) and on the selection of adjectives used in the scale.

3.1 Summary of Research Method

Several previous studies observing the SA influence on L2 perception and production were longitudinal studies and compared differences at pre and post SA (Llanes & Muñoz, 2013; Muñoz & Llanes, 2014). Due to the time limits associated with an MSc dissertation, this study was cross-sectional, examining the issue among Chinese EFL learners, some of whom had studied abroad in an English-speaking country (SA) and others who had not (NSA). This allows tentative inferences to be made about the possible relationship between SA experience and language attitude and perception (though a longitudinal design would be required in order to make stronger inferences).

This study used an online questionnaire to collect data. Participants were asked to listen to each recording and respond to a series of six-point Likert-scales based on their perceptions and answer two open-ended questions particularly for different levels of variety recognition. Other background information of participants was collected through the same questionnaire.

3.2 Participants

All participants were opportunistically recruited via snowball sampling on Wechat, a social networking platform widely known by Chinese people. The invitation letter (Appendix C) was sent to the researcher's acquaintances and they were asked to forward the link to any potential target participants. All participants took part in an online survey on voluntary basis. The strength of using snowball sampling is it is easy and convenient to collect large sample that meet the inclusion criteria within limited time. However, this recruitment method is not able to control who responded the survey and guarantee the

respondents are representative samples. In order to minimize this limitation, the researcher also asked acquaintances to forward the survey link to the university's group chat to collect as many respondents as possible for further screening. The survey was distributed online for 2 weeks.

Ninety participants who met the inclusion criteria completed the whole survey. Participants were all L1 Chinese EFL learners who were majoring or had majored in a foreign language at university level in China. As shown in Figure 6, the majority of participants were studying or had obtained a master' degree (N=57), which is nearly twice as much as the number for undergraduate. They were all aged between 18-35 years with 62.2% of them(N=56) aged between 23 and 25 years (Figure 7). 70 females, 18 males (and 2 others who preferred not to state their gender) participated in the survey (Figure 8), which is in accordance with the gender imbalance in foreign language majors in China (Wangyi News, 2020, Sep 14).

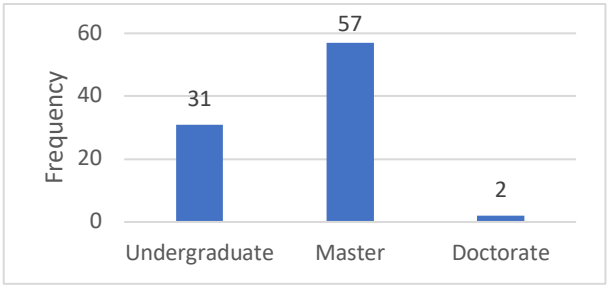


Figure 6. Educational Background of Participants

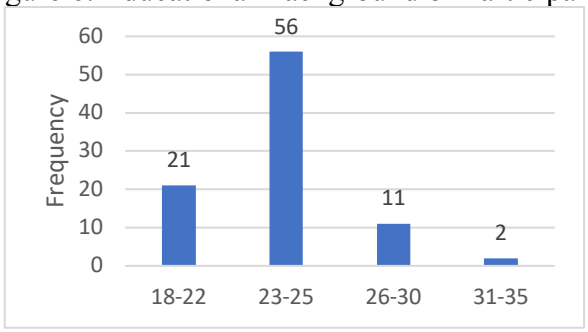


Figure 7. Age Range of Participants

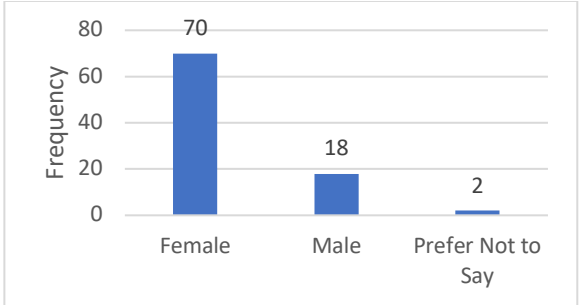


Figure 8. Gender of Participants

According to the background survey, all participants have experienced the Nine-year Compulsory Education in China. In China, primary and secondary education takes 12 years to complete in total, divided into primary, junior secondary and senior secondary stages. The nine-year schooling from primary school to junior secondary school pertains to compulsory education (China Internet Information Centre). Thus, the sample has certain representativeness of Chinese EFL learners.

In addition, a university course with a foreign language major in China focuses on developing foreign language abilities and intercultural communication skills, which requires students to not only have advanced English proficiency but also a grasp of at least one other foreign language as well. All participants passed the TEM-4 (Test for English Major-Band 4) or TEM-8 (Test for English Major-Band 8), a standardized English proficiency test for all Chinese language majors. Obtaining the certificate for TEM-4 parallels to B1+ level based on the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2021) and a passing grade for TEM-8 is consistent with B2+ level in CEFR (Zhang, 2019). Hence, all participants are intermediate or advanced English users (B1to C2 level in CEFR), which is also in accordance with their self-perceived English proficiency level (See Figure 8). Given complex effect of standardized testing such as testing a limited scope of learning and performance, participants were also required to evaluate their English proficiency according to the CEFR levels given in the survey. The self-report proficiency level has been regarded as a more reliable indicator of participants' actual language competence (Dewaele & Dewaele, 2021). The result of the self-report English proficiency level is shown in Figure 9 with the majority perceiving themselves as B2 level (N=41) and C1 level (N=29) English users.

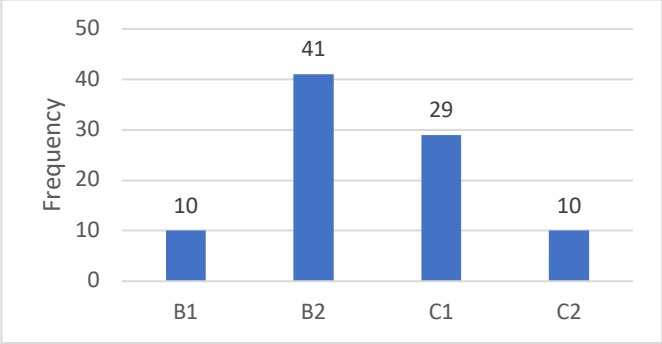


Figure 9. Self-perceived English Proficiency Level of Participants

In terms of SA experience (Figure 10), 50% of participants had no SA experience (NSA) (N=45) while the other 50% (N=45) had studied abroad in an English-speaking country (SA), with varying lengths of stay. Their length of SA in Anglophone countries ranged from 1 month to 41 months (Table 1). Among SA participants, 68.8% (N=31) had studied abroad in the UK and others had studied abroad in the USA, Ireland, Australia, Canada, New Zealand and Singapore. For NSA group, 44.4% said in the questionnaire that they intended to study abroad an English-speaking country in the future (with the most popular target destination being the UK) (Figure 11&12). The remainder (55.6%) stated that they did not intend to study abroad. (Some of these may have been majoring in languages other than English and therefore intending to study abroad in a non-Anglophone country).

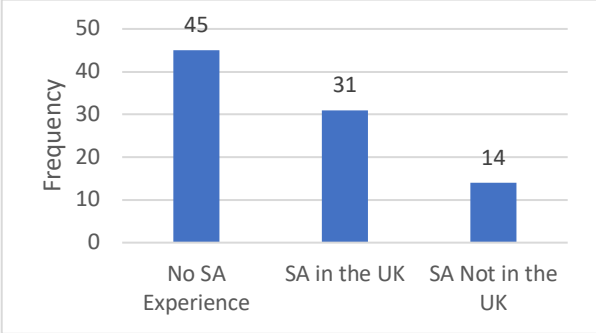


Figure 10. Study Abroad Experience of Participants

	Minimum	Maximum	Mean	Median	SD
SA Length (Months)	1	41	12.59	12	10.027

Table 1. Study Abroad Length

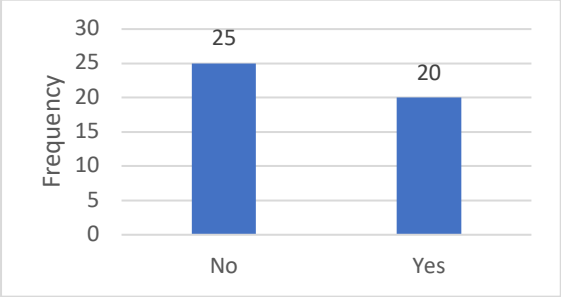


Figure 11. Study Abroad Motivation of Non-Study-Abroad Group

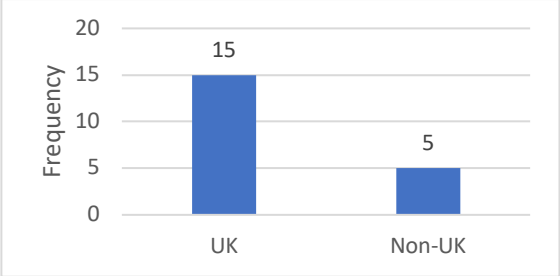


Figure 12. Expected Destination of Study Abroad

3.3 Speech Samples

The text of the speech samples used in this study was provided by an existing speech corpus, *International Dialects of English Archive (IDEA)*, which houses a large number of recordings of English-language dialects and accents from around the world. Speakers are required to read aloud the same text, *Comma Gets a Cure* and recorded in high-quality conditions. *Comma Gets a Cure* was written by Jill McCulough and Barbara Somerville and edited by IDEA Associate Editor Douglas N. Honorof (2000). The passage has 375 words based on J. C. Wells' standard lexical set words (Wells, 1982), which enables researchers to examine a large variety of phonemic features in English pronunciation. This archive is a useful resource for speech perception research, and has been adopted in several previous studies (Hiraga, 2005; Zhang, 2019).

The current study includes seven varieties of English accents: Received Pronunciation (RP), Liverpudlian, Glaswegian, Italian, Indian, Chinese (Mandarin-accented) and Malaysian (Cantonese-accented). These varieties were chosen in discussion with my supervisor (a native speaker of British English) for two reasons: (1) because they have strong, distinctive phonological features which allow them to be readily recognized; and (2) because of their importance or relevance for Chinese learners of English. More information on these two reasons are given below for each variety (section 3.3.1).

It was also important that the speech samples representing these different varieties should have comparable vocal qualities and speech rate, which is the method widely employed in previous studies (e.g. Ladegaard, 1998; Rodriguez et al., 2004; Cargile et al., 2006). Speakers' educational background (as documented as part of the IDEA database) was also kept consistent. Hence, the inclusion criteria when selecting speech samples were: 1) male; 2) have distinctive accent features; and 3) spoken by speakers with bachelor degree or above.

Based on these criteria, a range of relevant samples in IDEA were reviewed, and the varieties of RP, Liverpudlian and Glaswegian were selected from the archive. It was not possible to identify speech samples from this archive which met all of my inclusion criteria. Therefore, audio samples of the other four varieties were recorded directly from students based at the universities of Oxford and Edinburgh.

The background information and speech rate of each speaker are listed below. There is little difference between the speech rate of each recording ranging from 152.01 to 194 words per minute (SD=14.99). Since the volume of the original speech samples varied, it was adjusted using Audacity (Audacity Team, 2021), a free audio editing and recording software package.

Table 2. Speakers' Background Information

English Varieties	Gender	Region	Educational Background	Speech Rate(words per minute)	L1
RP	Male	London	Bachelor	181.42	English
Liverpudlian	Male	Liverpudlian	Bachelor	194.00	English
Glaswegian	Male	Lanarkshire	Bachelor	166.67	English
Italy	Male	Molise (Southern Italy)	Post-Doctoral	155.15	Italian
India	Male	Delhi (capital)	Master	160.74	English and Hindi
China(Mandarin)	Male	Shandong(Northern China)	Master	152.01	Mandarin
Malaysia(Cantonese)	Male	Kuala Lumpur	Master	172.81	Cantonese

Table 3. Speakers' Speech Rate

	N	M	SD	Min	Max
Speech Rate	7	168.97	14.99	152.01	194

3.3.1 Rationale for Selecting the Seven English Varieties

Although there are numerous varieties of English in use worldwide, it would clearly not be feasible to include all of them in this study. Therefore, this study selected seven

English varieties, which include varieties from all three concentric circles established by Kachru (Llamzon, 1984): Inner Circle (Received Pronunciation, Liverpudlian and Glaswegian varieties), Outer Circle (Indian and Malaysian varieties) and Expanding Circle (Chinese and Italian varieties). In other words, the 7 speech samples encompass standard and regional British varieties and local and international English varieties for Chinese EFL learners.

It should be noted that people from the same area of the same social class, age or sex do not speak identically. The seven speech samples were selected according to their distinctiveness of accents to contrast with each other, but they cannot represent all English varieties spoken in the specific region. The boundaries between each accent may well correspond to the perceptions of social reality rather than to exclusively linguistic and phonetic considerations.

Since this study is interested in the differences between perceptions of learners with and without SA experience, it focused on standard and regional English varieties in the UK, which is one of the destinations with increasing popularity for studying abroad. Chinese, Malaysian, Indian and Italian English varieties were additionally chosen because they are in the top ten countries of origin of international students in the UK (Universities UK, 2021, Jul 27), which together constitute an epitome of the varieties of English accents that EFL learners might encounter in SA contexts. In addition, speakers with Chinese, Indian and Malaysian English varieties are likely to become the target interlocutors that Asian EFL learners may encounter in future working environments (for both the SA and NSA groups).

Received Pronunciation

This variety is most often perceived as the standard British English pronunciation in native and non-native English-speaking contexts. It should be noted that the notion and criteria of being standard English vary across areas and the definition used in the current study is from Bex and Watts (1999) that described standard language as the language variety spoken and written by an educated social group and that has acquired the highest prestige in a certain speech community.

RP is generally regraded highly as an ideal model for English pronunciation for EFL learners due to frequent exposure in the classroom and media or because of learners' preference for the prestigious status of the standard varieties of English(McKenzie, 2008a). It has been used as the benchmark for learners' English pronunciation level in

standardized tests (Zhang, 2019). Despite its authority in EFL context, RP is regionally non-specific and spoken by few people in the UK.

Regional British Varieties—Liverpudlian and Glaswegian

Perceptions of standard and regional native varieties were gauged to see whether participants perceive these two types differently and how their perception relates to their learning environment (SA and NSA). Two regional British English speech samples were chosen specifically on the account that both varieties are distinctive and bear certain sociocultural connotations among NSs (Giles, 1970). In the past, the most stigmatized varieties are those spoken by working-class speakers in industrial areas such as Liverpool, Birmingham and Glasgow (Coupland & Bishop, 2007; Giles, 1970) in the UK. However, it is likely that these attitudes may have been changed by the increasing representation of regional varieties on social media and in the traditional media. There remains a dearth of studies exploring NNSs' attitudes towards regional varieties and whether NNSs' evaluations of these varieties align with those of NSs.

Chinese-Standard Mandarin

Mandarin is the predominant language in China. In addition to Mandarin, there are hundreds of related Chinese languages such as Hokkien and Cantonese and approximately 300 minority languages (Lewis, 2009). The speaker of the Chinese-accented English in this study comes from northern part of China, whence standard mandarin originated. This variety represents Mandarin-accented speech with tonal rhythm (Han, 2013). Previous studies have shown that EFL learners had ambivalent feelings towards their local variety of English, but most of them hold positive attitudes in terms of solidarity and legitimacy (McKenzie, 2008a; Xu et al., 2010). This study further investigated this issue.

Malaysian-Cantonese

Malaysia is a multicultural and multilingual country, where there is no monolithic idea of standard English. Malaysian English is an English-based creole language mixed with languages and dialects such as Mandarin, Hokkien, Cantonese, Hakka, Tamil and Malay (Yamaguchi & Deterding, 2016). The speech sample in this study was from an L1 Cantonese and L2 English speaker in Kuala Lumpur. Cantonese is widely spoken amongst south-eastern China, southeast Asia such as Malaysia, Singapore and Vietnam

and throughout western countries. Cantonese as a tonal language has drastically different sound codes from English ones. It has more tones than mandarin and relies strongly on tonal speech rhythm to distinguish meaning. In addition to the influence of Cantonese accent, Malaysian English variety is also influenced by multiple languages in its diversified speech community.

Indian

India has the second largest population of English speakers in the world. The Indian variety included in this study was a speaker from an urban area, where the majority of users of Indian English come from (Wiltshire, 2020). Most English users in India are bilingual or multilingual (Wiltshire, 2020). The speaker in this study was a simultaneous bilingual speaker of Tamil and English. Indian English varieties is widely acknowledged as easily recognized variety by local people and also English NSs (McCullough, 2013; Fuchs, 2015). It has been included in the listening comprehension tasks of several English standardized tests (e.g. TOEFL, IELTS) to better reflect the variety of accents one might encounter while studying abroad.

Italian

This variety has been selected since few studies have tapped into the perceptions and recognition of European non-native varieties among EFL learners. Italian international students consist of the largest population of European international students studying abroad in the UK (Universities UK, 2021, Jul 27).

3.4 Instrument

The instrument employed in present study was an online questionnaire translated into Mandarin and distributed on Qualtrics, an online survey software. The survey comprised three parts in the following order: a background information survey; a verbal-guise task concerning perceptions on seven English varieties; and a set of scales designed to measure attitudes to linguistic diversity and self-desired accent in English production. The Mandarin translation was checked by a proficient native Chinese speaker and EFL learner majoring in Applied Linguistics in the University of Oxford. Below, more details about these three parts of the survey will be given.

3.4.1 Linguistic and Educational Background Survey

This part of survey also served as background screening to select participants who met the inclusion criteria of this study (Appendix B & D).

Basic information such as gender, native language and age were requested. Participants who speak Chinese as their first language (L1) and who have experienced the Nine-year Compulsory Education in China met the inclusion criteria for this study. Since the target participants were language majors studying in Chinese universities, they were asked about their proficiency in both English and any other languages.

In terms of English competence, standardized test results of English proficiency along with participants' self-perceived English proficiency were gathered, to check whether they all have English proficiency at intermediate or advanced level. It is acknowledged that asking participants to self-report their test results may not be completely reliable (for example, it is conceivable that some participants may have sought to over-represent their scores) but this risk was considered small.

Since language majors are highly likely to have varying amounts of SA experience in English-speaking countries, information regarding their length and locations of SA were also requested. Those who have no SA experience were asked whether they wished to SA in the future (and if so, their expected destination). Although half of participants (N=45) had no SA experience, 20 of them stated in the survey that they had motivation to SA in an English-speaking country in the future (in 3.1). For these potential SA EFL learners, it is arguably of great value for them to have an awareness of the diversity of English varieties before going abroad. Hence, listening to various varieties in the questionnaire provided a preliminary practice for intercultural communication.

3.4.2 Verbal-Guide Technique

Following the background survey, participants' perceptions of different English varieties were examined using a verbal-guise technique. There are two major techniques in measurement of language attitudes and perceptions: verbal-guise (Ball & Giles, 1982) and matched-guise (Lambert, 1967) techniques. Matched-guise technique requires speakers to read aloud the same text in different English accents. However, since a wide range of varieties are included in the current study, it would be impractical to find a single speaker who is able to produce seven English varieties. Therefore, this study used the verbal-guise technique. Seven speakers read aloud the same text (*Comma Gets a Cure*) and recorded the speech. By controlling the speech content, it can control potential variables that may affect listeners' perceptions such as speaker's vocabulary level and

listener's topic familiarity. In this case, listeners could pay more attention to the accents and thus be better able to compare different accented English varieties. Speakers were told to use their own natural accent rather than imitate any accent and read the text fluently and clearly at a slow pace.

This study presented relatively lengthy speech samples with each speaker reading the whole text on the account that it is vital to provide participants with sufficient clues and period of time to process the speech samples and moreover, fully develop and record their evaluations. This consideration has been validated by previous study (Field, 2019; McKenzie, 2008a). When hearing a new speech variety and a distinctive voice for the first time, listeners are not initially adjusted to the phonological features, especially in a second language. They have to go through a stage of adjustment, known as normalization (Johnson, 2008). Hence, adequate time is required to help participants adapt to each speech sample. Participants were allowed to drag the progress bar of each recording based on their pace of adjustment. For instance, for those who needed more time to adjust to the accent, they could listen to the whole recording or could drag the progress bar and repeatedly listen to the segment that gave them clues of the speech.

Participants were asked to listen to each speech recording from a series of speakers and then complete several questions based on each recording. They were required to evaluate each speech sample from four aspects: social-attractiveness, comprehensibility, foreign-accentedness and variety recognition. Comprehensibility, social-attractiveness and foreign-accentedness were measured on a 6-point statement scale (ranging from 1=Strongly Disagree to 6=Strongly Agree). Variety recognition required participants to make inferences about the origin of the speakers at a national and sub-national level, using open-ended questions (i.e. what country are they from; which region are they from within that country). The reason for using an open-ended question for variety recognition is to allow participants to write as much as they knew for the speaker's origin (Yook & Lindemann, 2013). They were also allowed to miss out this item by writing "I don't know".

The reason for using a statement scale is that it allowed the researcher to contextualize the terms in plain language for participants to understand. The statements used in the statement scales are shown in Table 4.

Table 4. Statements in the Statement Scales

Terms	Statement
Comprehensibility	I can easily understand this accent.
Social-Attractiveness	The accent makes me feel warm and friendly.
Foreign-Accentedness	I think the speaker is a native English speaker.

A traditional Likert scale usually requires participants to rate their perceptions on a scale of five or seven points. However, the current study used a six-point statement scale without a midpoint, because it was feared that participants might otherwise choose the "safe", neutral option. Moreover, a series of Likert-scales might cause listeners fatigue and thus, a scale without a midpoint might encourage participants to make their choices with more deliberation. It is also acknowledged, however, that a risk of this approach is that respondents are obliged to take a position one way or the other, when it is possible that they are genuinely neutral on the matter. In addition, a six-point scale provides a relatively wide range of options for participants and a clear distinction between each option, compared to a scale with a larger number of choices, such as eight or nine-point scale.

The seven speech samples along with respective perception rating questions appeared in randomized order, to control for the possibility of an ordering effect on the ratings.

In addition to randomizing the order of presentation, the instructions in the survey informed participants that their attention should be concentrated on the *comprehensibility of the accented speech* rather than the content of the text. Although the text was the same each time, participants were aware that they needed to look beyond this when estimating comprehensibility.

3.4.2.1 Pilot Study-Selection of Traits

As mentioned beforehand, this study examined four aspects of Chinese EFL learners' perceptions of different English varieties: comprehensibility, social-attractiveness, foreign-accentedness and variety recognition. The statements describing "comprehensibility" and "foreign-accentedness" were from previous studies (Cheng, 2016; Chen, 2019; Zhang, 2019). These two concepts have clear Chinese translation equivalents in these studies. However, social-attractiveness is highly culturally-bound and

contingent on sociocultural milieu and personal preferences (El-Dash & Busnardo, 2001). Thus, it is important that the trait used in the statement is carefully chosen so that it can represent what social-attractiveness means in a Chinese context. In order to obtain validity for the survey, this study re-evaluated the traits of social-attractiveness by conducting a prior questionnaire before the main experiment to make sure that the statement in Chinese could be clearly understood by Chinese participants. This approach has been adopted previously (Hiraga, 2005). The process is explained below.

18 Chinese EFL learners, who were friends and classmates of the researcher in the University of Oxford, participated in the Mandarin adjectives selection task. The questions were as follows:

"What adjectives in Mandarin you would use to describe the feelings when you hear a voice that elicits positive emotions to you and makes you become willing to talk to the speaker? (Please list all the adjectives that you can think of according to your own preference)"

"What adjectives in Mandarin you would use to describe the feelings when you hear your mother tongue/dialect that brings you solidarity if you have a positive perception of your ethnic identity?".

The most frequently mentioned adjectives in the response were: close, warm, sincere and friendly. In Mandarin, there is a four-character idiomatic phrase expressing the idea of these four concepts altogether: *亲切友好(qīn qiè yǒu hǎo)*. Therefore, this phrase was chosen to measure social-attractiveness perception in the survey. The response coincided with several earlier studies, which used solidarity and warmth as traits representing social-attractiveness (Fiske et al., 2007; McKenzie, 2008a; McKenzie et al., 2016). People who are perceived as warm can elicit positive emotions such as friendliness to the perceiver (Fiske et al., 2007). Therefore, this study can justify that the meaning of the Mandarin adjectives chosen for social-attractiveness statement is consistent with what the study aims to investigate.

3.4.3 Openness to Linguistic Diversity

To assess current Chinese EFL learners' openness to linguistic diversity in English, participants were asked to respond to the following statements using a six-point scale (1=Strongly Disagree, 6=Strongly Agree): "I would like to hear varieties of English accents different from standard ones" and "I would like to learn nonstandard English varieties in English listening classrooms". The first statement explored participants'

acceptance of linguistic diversity, which has been adopted from previous studies (Coupland & Bishop, 2007; McKenzie et al., 2016). The second statement tapped into participants' willingness to explicitly learn different English accents in class (Zhang & Du, 2018). Openness to linguistic diversity has been found, in earlier research, to influence different aspects of perception and willingness to communicate (Coupland & Bishop, 2007; McKenzie, 2008a; McKenzie et al., 2016). Listeners who declared more openness to linguistic diversity were more willing to accept nonstandard accents (Coupland & Bishop, 2007).

3.4.4 Self-Desirability of Accents in English Production

Participants' self-desired English varieties in production were examined by responding to the statement "I would be happy to have this accent when I speak English" using the same six-point Likert scale (1=Strongly Disagree, 6=Strongly Agree) after listening to each recording. Previous studies have found that EFL learners regarded standard English highly in terms of prestige and attractiveness (Xu et al., 2010) and would like to adopt the standard English varieties in their production (McCrocklin & Link, 2016). However, it is unclear whether this preference for standard English in production for EFL learners still hold true in the recent decade, which was examined in current study.

3.5 Ethics

3.5.1 Ethical Approval

This study involves human participants and personal data. Therefore, before conducting the experiment, this study had to obtain an ethical approval from Central University Research Ethics Committee (CUREC) at the University of Oxford. The CUREC application form was submitted to the CUREC in April 2021. The research has been judged as meeting appropriate ethical standards and the approval has been granted by CUREC in April 2021 (Appendix G).

3.5.2 Consent Form

The consent form was collected from participants before taking part the online questionnaire. They were informed about the purpose of the study, participants' inclusion criteria, the tasks in the questionnaire, the data protection policy and further contact details. They were asked to carefully read and give their consent by checking the relevant

boxes if they agreed to participate in the study. Since all participants were aged over 18, it is not necessary to obtain parents' consent.

3.5.3 Data Protection

The online questionnaire did not require participants to leave any personally identifiable information. However, participants could leave their email address at the end of the survey if they were willing to receive a summary of the research findings once the research was completed. These email addresses were stored separately from the rest of the data, so that the data was stored in non-identifiable form. All research data and participants' email addresses were collected via Qualtrics, an online survey tool with reliable data security. All the data downloaded from the survey tool was safely stored in the researcher's laptop with password protected and backed up securely in the university's Nexus 365 OneDrive for Business, accessible only via institutional login.

Chapter 4. Results

4.1 Internal Consistency of the Scale

The statistical analysis of this study was performed using SPSS 27. To determine whether the Likert scale ratings had internal consistency, Cronbach's alpha was calculated within all seven speech samples' perception scores provided by listening participants. Since variety recognition was collected through open-ended questions, this variable was not included in the analysis of internal consistency. As shown in Table 1, the internal consistency of scales for the three other perceptions (comprehensibility, social-attractiveness and foreign-accentedness) was .834, which indicates a high level of internal consistency for the scale(Field, 2018). The score of scales for speech properties and scales for openness to linguistic diversity was .722 with substantial reliability. Hence, the Likert scales used in this study had relatively reliable ratings.

Table 5. Results of Internal Consistency of the Five Scales Ratings

Scales for Perceptions (α)	Scales for Openness to Linguistic Diversity(α)
.834	.722

4.2 Perceptions of Different English Varieties among Chinese EFL Learners

In order to understand whether varieties of different English accents has any effect on perceptions among Chinese EFL learners, a one-way repeated measures analysis of variance (ANOVA) was conducted to compare scores on comprehensibility, social-attractiveness and foreign-accentedness of seven different accents. Most distributions involved in the comparisons were normally distributed, except for: the comprehensibility of Chinese-accented speech; the comprehensibility, social-attractiveness and foreign-accentedness of RP-accented speech; and the foreign-accentedness of Malaysian-accented speech. The reason why they were not normally distributed may be because they received consistent responses from participants that resulted in scores skewed towards one end of the scale. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated, and therefore, a Greenhouse-Geisser correction was used.

4.2.1 Comprehensibility

As mentioned in Chapter 3, the Likert scale has six points with different levels of agreement: 1= strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree and 6=strongly agree. Participants responded to the statement "I can easily understand the accent" on this scale to evaluate comprehensibility. Therefore, the score above three was viewed as having positive comprehensibility score and vice versa.

A one-way repeated measures ANOVA with a Greenhouse-Geisser correction revealed that there was a statistically significant effect for the seven chosen varieties on comprehensibility, $F(4.946, 440.199) = 93.745$, $p < .001$ ($p = .000$), $\eta 2 = .513$. According to Cohen (1988)'s guidelines for effect size (.01=small, .06=moderate, .14=large effect), the eta squared suggests a large effect size. Pairwise Comparisons table in Appendix I.2 demonstrates all the possible comparisons for the seven levels of repeated measures variable. All comparisons are adjusted for multiple comparisons using the Bonferroni method. RP is significantly higher in its mean comprehensibility score than other six varieties.

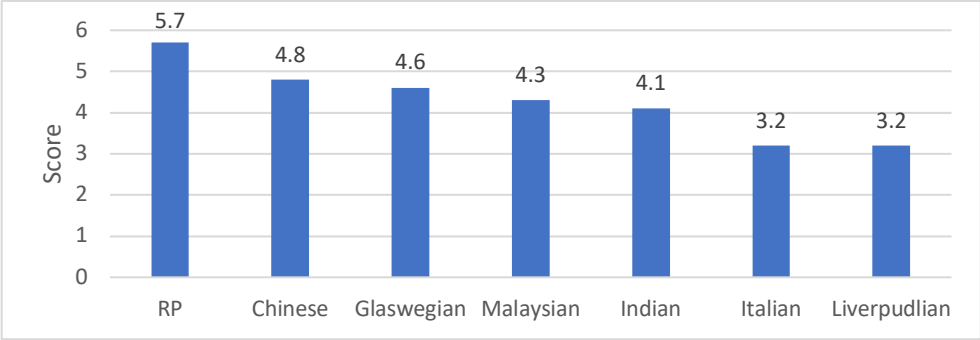
Table 6 presents the Mean (M) and Standard Deviation (SD) of the perceived comprehensibility of each variety, ranked from highest to lowest. The underlining between two varietiess indicates there is a significant difference ($p < .05$) between their comprehensibility scores. RP was perceived as the most comprehensible by participants (M=5.7), followed by Chinese English variety (M=4.79) and Glaswegian English variety (M=4.63). Malaysian and Indian English varieties were considered moderately comprehensible (M>3) with scores at 4.32 and 4.07 respectively. By contrast, Italian and Liverpudlian English varieties scored significantly lower than the Indian-accented speech, with a score slightly above three. A bar chart in Figure 13 represents the findings visually.

Table 6. Mean Scores of Comprehensibility

English Varieties	M	SD
RP	5.7	.7
Chinese	4.8	1
Glaswegian	4.6	1.0
Malaysian	4.3	1.1
Indian	4.1	1.1
Italian	3.2	1.3

Liverpudlian	3.2	1.3

Figure 13. Mean Scores of Comprehensibility



4.2.2 Social-Attractiveness

Social-attractiveness was evaluated by responding to the statement "the accent makes me feel warm and friendly". The results showed that there was a statistically significant effect for the seven chosen varieties on social-attractiveness, $F(4.598, 409.192) = 76.513$, $p < .001$ ($p = .000$), $\eta 2 = .462$, indicating a large effect size. Pairwise Comparisons adjusted by Bonferroni in Appendix I.3 demonstrates all the possible comparisons for the seven levels of repeated measures variable. RP is significantly higher in its social-attractiveness score than other six varieties.

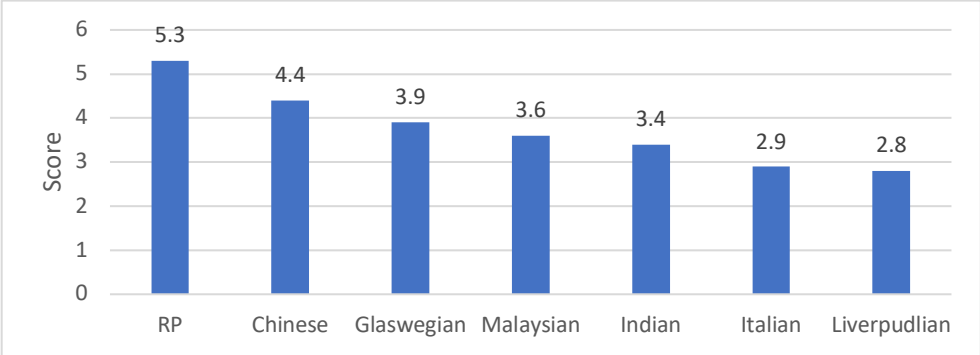
When the seven English varieties are ranked by their mean social attractiveness ratings (Table 7), their rank positions are consistent with those for comprehensibility. The underlining between two varieties indicates there is a significant difference ($p < .05$) between their social-attractiveness scores. RP was ranked as the most socially attractive English accent by participants on average (M=5.3), whereas the lowest score was found for the Liverpudlian-accented speech (M=2.8). The second most socially attractive accent was the Chinese variety (M=4.4), followed by Glaswegian (M=3.9) and Malaysian varieties (M=3.6). The Italian-accented speech had a relatively low rating in terms of this aspect (M=2.9). Figure 14 shows the bar charts of social-attractiveness scores.

Table 7. Mean Score of Social-Attractiveness

English Varieties	M	SD
RP	5.3	.9
Chinese	4.4	1.2
Glaswegian	3.9	1.1

Malaysian	3.6	1.0
Indian	3.4	1.2
Italian	2.9	1.3
Liverpudlian	2.8	1.1

Figure 14. Mean Scores of Social-Attractiveness



4.2.3 Foreign-Accentedness

Foreign-accentedness was measured by responding to the statement "I think the speaker is a native English speaker". Therefore, the lower the score on this statement, the less native-like the speech sample was perceived to be, and the stronger the foreign accent it was perceived to have. The results demonstrated that there was a statistically significant effect for the seven chosen varieties on foreign-accentedness, $F(4.524, 402.673) = 148.769$, $p < .001$ ($p = .000$), $\eta 2 = .626$, indicating a very large effect size. Pairwise Comparisons adjusted by Bonferroni in Appendix I.4 demonstrate all the possible comparisons for the seven levels of repeated measures variable. RP was rated significantly higher than the other six varieties, suggesting a perception of higher nativelikeness. By contrast, the ratings for Chinese-accented speech were significantly lower than for all the other six varieties, suggesting its distinct perceived foreign-accentedness.

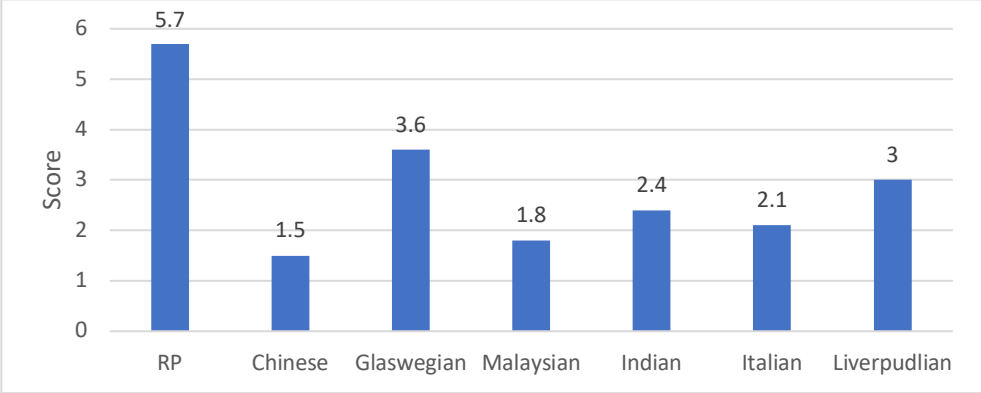
The results and ranking for perceived foreign-accentedness are shown in Table 8. The underlining between two varieties indicates there is a significant difference ($p < .05$) between their foreign-accentedness scores. The Chinese variety was the one perceived by participants, on average, to have the strongest foreign accent (M=1.5). Malaysian (M=1.8), Italian (M=2.1) and Indian (M=2.4) varieties were evaluated as having moderately strong foreign-accentedness with all their mean scores below three. By contrast, RP was perceived as having the least foreign-accentedness or namely, being the

most nativelike, with the mean score close to the maximum possible score of six (M=5.7). Glaswegian (M=3.6) and Liverpudlian (M=3.0) varieties were rated as the ones with the less foreign-accentedness and being more nativelike. Figure 15 shows the bar charts of foreign-accentedness scores.

Table 8. Mean Score of Foreign-accentedness

English Varieties	M	SD
Chinese	1.5	.9
Malaysian	1.8	1.0
Italian	2.1	1.3
Indian	2.4	1.4
Liverpudlian	3.0	1.7
Glaswegian	3.6	1.5
RP	5.7	.8

Figure 15. Mean Scores of Foreign-Accentedness



4.2.4 Variety Recognition

4.2.4.1 Accuracy of Variety Recognition

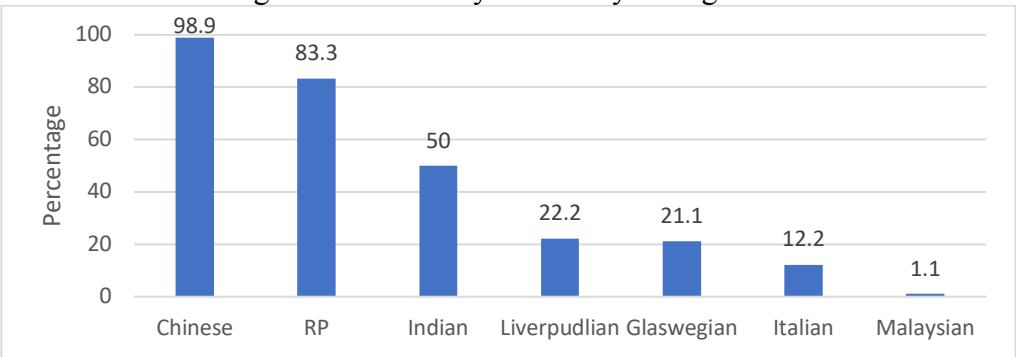
To ascertain how accurately participants could identify the varieties of the seven chosen English varieties, two open-ended questions were asked in the survey. These sought participants' judgements on both the country, and the region within the country, that they thought the speakers come from. The decision of whether the answer was categorized as accurate or inaccurate was somewhat difficult due to the idiosyncratic nature of the open-ended responses. Participants were allowed to miss out the questions if they were not sure about their judgment by answering the question with the answer "I don't know".

There were some participants who could identify the variety at country level, whereas there were also some who recognized the variety from a more specific region within the country. In addition, a relatively large number of participants frequently identified some varieties at a level broader than the country, such as “Southeast Asia” or “European countries”. Considering all participants were Chinese EFL learners, it would not be surprising if they were unable to correctly pick up on the nuances of regional accents, and thus were unable to identify accents accurately at the narrower regional level. Therefore, the identification of a variety’s origin was deemed accurate if it was correctly identified at the country level. For instance, “the UK” was accepted as appropriate identification of the Glaswegian and Liverpudlian varieties. Other studies had addressed this issue in a similar manner (McKenzie, 2008b; Wong, P., & Babel, 2017). Table 9 and Figure 16 summarizes the percentages of accurate variety recognition for the seven English varieties, ranked according to accuracy rate.

Table 9. Accuracy of Variety Recognition

English Variety	Accuracy Rate (%)
Chinese	98.9
RP	83.3
Indian	50
Liverpudlian	22.2
Glaswegian	21.1
Italian	12.2
Malaysian	1.1

Figure 16. Accuracy of Variety Recognition



Almost all participants correctly identified the Chinese English variety (98.9%). Conversely, the accuracy rate for recognizing the Malaysian English variety was very low at merely 1.1%. There are striking differences between identifying the standard and regional British varieties. RP had the second highest accuracy rate, recognized by a vast majority of participants (83.3%). However, the national background of both Liverpudlian and Glaswegian varieties were much less accurately identified, with mean accuracy rates of just 22.2% and 21.1% respectively. In terms of the international varieties, the most frequently identified after Chinese was the Indian English variety (with an average accuracy rate of 50%), whereas only few recognized the Italian English variety correctly (12.2%).

4.2.4.2 More Precise Identification of Each English Variety's Origin

Labels of speakers' place of origin given by all participants varied widely. Some participants answered "I don't know"; these responses are not shown in the results. This section reports the top 10 most frequent responses for each English variety. Therefore, the percentage in the tables below may not add up to 100%. The full list of all responses are provided in Appendix J.

In Table 10, it is obvious that participants almost all correctly identified the national background of the Chinese-accented speaker. Nevertheless, only 43.2% of all participants responded to the regional identification of Chinese-accented speech, while others did not provide their judgements by answering "I don't know". It can be seen from the table that in addition to over a quarter of participants (28.9%) who responded "northern China", 4.4% of them specifically identified the speaker as coming from Beijing and 1.1% of them mentioned Henan province. Both Beijing and Henan province are places located within northern China. Therefore, the total percentage of participants who accurately recognized the origin of the accent as northern China is around 33%. In the same manner, around 7.7% of participants regarded the origin as southern China with labels of southern China (3.3%), Shanghai (2.2%), Jiangsu (1.1%) and Zhejiang provinces (1.1%).

Table 10. Labels for Chinese English Variety

Country	N	%	Region	N	%
China	89	98.9	Northern China	26	28.9
			Southern China	3	3.3
			Beijing	3	3.3

	Shanghai	2	2.2
	Eastern China	2	2.2
	Henan province	1	1.1
	Jiangsu province	1	1.1
	Zhejiang province	1	1.1

Participants also reached agreement to a large extent on the origin of the RP variety, although some identified the speaker as speaker from the USA and one respondent thought the variety was from Canada (Table 11). At the more specific sub-national level, London was most frequently regarded as the place where the RP speaker came from.

Table 11. Labels for RP

Country	N	%	Region	N	%
UK	75	83.3	London	29	32.2
USA	11	12.2	England/ southern UK	5	5.6
Canada	1	1.1	Oxford	3	3.3
			RP	2	2.2
			New York	2	2.2
			Cambridge	1	1.1

In comparison with RP, the UK regional accents received more mixed identifications. As illustrated by Table 12, in total, 15 different places of origin were suggested for the Liverpudlian English variety, with the top three being the UK (22.2%), India (12.2%) and France (10%). 2.2% of participants recognized the variety specifically as Liverpudlian.

Table 12. Labels for Liverpudlian English Variety

Country	N	%	Region	N	%
UK	20	22.2	Scotland	6	6.7
India	11	12.2	Liverpool	2	2.2
France	9	10	Osio	2	2.2
Italy	4	4.4	Dublin	1	1.1
European countries	3	3.3	Edinburgh	1	1.1

Australia	2	2.2	London	1	1.1
Germany	2	2.2	Manchester	1	1.1
Norway	2	2.2	North Ireland	1	1.1
Russia	2	2.2	Paris	1	1.1
Spain	2	2.2	Northern UK	1	1.1

The Glaswegian variety received more diverse responses with 18 different places of origin being suggested (Table 13). 21.1% of respondents overall accurately classified the variety as a UK accent. A majority of participants who made a judgement on the regional identification considered that the speaker was from Scotland, with the labels of Scotland (8.7%), Edinburgh (1.1%) and Glasgow (1.1%). There were four participants (4.4%) who identified a northern UK origin more broadly.

Table 13. Labels for Glaswegian English Variety

Country	N	%	Region	N	%
UK	19	21.1	Scotland	8	8.9
Australia	4	4.4	Northern UK	4	4.4
India	4	4.4	Dublin	2	2.2
Ireland	4	4.4	London	2	2.2
Germany	3	3.3	Glasgow	1	1.1
China	3	3.3	Edinburgh	1	1.1
New Zealand	2	2.2	Seattle	1	1.1
Russia	2	2.2			
Spain	2	2.2			
France	1	1.1			

For International English varieties, both Indian and Italian English varieties received diverse responses, each with 15 labels of nationality scattered around the world. This perhaps indicates some uncertainty amongst participants in categorizing these two varieties. Interestingly, 50% of participants accurately recognized the origin of the Indian-accented speech, whereas 58.9% of all participants deemed that the Italian-accented speech also came from India (Table 14 & 15). There might be some similarity of accent features for these two varieties that confounded the listeners.

Table 14. Labels for Indian English Variety

Country	N	%	Region	N	%
India	45	50	New Delhi	5	5.6
France	5	5.6	Tokyo	1	1.1
Pakistan	5	5.6	Sicily	1	1.1
South Asian countries	4	4.4	Delhi	1	1.1
Japan	3	3.3	Sindi	1	1.1
Arabic countries	2	2.2	Lahore	1	1.1
Italy	2	2.2			
Spanish-speaking countries	2	2.2			
Korea	2	2.2			
Singapore	2	2.2			

Table 15. Labels for Italian English Variety

Country	N	%	Region	N	%
India	53	58.9	New Delhi	5	5.6
Italy	11	12.2	Rome	1	1.1
Spain	8	8.9	Sicily	1	1.1
France	6	6.7	Southern Italy	1	1.1
Pakistan	2	2.2	London	1	1.1
Russia	2	2.2	Paris	1	1.1
Middle East	2	2.2	Rio de Janeiro	1	1.1
African countries	1	1.1	Turkey	1	1.1
Arabic countries	1	1.1			
Latin American countries	1	1.1			

As indicated in Table 16, the Malaysian variety was the least accurately recognized by participants. 52.2% of them thought that this variety was spoken by a Chinese speaker. Although its Malaysian origin was correctly recognized by only a single participant (1.1%), it should be noted that most participants who tried to identify the speaker's origin at the regional level suggested a place in the Cantonese regions in Southern China (10% of respondents overall), such as Hong Kong (3.3%), Guangzhou (2.2%) and Shenzhen (1.1%). According to the speaker's origin mentioned in Chapter 3, these identifications match the speaker's Cantonese L1 background.

Table 16. Labels for Malaysian English Variety

Country	N	%	Region	N	%
China	47	52.2	Southern China	9	10
Japan	8	8.9	Hong Kong	3	3.3
Korea	8	8.9	Guangzhou	2	2.2
Singapore	3	3.3	Shenzhen	1	1.1
Asian countries	2	2.2	Hebei	1	1.1
Arabic countries	1	1.1	Hunan	1	1.1
European countries	1	1.1	Northern China	1	1.1
France	1	1.1	Seoul	1	1.1
Germany	1	1.1	Shanghai	1	1.1
Malaysia	1	1.1			

4.3 Study Abroad and Perceptions of Different English Varieties

In order to investigate whether there was a significant difference between the perceptions of participants with and without experience of SA in Anglophone countries, an independent samples t-test was conducted to compare the comprehensibility, social-attractiveness and foreign-accentedness ratings between SA and NSA groups (section 4.3.1). Further categorizing the SA group according to more specific SA locations, a one-way analysis of variance (ANOVA) was conducted (section 4.3.2). Since variety recognition obtained nominal data, a chi-square test was used to compare the difference between two groups, which is explained separately in the 4.3.3 and 4.3.4.

4.3.1 Study Abroad and Perception of Comprehensibility, Social-Attractiveness and Foreign-Accentedness

Technically, Likert scales give ordinal data. To analyse ordinal data statistically, it is sometimes considered that non-parametric tests should be used (Field, 2018). However, it is commonplace for studies in Applied Linguistics to use parametric testing to analyse Likert scale data (e.g. McKenzie, 2008; Amano, 2019; Zhang, 2019) and Likert scales may be deemed to have equal intervals if measuring certain constructs such as comprehensibility and accentedness (Glass et al., 1972; Lubke & Muthén, 2004; Norman, 2010). In this study, both parametric and non-parametric tests were run and the outcomes compared, in order to allow the two sets of findings to be compared.

An independent samples t-test was conducted to compare differences between SA and NSA groups. Several preliminary assumptions need to be met before conducting the independent samples t-test: random sampling, normal distribution and homogeneity of variance (Pallant, 2020). Random sampling is difficult to obtain in current study due to restricted time and inconvenience of sampling, which is often the case and has been tolerated in applied linguistic studies (Amano, 2019). In terms of normal distribution of data, significance tests of normality may not be very reliable in assessing this assumption (Field, 2018). Instead, interpreting the statistics of skewness and kurtosis and visual inspection of histograms can be appropriate. The values for skewness and kurtosis between -2 and +2 are considered acceptable indicators of normal univariate distribution (George & Mallery, 2010). Based on this rule, most distributions involved in the comparisons in this section were found to be normally distributed, other than: the foreign-Accentedness of the Chinese accented speech for the SA group; the comprehensibility of the RP sample for both the SA and NSA groups; the foreign-accentedness of the RP sample for both the SA and NSA groups; and the foreign-accentedness of the Malaysian-accented sample for both the SA and NSA groups. The non-normality of these distributions may be due to (certain groups of) participants' distinct and consistent perceptions towards these English varieties, resulting in responses which are skewed towards one end of the scales. A Levene's test of equality of variances demonstrated that the variances were equal between the two groups (SA and NSA) for each variable on each variety, except for the comprehensibility and foreign-accentedness of the Liverpudlian-accented English variety, and the social-attractiveness of the Malaysian-accented English variety. However, the independent samples t-test is fairly robust to deviations of normality and violation of homogeneity of variances when the sample sizes in each group are equal or nearly equal (Field, 2018). As a precaution, a Mann-Whitney U test, which is a non-parametric equivalent of an independent-samples t-test, was also conducted in order to provide a point of comparison to the parametric test results. The result of the Mann-Whitney U test was similar to that of the t-test, hence only the result of the t-test is presented below (See the result of the Mann-Whitney U test in Appendix K.3).

A Bonferroni Correction was applied, as there were multiple comparisons being performed on the same dependent variable on the same sample data, to minimize the risk of Type I error (i.e. when a null hypothesis was rejected, even though it is in fact, true) (Field, 2018). Since there were seven statistical analyses to be performed for each batch

of statistical testing, applying a Bonferroni correction, the adjusted alpha (significance) level would be .05/7≈ .00714. In this case, to determine if any of the comparisons is statistically significant, the p-value must be p<.007.

The results of a series of comparisons from t-tests are reported in the Table 17 below. With regard to comprehensibility, applying the Bonferroni-corrected significance level (p<.007), no significant difference was found between scores of SA and NSA groups in all seven varieties. The score of the SA group for Italian-accented English variety (M=3.6, SD=1.1) was much higher than that of the NSA group (M=2.9, SD=1.2), t(88)=2.741, *p*≈ .00741, Cohen's d=1.231 (95% CI: .196 to 1.227). Although this result did not meet the adjusted significance level, it approached statistical significant level.

Table 17. Results of T-tests: Comparison of Comprehensibility Evaluation between SA and NSA Groups

English Varieties	t	df	Sig. (2-tailed)	Cohen's d
Chinese	.322	88	.748	.982
RP	.968	88	.336	.654
Liverpudlian	2.204	85.7	.030*	1.243
Glaswegian	1.993	88	.049*	1.005
Indian	1.893	88	.062	1.114
Italian	2.741	88	.007*	1.231
Malaysian	1.490	88	.240	1.061

Note: Bonferroni adjusted significant level is p<.007.

* p< .05.

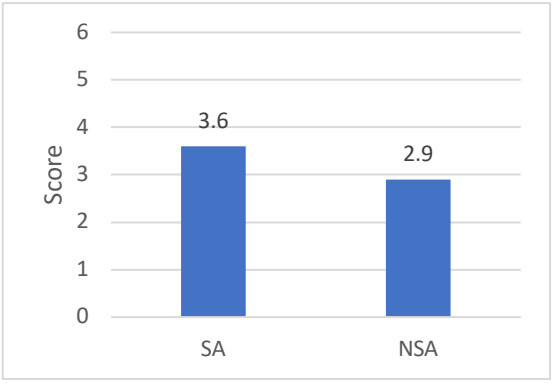


Figure 17. Comprehensibility Score of Italian English Variety

However, it should be noted that there was a mean difference in favour of the SA group in the Glaswegian English variety, t(88)=1.993, *p*=.049, Cohen's d =1.005 (95%

CI: .001 to .843). The mean difference was .42 between SA (M=4.8, SD=.9) and NSA groups (M=4.4, SD=1.1). In the same vein, comprehensibility of another regional UK accent, Liverpudlian, also saw a mean difference in favour of the SA group, t(85.668)=2.204, *p*= .030, Cohen's d =1.243 (95 CI: .057-1.099). The mean difference was .78 between SA (M=3.5, SD=1.3) and NSA groups (M=2.9, SD=1.1). The effect sizes in two instances are very large. Figures 18 and 19 show the bar charts of these two items.

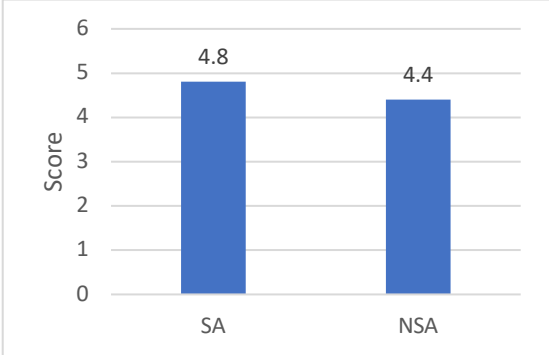


Figure 18. Comprehensibility Score of Glaswegian English Variety

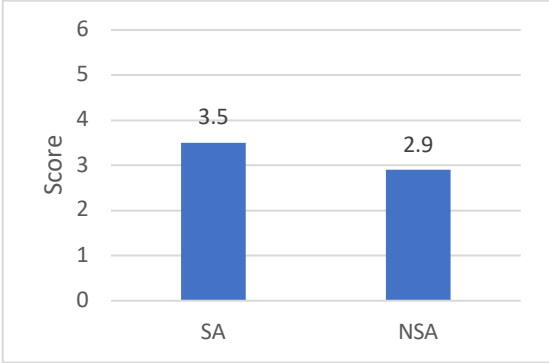


Figure 19. Comprehensibility Score of Liverpudlian English Variety

As for social-attractiveness, there were no significant differences between the scores for the SA and NSA groups for any of the seven varieties (Table 18).

Table 18. Results of T-tests: Comparison of Social-Attractiveness Evaluation between SA and NSA Groups

English Varieties	t	df	Sig. (2-tailed)	Cohen's d
Chinese	-1.166	88	.247	1.175
RP	.555	88	.580	.950
Liverpudlian	.475	88	.636	1.109
Glaswegian	.574	88	.568	1.102

Indian	1.818	88	.072	1.218
Italian	.834	88	.406	1.264
Malaysian	1.054	73.9	.295	1.000

Note: Bonferroni adjusted significant level is p< .007.

* p< .05.

In respect of foreign-accentedness, although there was no statistically significant difference (p< .007), the scores for both regional UK varieties were much higher (i.e. indicating less perceived foreign accent) for the SA group than the NSA group (Table 19). The mean foreign accentedness score for the Liverpudlian variety (Figure 20) was 3.4 (SD=1.9) for the SA group and 2.7 (SD=1.5) for the NSA group, t(84.051)=1.984, *p*= .051 (mean difference= .7, 95% CI: - .001 to 1.424). The mean scores for the Glaswegian variety (Figure 21) were 3.9 (SD=1.4) for the SA group and 3.3 (SD=1.6) for the NSA group, t(88)=1.946, p= .055 (mean difference= .6, 95% CI: - .013 to 1.258).

Table 19. Results of T-tests: Comparison of Foreign-Accentedness Evaluation between SA and NSA Groups

English Varieties	t	df	Sig. (2-tailed)	Cohen's d
Chinese	-1.116	88	.908	.907
RP	-.136	88	.892	.775
Liverpudlian	1.984	84.051	.051*	1.715
Glaswegian	1.946	88	.055*	1.517
Indian	.750	88	.456	1.406
Italian	.564	88	.574	1.308
Malaysian	-.102	88	.919	1.032

Note: Bonferroni adjusted significant level is p< .007.

* p< .05.

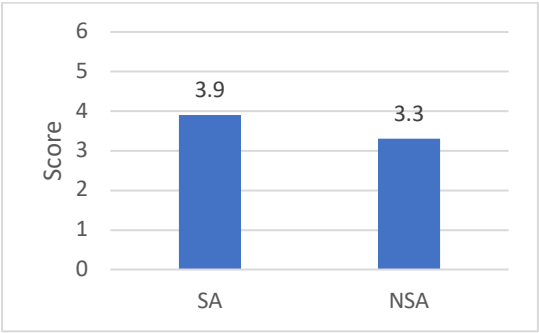


Figure 20. Foreign-Accentedness Score of Glaswegian English Variety

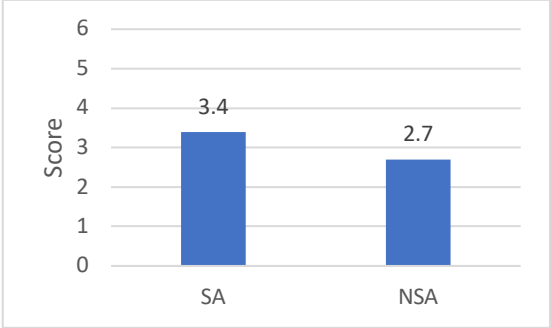


Figure 21. Foreign-Accentedness Score of Liverpudlian English Variety

4.3.2 Study Abroad in the UK and Perception of Comprehensibility, Social-Attractiveness and Foreign-Accentedness

In order to gauge whether studying abroad in different locations would have an impact on perceived comprehensibility, social-attractiveness and foreign-accentedness of different varieties, a one-way independent analysis of variance (ANOVA) was conducted. Participants were divided into three groups according to their SA locations and experience (Group 1: SA in the UK, N=31; Group 2: SA not in the UK, N=14; Group 3: NSA, N=45). Data for the comparisons was not all normally distributed. The distributions for Glaswegian comprehensibility, RP foreign-accentedness and Malaysian social-attractiveness violated the assumption of homogeneity of variances, as assessed by Levene's test for equality of variance. However, ANOVA is robust to some violation of homogeneity of variance and normal distribution (Field, 2018). The Kruskal-Wallis H test is a rank-based nonparametric alternative for one-way ANOVA. The result of the Kruskal-Wallis test was similar to that of the ANOVA, hence only the result of the ANOVA was presented below (See the result of the Kruskal-Wallis test in Appendix K.7).

A Bonferroni post-hoc test was also applied for multiple comparisons in ANOVA to minimize Type I error. The reason why using a Bonferroni method is because it is more rigorous than the Tukey test, which is applicable for multiple comparisons (Field, 2018). However, this test is rather conservative with weak statistical power. It should be noted that SPSS maintains the p value in post-hoc analysis at .05. In the case of Bonferroni post-hoc tests, SPSS multiplies the p value by the number of comparisons being performed and if the value is still above .05, then it can be seen as significant value. This is the equivalent method of Bonferroni correction to the one used in the t-tests in 4.3.1.

For comprehensibility scores, there was a statistically significant interaction effect between comprehensibility of the Italian-accented English and SA locations at the $p < .05$

level, F(2,87)=3.927, *p*= .023, *η2* = .082, indicating a medium effect size (Table 20). Post-hoc comparisons using Bonferroni tests indicated that the mean score for Group 1 (SA in the UK: M=3.7, SD=1.4) was significantly higher than score for Group 3 (NSA: M=2.9, SD=1.2) with p=.023. Group 2 (SA not in the UK: M=3.4, SD=1.1) did not differ significantly from either Group 1 and 3. A bar chart was displayed in Figure 22.

Table 20. Results of ANOVA: Effect of Study Abroad Locations on Comprehensibility Evaluation

English Varieties	F	df	Sig. (2-tailed)	η2
Chinese	.389	2	.679	.009
RP	.528	2	.592	.012
Liverpudlian	2.403	2	.096	.052
Glaswegian	2.140	2	.124	.047
Indian	1.818	2	.168	.040
Italian	3.927	2	.023*	.083
Malaysian	1.130	2	.328	.025

* significant at the <.05 level

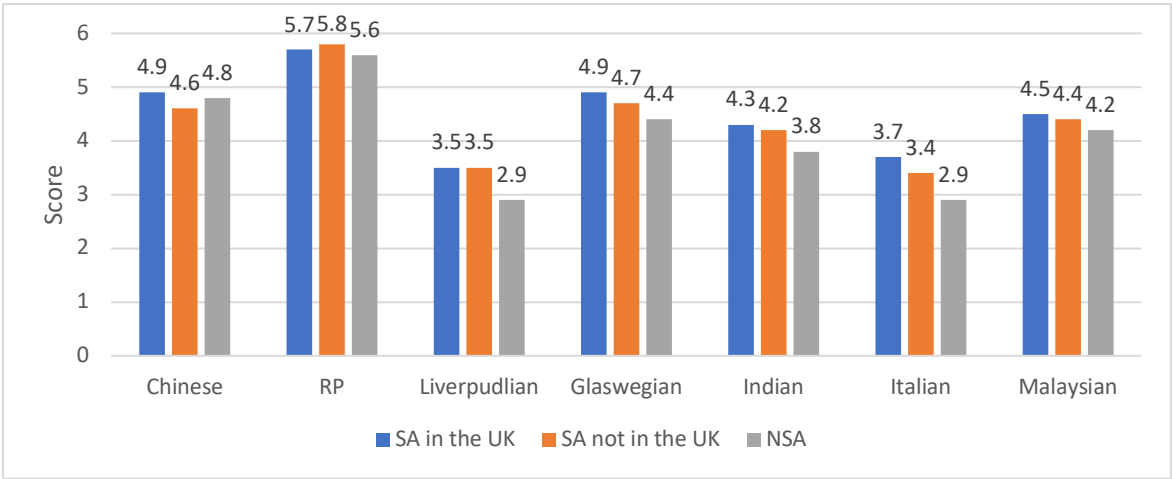


Figure 22. Comprehensibility Mean Scores of Three Groups

With regard to social-attractiveness, there was a significant effect of SA locations on the ratings of the Italian-accented English, F(2,87)=4.327, *p*= .016, *η2* = .090, indicating a medium to large effect (Table 21). Post-hoc comparisons showed that the mean score for Group 1 (M=3.4, SD=1.1) was significantly higher than that of Group 2 (M=2.3, SD=1.1) with p=.018. No significant differences were found between Group 1 and 3 or between Group 2 and 3. A bar chart in Figure 23 shows the result visually.

Table 21. Results of ANOVA: Effect of Study Abroad Locations on Social-Attractiveness Evaluation

English Varieties	F	df	Sig. (2-tailed)	η2
Chinese	1.809	2	.170	.040
RP	.575	2	.565	.013
Liverpudlian	.953	2	.390	.021
Glaswegian	.167	2	.847	.004
Indian	2.444	2	.093	.053
Italian	4.327	2	.016*	.090
Malaysian	.553	2	.577	.013

* significant at the <.05 level

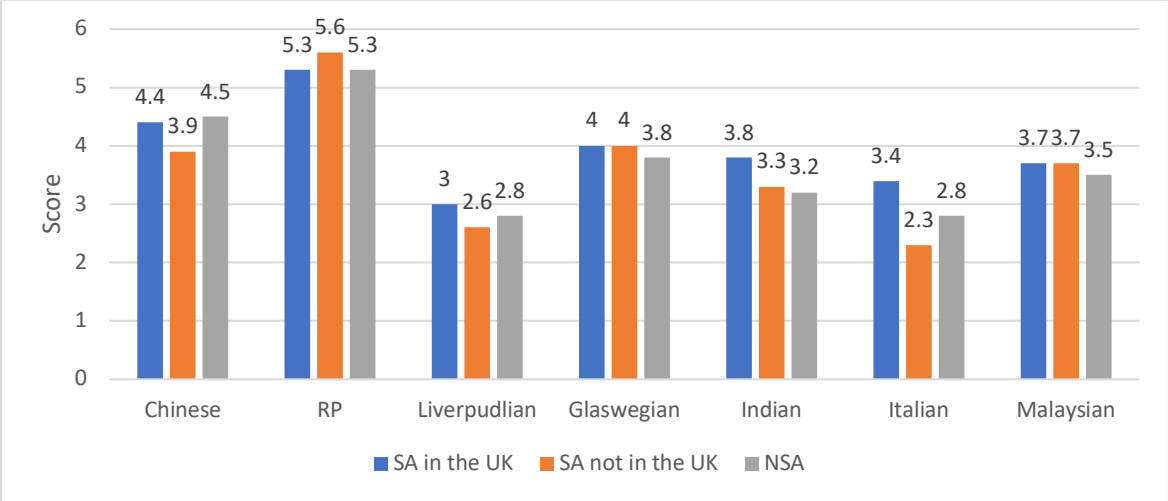


Figure 23. Social-Attractiveness Mean Score of Three Groups

In terms of foreign-accentedness, there was a statistically significant interaction effect between SA locations and the perceived foreign-accentedness in Liverpudlian English variety, F(2,87)=5.650, *p*= .005, *η2* = .115, suggesting a moderate to large effect size. Post-hoc analysis revealed that Group 1 (M=3.84, SD=1.899) was significantly different from both Group 2 (M=2.43, SD=1.453) and Group 3 (M=2.69, SD=1.505) with p=.028 and p=.011 respectively, which means that a majority of listeners from Group 1 recognized that the speech was from a native-speaker (See Figure 24 below).

Table 22. Results of ANOVA: Effect of Study Abroad Locations on Foreign-Accentedness Evaluation

English Varieties	F	df	Sig. (2-tailed)	η2

Chinese	.798	2	.453	.018
RP	1.690	2	.191	.038
Liverpudlian	5.650	2	.005*	.115
Glaswegian	1.971	2	.145	.043
Indian	.733	2	.484	.017
Italian	.450	2	.639	.010
Malaysian	.007	2	.993	.000

* significant at the <.05 level

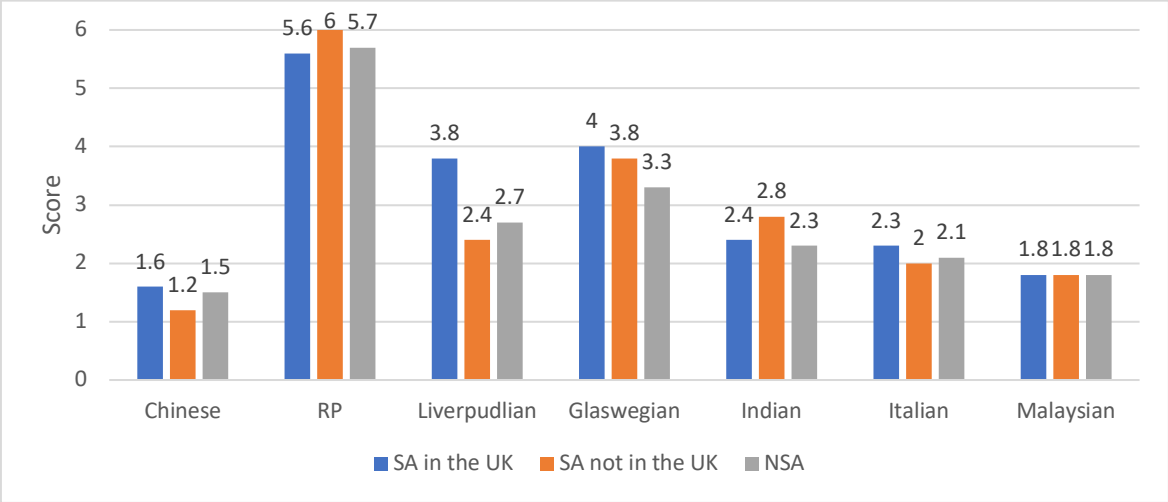


Figure 24. Foreign-Accentedness Mean Score of Three Groups

4.3.3 Study Abroad and Accuracy of Variety Recognition

To test whether there was any association between SA experience (SA and NSA) and accuracy of variety recognition (accurate and inaccurate), a Pearson's chi-square test for independence was used for association between these two nominal variables.

Since each variable is dichotomous with two categories, the value of continuity correction was adopted to compensate for overestimation of the chi-square value when analyzing a 2 by 2 table (Pallant, 2020). As Table 23 demonstrated, a chi-square test for independence (with Yates Continuity Correction) indicated no significant association between SA experience and accuracy of variety recognition for all varieties.

Only one participant answered "I don't know" when identifying the Chinese English variety, while the other 89 participants all correctly identified this variety. Conversely, for the Malaysian English variety, the vast majority of participants did not know which country this variety came from. The accuracy of variety recognition in these two varieties

cannot be attributed to SA experience, which was also confirmed by the continuity correction and *p* value for these two varieties. For other varieties, there were similarly no significant differences in the correlation between accuracy of variety recognition and SA experience.

Table 23. Association Between Accuracy of Variety Recognition and Study Abroad Experience

English Varieties	Continuity Correction	Sig(2-tailed)
Chinese	.000	1.000
Malaysian	.000	1.000
Italian	.000	1.000
RP	.320	.572
Liverpudlian	.579	.447
Indian	.711	.399
Glaswegian	2.402	.121

*. Association is significant at the <.05 level (2-tailed).

4.3.4 Study Abroad in the UK and Accuracy of Variety Recognition

In order to unpack whether specific SA locations had an effect on accuracy of variety recognition, participants were again categorized into three groups (Group 1: SA in the UK, N=31; Group 2: SA not in the UK, N=14; Group 3: NSA, N=45). A chi-square test for independence was used in this case (Table 24).

For a minimum sample size, 80% of cells are required to have an expected count greater than or equal to five in order to have more accurate approximation of the significance level (Pallant, 2020). In current study, accuracy of Chinese, Malaysian and Italian variety recognition has more than 20% of cells with expected count less than 5. Therefore, their chi-square statistic might be not valid.

Table 24. Association Between Accuracy of Variety Recognition and Study Abroad in the UK

English Varieties	χ^2	*Sig(2-tailed)*
Malaysian	1.011	.603
Indian	1.362	.506
RP	1.679	.432

Italian	3.471	.243
Liverpudlian	.243	.176
Chinese	5.490	.064
Glaswegian	9.040	.011*

*. Association is significant at the <.05 level (2-tailed).

It can be seen in the Table 24 that only recognition of the Glaswegian variety significantly related with SA experience in the UK. The result was $\chi 2$=9.040, p= .011 (p< .05). To be specific, as shown in Figure 25, 63.2% of participants who accurately recognized Glaswegian variety at country level have SA experience in the UK (Group 1), which is particularly higher than the figures for Group 2 (SA not in the UK: 5.3%) and Group 3 (NSA: 31.6%).

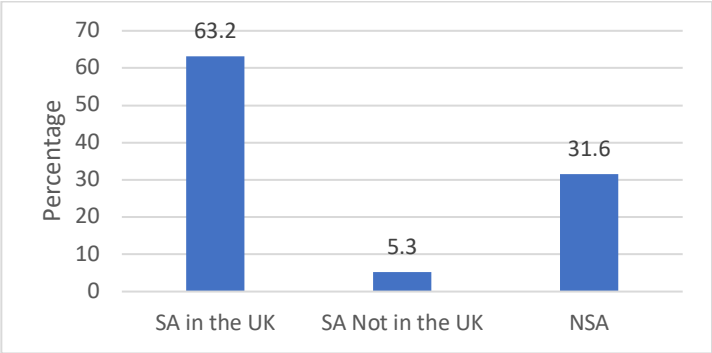


Figure 25. Accurate Glaswegian Variety Recognition of Three Groups

4.4 Openness to Linguistic Diversity

In order to further investigate Chinese EFL learners' openness to linguistic diversity, participants were required at the end of the survey to evaluate their preference on the following two statements: "I would like to hear varieties of English accents different from standard ones" and "I would like to learn nonstandard English varieties in English listening classrooms." (1=strongly disagree, 6=strongly agree). The results are shown below in Figure 26 and 27. It can be seen from the graph that question 1 received quite positive responses (M=4.61, SD=1.25). The scores for question 2 were, on average, slightly lower than for question 1 but still highly positive (M=4.32, SD=1.44).

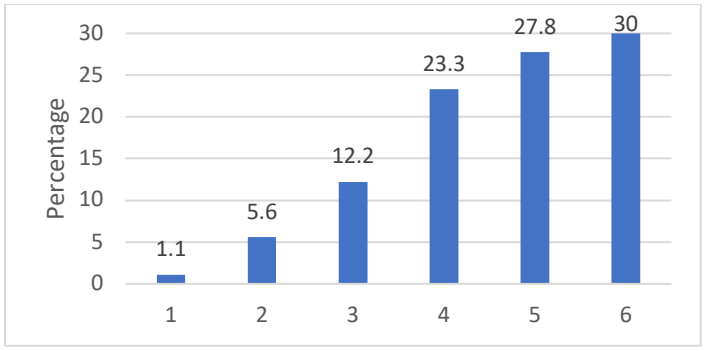


Figure 26. Acceptance of Linguistic Diversity

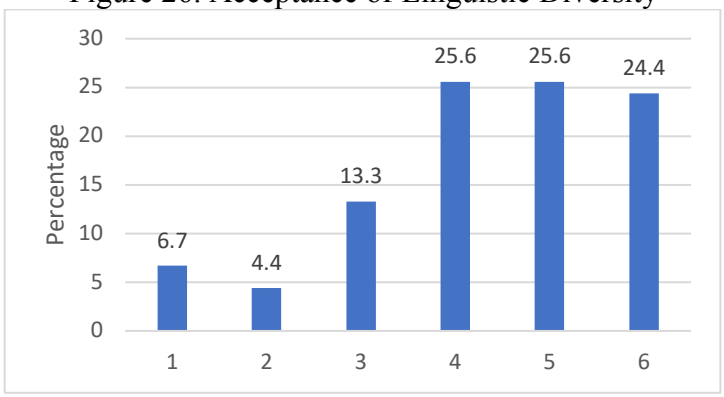


Figure 27. Willingness to Learn Nonstandard English Varieties

Considering SA experience, an independent sample t-test showed that there was no significant difference in the scores on these two questions between SA and NSA groups. Similarly, an ANOVA test found no significant difference in the scores of these two questions across the three groups with different SA locations and experience.

4.5 Self-Desirability of Accents in English Production

Table 25 demonstrates the ranking and mean score of participants' self-desirability of accents in their English production. RP was the only one that ranked positively in the statement "I would be happy to have this accent when I speak English" with a mean value greater than three (M=5.13, SD=1.08). The other six varieties were all evaluated negatively in terms of participants' willingness to adopt respective accent. Glaswegian accent was ranked second but there was a huge gap between its score and RP's score (M=2.68, SD=1.26). Interestingly, another UK regional accent, the Liverpudlian, was almost the least desirable one to adopt in English production (M=1.81, SD=.91).

Table 25. Rank of Self-Desired Accents in English Production

English Varieties	M	SD

RP	5.13	1.08
Glaswegian	2.68	1.26
Chinese	2.07	1.27
Malaysian	1.86	1.01
Indian	1.843	.964
Liverpudlian	1.81	.91
Italian	1.53	.77

Chapter 5. Discussion

5.1 Chinese EFL Learners' Perceptions of Different English Varieties

Based on the descriptive statistics in Chapter 4, the mean comprehensibility and social-attractiveness ratings followed the same ranking from high to low: RP, Chinese, Glaswegian, Malaysian, Indian, Italian and Liverpudlian. The more comprehensible English varieties also received more positive ratings of the speaker's social attractiveness.

The evaluation of foreign-accentedness had the following ranking (from high to low): Chinese, Malaysian, Italian, Indian, Liverpudlian, Glaswegian and RP. The varieties with the highest and lowest scores are the ones that received the most consistent responses from the participants, suggesting Chinese EFL learners' familiarity with them.

The accuracy rate of recognizing the nationality of the speaker has the following ranking, from high to low: Chinese**,** RP**,** Indian**,** Liverpudlian**,** Glaswegian**,** Italian and Malaysian. The first two varieties received more consistent responses from participants concerning the country and region that the two speakers come from, whereas the varieties with lower accuracy rates received more diverse answers.

Overall, RP appeared to be a very salient variety for participants in terms of all four categories of perceptions. Participants' ability to distinguish it among all seven varieties was definitive, showing its distinction between these varieties was evident. This may be due to the prominent native and "standard" models used in Chinese EFL classrooms (Zhang & Du, 2018).

In the same vein, Chinese-accented speech was also a very salient one for participants in all aspects evaluated. It was regarded highly and positively in terms of social-attractiveness. This corresponded consistently with previous studies in the past decade, which demonstrate learners' awareness of their own variety of English and a wish for acceptance of regional English varieties that were usually regarded as less standard (McKenzie, 2008a; McKenzie et al., 2016). It was found that Thai-accented English and standard English varieties such as RP and Standard American speech were both ranked higher than other Asian English accents among Thai students (McKenzie et al., 2016). Similarly, Japanese-accented speech was found to possess stronger social-attractiveness than regional US accents among Japanese EFL learners(McKenzie, 2008a). This may be because identifiable forms of local-accented varieties were salient markers of ingroup identity and thus evoked solidarity. Moreover, the recent rise of Global Englishes (Galloway & Rose, 2015) foregrounds the legitimacy of regional English

varieties and the global use of the English language, which is in accordance with the strong wish among Chinese EFL learners (Bian, 2009).

Of the two regional UK varieties, the Glaswegian variety was more popular than the Liverpudlian variety. This finding accords with the result in the study by Coupland and Bishop (2007), who examined attitudes towards English varieties among British residents and found a common positive evaluation for Scottish standard English variety and a relatively negative rating for Liverpudlian variety. The only aspect that did not differentiate the two varieties in this study was perception of foreign-accentedness and variety recognition. Both were perceived as more nativelike in terms of accent but only few participants could recognize their nationality. Although a substantial percentage of participants considered that the Glaswegian variety was highly comprehensible and socially attractive, their ability to identify it was quite low, with merely one fifth of participants recognizing its UK origin. This finding contrasts with those of a previous study by McKenzie (2008b): in that study, when listeners could not identify the origin of the English speakers from stimuli, there was a tendency to rank the speech less favourably.

Among the three international varieties, Malaysian received the highest comprehensibility and social-attractiveness ratings. However, it also had the lowest accuracy rate of nationality identification among the seven varieties evaluated, whereas a majority of participants recognized the Cantonese influence on the accent. The familiarity with Cantonese may increase participants' sensitivity to its Cantonese accent.

Indian-accented speech received quite positive evaluations ($M>3$) in both comprehensibility and social-attractiveness. It gained relatively higher accuracy rate of variety recognition, maybe because of participants' frequent exposure to the variety due to geographical proximity and representation in social media and movies.

Italian-accented speech had significantly lower scores in comprehensibility and social-attractiveness than the above two international varieties. Interestingly, more than half of all participants confused the Italian-accented speech with the Indian one, possibly due to the similarity of lack of aspiration in voiceless stops in the two varieties.

5.2 Study Abroad and Perceptions of Different English Varieties among Chinese EFL Learners

Given the scant existing studies examining SA in relation to the sociolinguistics of English, the present study investigated this issue among Chinese EFL learners. According

to data analysis, the statistics in this study indicated differences between perceptions of learners with and without SA experience specifically for international and regional varieties, which is likely to be due to the effects of SA.

An important finding is that there was a significant positive relationship between SA in the UK and the scores of regional and international varieties in all four aspects evaluated, suggesting there might be a causal effect of SA in the UK on participants' perceptions. It was found that participants who have studied abroad in the UK tended to evaluated the comprehensibility of Italian-accented speech more positively compared with those who study at home. The reason why this study found a difference exactly in respect of the Italian variety may be because there is a large proportion of Italian international students and Italian scholars in the UK (Universities UK, 2021, Jul 27), which might increase the opportunities for SA learners to encounter this accent and to adapt to it. It should be noted that, although the Italian variety was the only one that reached a significant difference, the scores for other international and regional varieties were higher for the "SA in the UK" group than for the other two groups. This finding is compatible with previous studies that found learners in a SA learning context had a significant development ($p<.001$) in listening comprehension generally (Allen, 2002). The reason why listening comprehension may be improved may be because the diverse nature of social networks and the frequency and diversity of intercultural communication in the SA environment can foster EFL learners' adaptation to different accents (Bradlow & Bent, 2008).

Interestingly, there is a significant positive relationship between SA in the UK and perceived social-attractiveness of Italian-accented speech in this study. "SA in the UK" participants perceived the speech as significantly friendlier and warmer than those who SA in places other than UK and those who had no SA experience. This may be also due to the increased interaction and socialization with international students when SA in the UK, which may strengthen mutual understanding of linguistic and cultural differences generally (Churchill & DuFon, 2006).

With regard to variety recognition, the results indicated a significant positive association between accuracy of identification of the Glaswegian variety and SA in the UK. This, unsurprisingly, suggests that SA in the UK may offer an advantage in helping learners to identify regional varieties that are commonly encountered in the UK. This finding aligns with that of McKenzie(2004), who found a positive effect of place of residence on perceiving regional varieties. In that study, participants who have studied

abroad in Glasgow were more accurate at identifying Glaswegian variety and evaluated the variety more positively, which may because of their familiarity with the accent.

There is no significant difference found in the four perceptions between the general SA group and NSA group. There are two potential reasons. Firstly, there is a possibility that the employment of a relatively conservative Bonferroni method, and a small sample size in this study, might have restricted the ability to detect significant differences between SA and NSA participants. Secondly, the gap between learners at home and abroad may have been reduced by the digital realm abounding with information from around the world. Learners at home can now still explore the world across country borders through information technology, satellite television and social media (Shiri, 2013). Learners in different learning contexts now have many more opportunities to understand target culture and language, without actually needing to travel abroad.

The overall results implied that there might be certain strength of understanding regional and international varietiess with SA experience. SA in the UK may have potential advantage in comprehension and acceptance of international varieties and identification of regional UK varieties. This ability can be translated into more established confidence in intercultural communication. Listeners with extensive exposure to various accents are more adept at understanding accented speech than listeners with little or no exposure to accented speech (Bradlow & Bent, 2008).

5.3 Openness to English Linguistic Diversity

There are highly positive attitudes towards English linguistic diversity of nonstandard varieties and willingness to learn different English varieties in the classroom among Chinese EFL learners in the current study, regardless of different learning contexts (SA and NSA). It should be noted that the participants in the current study are all language major students with multiple language abilities, which may enable them to have heightened metacognitive awareness and acceptance of linguistic and cultural diversity. Despite this factor, previous studies on language attitudes among Chinese EFL learners also showed a strong willingness to legitimize nonstandard varieties of English and re-examine the monolithic standard native model in the classroom (Xu et al., 2010; Zhang & Du, 2018). This openness to English linguistic diversity can result in increased tolerance of local varieties of English speech amongst learners (McKenzie, 2010) and encourage more discussion about inclusion of standard and non-standard varieties of both Chinese and English into Chinese language and English language classrooms, to equip learners

with variation awareness and be able to cope with linguistic and cultural bias inside and outside China.

5.4 Self-Desirability of Accents in English Production

Participants expressed an overt preference for the "standard" variety of English, RP in terms of the accent they would like to adopt in their own English production. The other six accents were all evaluated negatively for this aspect. This result indicates a continuing preference for standard English varieties among Chinese EFL learners (Xu et al., 2010; Zhang, 2019; Zhang & Du, 2018). Crismore and colleagues (1996) focused on language attitudes among Malaysian English speakers and found that, while they accepted the functionality of Malaysian English, they were determined to learn standard varieties for their prestige. McKenzie (2008b) revealed a tendency of Japanese EFL learners to regard the standard varieties as the "correct" models for language learning.

The contrast between participants' desire for an RP variety in their own English production on the one hand, and their openness to linguistic diversity on the other, seems contradictory. However, this aligns with previous studies that showed a lack of confidence in English production among EFL learners and a preference of using native models to measure their own English production (McCrocklin & Link, 2016; Zhang & Du, 2018). This may reflect the native English norms in language education. Learners are taught to conform to native English norms from their language curriculum (Wang, 2013). They were provided with less variations of English input in the classroom and thus, they were less confident to manage non-standard varieties in their language use.

5.5 Pedagogical Implications

The results of present study suggest that there might be some positive influence of SA in the UK on EFL learners' perceptions on different English varieties. Learners with SA experience may be more able to handle variability of accents and cultures in the real world (Churchill & DuFon, 2006). Therefore, if multiple uses and variations of the target language can be introduced into the classroom, more learners at home can learn the skills needed to adapt to other varieties, as learners in a SA context have the opportunity to do. In addition, as shown in the language background survey, a majority of participants in the at-home context had motivations to SA in the future. It is also beneficial for those potential SA learners to understand the variations of English usage before going abroad.

Participants' positive attitudes towards linguistic diversity and their willingness to learn different English varieties in the classroom regardless of learning context (SA and NSA) shows that the pre-eminence of standard English varieties such as RP could be challenged and the inclusion of diversified language varieties in English education is in demand.

Situated in a world where multilingual speakers of English are becoming the majority of English users (Galloway, 2017b), it is of considerable value for those with and without SA opportunities to develop sufficient adaptive skills and sociolinguistic competence in the classroom to cope with linguistic and cultural bias in the real world and accommodate different accents for successful communication and relationships (Shiri, 2010). What learners experience in the classroom should arguably align with what they will encounter in real life (Wang, 2013). They should be informed of the fact that people from different areas and of different social class, age or sex do not speak identically in real life.

The debate about whether to teach an accent or variety in teaching EFL and which variety to teach was recently brought to the fore (Shiri, 2010; Matsuda and Friedrich, 2012). It is evident from the findings in the current study that standard English varieties should no longer be exclusively used in EFL contexts. Courses such as language variations and Global Englishes should be provided to raise awareness of linguistic diversity.

In terms of which variety to teach, perhaps the options should be based on an analysis of learners' needs. Learners should be informed about those varieties of English that they might encounter in the future, such as varieties in their home country, and regional varieties in their SA destination other than the standard varieties. It is also important to generate explicit knowledge of phonological variation, cultural-specific vocabulary and syntactic rules of different varieties to help learners acquire pragmatic abilities of understanding different aspects of English variations. In this way, learners can be able to adapt to any of the varieties of English accents that they might encounter in the future.

Chapter 6 Conclusion

6.1 Conclusion

The purpose of this study was to understand Chinese EFL learners' perceptions of different English varieties and their attitudes towards linguistic diversity in English, and to examine whether there has any difference between perceptions of learners with and without SA experience. Perceptions were operationalized as comprehensibility, social-attractiveness, foreign-accentedness and variety recognition. 90 Chinese EFL learners participated in an online survey and evaluated seven standard and nonstandard English varieties.

There were three main findings in this study. Firstly, standard variety (RP) and local variety (Chinese-accented English) were evaluated highly in terms of comprehensibility and social-attractiveness and received more accurate variety recognition. For accentedness, participants were accurate at identifying native English varieties, even for regional ones. Secondly, there were differences observed between SA and NSA groups on EFL learners' perceptions on different English varieties. The scores of comprehensibility and social-attractiveness of international varieties and perceived foreign-accentedness and variety recognition of regional British varieties among "SA in the UK" participants were more positive compared with the NSA group. Thirdly, although Chinese EFL learners were conservative to choose standard native norms for their desirable accent in English production, they had a strong willingness to accept linguistic diversity in English and learn different nonstandard English varieties.

6.2 Limitations

There are several limitations of current study. The first limitation is that the sample is not representative of Chinese EFL learners. Participants were all university students majoring in language studies. They all have intermediate to advanced level of English proficiency and have multiple language abilities. Therefore, they cannot represent all Chinese EFL learners with different levels of English proficiency and different majors. Besides, the SA and NSA groups in current study might not be representative of EFL learners in different learning contexts. The majority of participants with SA experience have studied abroad in the UK. It is unclear whether studying abroad in other countries would have different effects on their perceptions.

The second limitation is concerned with representativeness of the speech samples evaluated. There is only one standard variety of RP and two regional UK English varieties included in the study. It is unclear whether other standard varieties such as General American English and regional American English varieties would lead to different results. Moreover, this study only included speech samples from male speakers. It is uncertain whether female speakers would lead to different perceptions among listeners.

A third limitation is that reading the same text for each variety might undermine the validity of evaluation of comprehensibility. A better way to examine comprehensibility could be to require speakers to record their spontaneous speech. However, this method might introduce new confounding variables, such as topic familiarity and speech rate. Nevertheless, this limitation had been controlled in this study by informing participants to focus on the accent rather than the content of the speech.

Another limitation is that only a limited number of individual differences were examined. Variables such as SA experience and SA locations were the focuses of this study. There are other variables that are also important in investigating participants' perceptions such as social network in SA context and frequency of using social media and watching English-speaking films and TV series in NSA context.

6.3 Suggestions for Future Study

The first suggestion for future study is to examine the same issue as the current study with a different method among another sample, to see whether the findings would be replicated. A possible method would be to assess participants' perceptions through a semi-structured interview, enabling researcher to ask participants follow-up questions about their perceptions and to explore individual differences in greater depth.

A second suggestion is to investigate more individual differences in the SA context. This study only examines one of the variables in the SA context, which is the place of SA. More studies are required to unpack multiple variables in the SA environment that might influence language learning. Possible variables such as the nature of learners' social networks, their extracurricular activities and the length of their stay SA are all worthy of further investigation.

In terms of the issue of linguistic diversity in English, more experimental research in the classroom should be conducted to help develop effective English language curriculum

and assessments that include multiple English varieties and at the same time do not threaten assessment fairness. It is imperative for future studies to provide a defensible direction for teaching and assessing multiple English varieties and sociolinguistic competence, to enhance learners' listening comprehension and their skills to handle variability in intercultural communication.

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Appendix A. Speech Material

Comma Gets a Cure

Well, here's a story for you: Sarah Perry was a veterinary nurse who had been working daily at an old zoo in a deserted district of the territory, so she was very happy to start a new job at a superb private practice in North Square near the Duke Street Tower. That area was much nearer for her and more to her liking. Even so, on her first morning, she felt stressed. She ate a bowl of porridge, checked herself in the mirror and washed her face in a hurry. Then she put on a plain yellow dress and a fleece jacket, picked up her kit and headed for work.

When she got there, there was a woman with a goose waiting for her. The woman gave Sarah an official letter from the vet. The letter implied that the animal could be suffering from a rare form of foot and mouth disease, which was surprising, because normally you would only expect to see it in a dog or a goat. Sarah was sentimental, so this made her feel sorry for the beautiful bird.

Before long, that itchy goose began to strut around the office like a lunatic, which made an unsanitary mess. The goose's owner, Mary Harrison, kept calling, "Comma, Comma," which Sarah thought was an odd choice for a name. Comma was strong and huge, so it would take some force to trap her, but Sarah had a different idea. First she tried gently stroking the goose's lower back with her palm, then singing a tune to her. Finally, she administered ether. Her efforts were not futile. In no time, the goose began to tire, so Sarah was able to hold onto Comma and give her a relaxing bath.

Once Sarah had managed to bathe the goose, she wiped her off with a cloth and laid her on her right side. Then Sarah confirmed the vet’s diagnosis. Almost immediately, she remembered an effective treatment that required her to measure out a lot of medicine. Sarah warned that this course of treatment might be expensive—either five or six times the cost of penicillin. I can’t imagine paying so much, but Mrs. Harrison—a millionaire lawyer— thought it was a fair price for a cure.

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Appendix B. Invitation Letter (English)

Dear participant,

I hope you are doing well.

I am [redacted] an MSc student in the University of Oxford. You are being invited to take part in an online survey of my master dissertation. The aim of the research is to investigate perceptions of English varieties among Chinese EFL learners. It should take you around 15 to 20 minutes to complete the survey. If you meet the inclusion criteria listed below, please click the link and join the interesting survey.

【Inclusion Criteria】

1. aged over 18
2. a native speaker of Chinese with no parent being a native English speaker;
3. learning English at intermediate to advanced levels (E.g. IELTS over 5.5, TOEFL over 72, Pass TEM 4/ TEM 8, College English Test Band 4 over 530 or College English Test Band 6 over 500)
4. Had received Nine-year Compulsory Education in China
5. Had received the education before high school in China

【Survey Task】

If you agree to take part in this study, you will first be asked to complete a simple language background survey, then listen to several speech audio recordings in the survey and rate each speech sample on several variables. After the perception rating task, there are some questions asking your own experience concerning your use of language.

If you are willing to take part in my research, please click the link and join the survey. I would appreciate it if you can forward the link and invitation letter to any of your acquaintances who meet the inclusion criteria. The survey is easy without standard answers. Please be reassured that all data will be stored securely and anonymously. If there is anything that is not clear or if you wish to give us feedbacks before or after your participation, do not hesitate to contact me [redacted].

Many thanks for reading this and for considering to take part in my experiment.

Appendix C. Invitation Letter (Chinese)

[redacted]



大家好！我是牛津大学应用语言学与二语习得专业的一名在读研究生。我目前的论文研究旨在探究中国英语学习者对不同英语口音的认识。希望能邀请您参与我的毕业论文研究，完成一份 **15-20 分钟的问卷**。只要您符合以下参与者条件，就可以匿名参与有趣的**听音测评小游戏**！

【参与者条件】

1. 18 岁以上
2. 母语为中文且父母任一方不为英语为母语人士
3. 英语水平中高级（例如：雅思总分 5.5 以上、托福 72 分以上，英语专业四级/专业八级合格，大学英语四级 530 分以上，大学英语六级 500 分以上）
4. 接受过中国九年义务教育
5. 从幼儿园到高中均在中国接受教育

【问卷内容】

首先，您将完成一项简单的背景调查问卷。之后，您将听到七段录音，分别读一篇有趣的小故事。您将测评每段录音。最后，您将回答一些个人语言学习问题。

如果您愿意参与问卷，请点击以下链接，也**欢迎您转发**给符合参与者条件的朋友加入问卷研究。**问卷全程简单轻松不烧脑，且无标准答案，您的参与将是保密的，回答也将是匿名的，请放心作答。**若您有任何问题，请通过邮件联系我[redacted]非常感谢大家在百忙中参与问卷调查！祝大家学业有成，论文灵感涌现！

Appendix D. Online Questionnaire (English)

PARTICIPANT INFORMATION SHEET

Name of the Research: Perceptions of native and non-native English varieties by Chinese EFL learners

Researcher: [redacted]

CUREC Reference Number: [redacted]

You are being invited to take part in a research project investigating perceptions of English varieties. Before you decide, it is extremely important for you to **READ CAREFULLY** in order to understand why the research is being done and what participation will involve. We wish to remind you that your participation is completely voluntary. If you agree to participate with the understanding that the data you submit will be processed accordingly, please check the two boxed at the end to get started.

1. ***Why is this research being conducted?***

This study aims to investigate how Chinese learners of English perceive a variety of English accents and also examine some of the factors which might contribute to these perceptions. The ultimate aim of this research is to inform English learning and teaching and improve pedagogy.

2. ***Why have I been invited to take part?***

You have been invited because

6. aged between 18-35;
7. a native speaker of Chinese;
8. learning English at intermediate to advanced levels
9. and either:
    a) currently reside in China and have no study abroad experience and no long-term living experience (less than 1 month) in an Anglophone country; or
    b) currently reside either in China or in an Anglophone country, and have completed or are completing a period of study abroad in an Anglophone country.

3. ***Do I have to take part?***

No. It's your choice to decide whether or not to take part. You can ask questions about the research before deciding whether or not to take part. If you do agree to take part, you may withdraw yourself from the study, without giving a reason, and without negative consequences just by closing the browser. No data will be collected if you withdraw from the study before submitting the survey.

4. *What will happen to me if I take part in the research?*

If you agree to take part in this study, you will first be asked to carefully read and sign the informed consent form online. Then, you will need to complete an online survey. You will first complete a simple language background survey, then listen to several speech audio recordings in the survey and rate each speech sample on four variables. After the perception rating task, there are some open-ended questions asking your personal experience concerning your use of language. It should take you 20-25 minutes to complete the survey and you can choose at any time . All data will be stored securely and anonymously.

5. *Are there any potential risks in taking part?*

There are no foreseeable significant risks in this study. However, if you feel any discomforts or risks arise during completing the survey, you can withdraw the study by closing the browser or contacting the researchers via [redacted].

6. *Are there any benefits in taking part?*

There will be no direct or personal benefit to you from taking part in this research. However, the completion of this survey might have beneficial effects on your English learning and communication by raising the awareness of the diversity of accents that exist in English. You can ask for a summary of the findings of my study and email me with any questions or ideas you would like to discuss with me in terms of English learning.

7. *What happens to the data provided?*

The information you provide during the study is the **research data**. Any research data from which you can be identified is known as **personal data**.

No personal data will be collected in this study.

Questionnaire answers will be safely stored in a dedicated folder in my personal laptop with password protected and backed up securely in the university's Nexus 365 OneDrive for Business, accessible only via my institutional login. In line with university policy, the data will be stored for at least three years after completion of the research and then permanently destroyed using the data destruction software fileshredder.org. The questionnaire will be anonymous. The online consent form will also be anonymous and stored separately for at least 3 years after publication or public release of the work of the research.

I will have access to the research data and it will also be shared with my supervisor as required to support my analysis. Responsible members of the University of Oxford may be given access to data for monitoring and audit of the research as required.

I would like your permission to use anonymised data in future studies, and to share data with other researchers (e.g. in online databases). As noted above, all personal information that could identify you will have been removed before information is shared with other researchers or results are made public.

8. Will the research be published?

The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archive online gives easy access for researchers to the full text of freely available theses, thereby increasing the likely impact and use of that research.

The research will be written up as my Master's dissertation. All data referred to in the dissertation will be completely anonymous: no participants will be identifiable. On successful submission of the thesis, it may be deposited both in print and online in the University archives to facilitate its use in future research. If so, the thesis will be openly accessible.

9. Who has reviewed this study?

This study has been discussed with my supervisor and reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee.

10. Who do I contact if I have a concern about the study or I wish to complain?

a) For studies reviewed by a University research ethics committee only:

If you have a concern about any aspect of this study, please contact me, [redacted], or my supervisor [redacted]. We will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Departmental Research Ethics Committee (DREC) at Oxford University Department of Education, 15 Norham Gardens, Oxford, OX2 6PY; Email: research.office@education.ox.ac.uk. He will aim to resolve the matter as quickly as possible.

11. Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study. The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed in the public interest.

Further information about your rights with respect to your personal data is available from http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/.

12. Further Information and Contact Details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact me [redacted].ox.ac.uk).

Thank you so much for your interest in this study!

Yours sincerely,

[redacted]

Jiefan Fang



Please note that you may only participate in this survey if you are 18 years of age or over.

☐ I certify that I am 18 years of age or over

If you have read the abovementioned information and agree to participate with the understanding that the data you submit will be processed accordingly, please check the relevant box below to get started.

☐ Yes, I agree to take part

Please read the following questions and respond according to your own language background and personal experience. Your responses will contribute to the conclusions of the study and will not be used for any other purpose. They will be kept confidential. Thank you very much for your cooperation!

Language Background

1. Do you have any known hearing impairment?
   A. Yes. B. No. C. Prefer not to answer.
2. What is your gender?
   A. Male. B. Female. C. Non-binary D. Prefer not to answer.
3. How old are you?
   A. <18. B. 18-22. C.23-25. D. 26-30. E. 31-35. F. >35.
4. How long have you been studying English? Please answer in number of years
   _____
5. Is Chinese your first language?
   A. Yes. B. No.
6. Which English proficiency certificate do you have? Please state your score in the blank.

A. TEM-4 (Test for English Majors-Band 4) (score:_____)
B. TEM-8 (Test for English Majors-Band 8) (score:_____)
C. IELTS (score:_____)
D. TOEFL (score:_____)

7. Please estimate your CEFR level in English, and in any other languages you speak, by placing a tick in the appropriate box.

	English	Other (please state)	Other (please state)
Basic: 1. Can understand and use familiar everyday expressions 2. can introduce themselves and ask and answer questions in a simple way			
Intermediates: 1. Can interact with native speakers with a degree of fluency and spontaneity 2. Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.			
Advanced: 1. Can understand with ease virtually everything heard or read. 2. Can use language flexibly and effectively for social, academic and professional purposes. 3. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.			

Please tell me about your educational background by filling in any boxes as appropriate.

	Undergraduate degree	Master's degree	doctorate
Name of university			
Subject or major			
Year (or expected year) of graduation			

8. Have you ever studied abroad in an Anglophone country (living in the country for more than 3 months, including short-term exchange study)?

   A. Yes. B. No.

   If yes: please choose at which stage(s) you studied abroad and fill in the blank the length of your study abroad experience. If you've studies abroad more than once, tell me about all of the times. (E.g. 05/2020-10/2020)

   A. Before undergraduate education._____
   B. Undergraduate education._____
   C. Master education._____
   D. Doctoral education._____

	Study abroad? Yes / NO	If Yes, how many months?	Which country?	Was this during covid times? (Y/N)
Before undergraduate education._____				
Master education._____				
Doctoral education._____				

If no: do you plan to study abroad in the future?

A. Yes. B. No.

If yes, which country?_____

Next, you will listen to seven recordings reading an interesting short story respectively. You can drag the progress bar based on your need. Please listen to the recordings before answering relevant. Please note there is no right or wrong answer – this is about your perceptions. Please be honest – remember your answers are anonymous.

Perception Rating Task

[Speech sample audio recordings in randomized order (China, Malaysia, India, Italy, Glasgow, Liverpool, RP)]

Please listen to the recording and rate the following items.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
I can easily understand this accent	O	O	O	O	O	O
The accent makes me feel warm and friendly.	O	O	O	O	O	O
I think the speaker is a native English speaker.	O	O	O	O	O	O
I would be happy to have this accent when I speak English	O	O	O	O	O	O

1. Which country do you think the speaker come from?_____ (Don't worry if you don't know – this is not a test! You can just write "I don't know" if you are not sure)
2. Which region within this country do you think the speaker comes from? _____ (Don't worry if you don't know – this is not a test! You can just write "idk" for "I don't know" if you are not sure)

Thanks for your patience! You are almost there! There are a few final easy questions for you. Please answer them according to your own experience.

Other Personal Experience

1. Please rate the following statement.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
I like to hear varieties of English accents different from standard ones.	O	O	O	O	O	O
I would like to learn nonstandard English varieties in English listening classrooms.	O	O	O	O	O	O

Many thanks for your contribution to this survey! If you are interested in this study and willing to know more information, please leave your e-mail address below. The researcher will contact you once the research is completed.

_____

Appendix E. Online Questionnaire (Chinese)

问卷参与须知

研究名称：中国英语学习者对不同英语口音的认知
研究者：[redacted]
牛津大学研究伦理委员会中心许可编号：[redacted]

您好！非常感谢您有意愿参与此项研究的问卷调查。您已受邀参与此项研究。在您决定是否参与之前，请您仔细阅读以下信息，了解实验目的和参与须知。您提供的所有数据将是匿名的。若阅读后，您同意参与，请点击文末两个方框开始参与。

此项研究目的是什么?

此项研究旨在探析中国英语学习者对不同类别英语的认知以及影响该认知的潜在因素。研究将有助于理解并改善英语学习和教学模式。

我必须要参与么?

不是的。您可以决定是否参与问卷调查。在参与之前，您可以询问任何关于本研究的问题，再决定是否加入此项研究。在填写问卷过程中，您可以随时暂停或者关闭浏览器退出问卷调查。若您在中途选择退出，任何您已填写的将不会被保留。

参与问卷调查需要做什么?

若您愿意参与我的研究，首先，你将完成一项简单的背景调查问卷。之后，你将听到一个有趣的英语小故事分为七段小录音，并对每一段小录音进行测评。最后，你将回答一些简单的个人语言学习问题。问卷大约需要共10-20分钟左右完成。如果您对我的研究和问卷内容感兴趣，可以留下您的联系方式，参与后续的线上采访。

参与问卷调查是否有任何潜在风险以及福利?

参加这项研究并没有任何已知风险。这项研究并没有即时的福利，但你的参与将有助于你自身的外语学习和跨文化意识培养。

提供的数据将会被如何处理?

问卷数据将用于研究者 [redacted] 的硕士毕业论文中。该论文将在其导师 [redacted]）的监督下完成。所有数据仅由研究者与其导师使用。您提供的所有数据将是完全匿名的。此问卷将不会收集任何能够识别个人身份的数据，包括您的名字以及IP地址。收集到的所有数据将会存储于问卷平台Qualtrics中，并备份于牛津大学Nexus 365 OneDrive中的加密文件。研究者及其导师将有权查阅数据。论文完成后将提交于牛津大学研究伦理委员会中心。基于监督与核查需求，牛津大学成员将有可能查阅数据。研究数据（包括此同意书）将有可能发表于学术出版物中。由于学校存档要求，研究数据在论文公开或发表后将存储三年。

获取更多信息联系方式

若您在参与问卷调查之前或之后有任何疑问，请您通过邮件联系研究者 [redacted] [redacted] 或者她的导师 [redacted] [redacted] 。我们将会竭力回答您的问题，若您的问题未于10个工作日内得到答复，或者您感到不满意或希望提出正式投诉，请联系牛津大学人文社科研究伦理委员会主席（ethics@socsci.ox.ac.uk）主席将会尽快解决您的问题。

请注意，您只有年满18岁才可以填写此问卷和参与后续问卷调查。

我确认我已年满18岁。

若您已阅读了以上信息，并同意参与问卷调查，请点击以下选项进入问卷。感谢！

是的，我同意参与问卷调查。

请问您是否有任何已知的听觉障碍?

是

否

请问您的性别是?

男

女

非二元性别/第三性别

保密

请问您的年龄是?

请问您的母语是否为中文?

是

否

请问您学英语几年了?

请问您是否接受过九年义务教育?

是

否

请问您是否从幼儿园到高中都在中国接受教育?

是

否

请选择以下您 **所有的** 学习经历（包括**在读**）(多选):

本科

硕士

博士

请问您本科就读的学校名称是：

请问您本科就读的专业为：

请问您本科的毕业年份为：

请问您硕士就读的学校名称是：

请问您硕士就读的专业为：

请问您硕士的毕业年份为：

请问您博士就读的学校名称是：

请问您博士就读的专业为：

请问您博士的毕业年份为：

请选择您参加过的其中一个**英语**能力标准考试名称，并在空格内填写成绩：（多选）

专业四级

专业八级

雅思

托福

其他（请填写考试名称-成绩）

请根据以下标准评估您的英语语言能力：

入门级

初级

中级

中高级

高级

精通

【入门级】：能进行简单自我介绍和基础日常问候和交流；能简单提问和回答问题。
【初级】：能理解购物、家庭、工作中需要使用的常用表达；能简单表达需求。
【中级】：能理解娱乐、家庭、工作、学习相关话题中的要点；能使用该语言处理旅行中的各种情况；能简略表达兴趣、意愿，描述经历、事件、梦想、观点、计划。
【中高级】：能理解复杂或专业领域文章的主旨；自然轻松地与母语者进行互动；能对各种话题进行细节描述。
【高级】：能理解长难文章和对话；表达观点不会词穷；轻松使用复杂句式和结构、地道的习语、连接词、修辞手法来进行社交、学术、专业交流等。
【精通】能轻松理解接收到的任何信息；自然流畅准确表达各种观点；能辨别同义词的细微语境差别。

请问除了中文和英文，您是否还会其他语言么?

是，请填写该语言及水平（例如：法语-初级；西班牙语-入门级）

否

请问您是否曾在以英语为母语国家留学过（在**该国学习并居住**，包括短期交换）？

是

否

请问您是在什么阶段赴以英语为母语的国家留学？请选择您所有的有留学经历的阶段。（多选）

本科之前

本科

硕士

博士

请问您在本科之前留学的国家和地区为（例如：英国利兹）：

请选择您本科之前的留学时长月份数（假设留学一个月，则在空格内填写1）：

请问您本科之前的留学时间是否包含2020或2021年?

是

否

请问您在本科阶段留学的国家和地区为（例如：英国利兹）：

请选择您本科阶段的留学时长月份数（假设留学一个月，则在空格内填写1）：

请问您本科阶段的留学时间是否包含2020或2021年?

是

否

请问您在硕士阶段留学的国家和地区为（例如：英国利兹）：

请选择您硕士阶段的留学时长月份数（假设留学一个月，则在空格内填写1）：

请问您硕士阶段的留学时间是否包含2020或2021年?

是

否

请问您在博士阶段留学的国家和地区为（例如：英国利兹）：

请选择您博士阶段的留学时长月份数（假设留学一个月，则在空格内填写1）：

请问您博士阶段的留学时间是否包含2020或2021年?

是

否

请问您未来是否有赴以英语为母语国家进行留学的意向?

是

否

请选择您有留学意向的国家:

英国

美国

加拿大

澳大利亚

爱尔兰

其他，请填写:

接下来，您将听到七段录音，分别读一篇有趣的小故事。**您可根据需要拖动每一段的进度条。**请听录音后，再回答问题。这一部分的问题没有标准答案，您个人的感觉和判断是最重要的。您的回答将是匿名的，请放心作答！:)



请听以下录音，回答下列问题：

	完全反对	反对	比较反对	比较同意	同意	完全同意
我能很容易地理解这个口音。	○	○	○	○	○	○
这个口音让我感觉亲切友好。	○	○	○	○	○	○
我认为说话者的母语为英语。	○	○	○	○	○	○
我希望自己能拥有这样的英语口音。	○	○	○	○	○	○

请问您认为说话者来自哪个国家？（若您不知道，请在空格内填写**idk**。这不是个考试，请根据您的直觉放心作答。）

请问您认为说话者来自哪个地区或城市？（若您不知道，请在空格内填写**idk**。这不是个考试，请根据您的直觉放心作答。）

感谢您坚持到这里！问卷马上到终点咯！接下来还有几个简单的小问题，请您根据自己真实的情况作答。

请根据个人偏好，选择以下情况的接受程度：

	完全反对	反对	比较反对	比较同意	同意	完全同意
我愿意听到各种各样不同于标准英音/美音的英语口音。	○	○	○	○	○	○
我希望在英语听力课堂中学习到各种不同于标准英音/美音的英语口音。	○	○	○	○	○	○

对于本次研究，您有什么其他看法或改进建议？

Appendix F. Pilot Study of Selection of Social-Attractiveness Traits

感受形容词
2021年8月21日早上8点59分 BST

Q1 - 当您听到让您有好感的声音，让您想与说话者进行进一步聊天，您会用什么中文形容词去形容这种声音带给您的感觉？（请根据您自己的偏好，填写您所想到的所有形容词。）

当您听到让您有好感的声音，让您想与说话者进行进一步聊天，您会用什么中文形容词去形容这种声音带给您的感觉？（请根据您自己的偏好，填写您所想到的所有形容词...
磁性
友好 真诚
闻所未闻
干净
有质感；可爱
醇厚，温和，悦耳，灵动，吐字清晰咬字标准，有气质
亲切，友好
好听
兴奋的快乐的有趣的有磁性的吸引人的
标准 沉稳 声带发生部位靠后 攻击性不强 甜美可人儿 舒服 像人潮汹涌中的瞩目 故事性很强 真他妈好听
美妙
亲切 温柔

Q2 - 当您听到熟悉的乡音，让您唤起乡愁和归属感，您会用什么中文形容词去形容这种声音带给您的感觉？（请根据您自己的偏好，填写您所想到的所有形容词。）

当您听到熟悉的乡音，让您唤起乡愁和归属感，您会用什么中文形容词去形容这种声音带给您的感觉？（请根据您自己的偏好，填写您所想到的所有形容词。）
依恋
怀旧 亲切
知音难觅
地道
土里土气
前后鼻音不分，呢了不分，发音很"扁"，梦回初中，土，脏字好多，自己人！
亲切，乡土，接地气
亲切
熟悉的搞笑的
人生海海
亲切
方言感 老龄 关切

Appendix G. Ethical Approval

MSc Applied Linguistics for Second Language Acquisition/Applied Linguistics for Language Teaching CUREC application for [redacted]

Dear [redacted]

Perceptions of native and non-native English varieties by Chinese EFL learners: an investigation of the effects of Study Abroad - Ref [redacted]

The above application has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants. I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

I have two points to note. Firstly, your consent form for the interview should, I believe, explicitly ask for consent to audio-record the interviews. I do not need to see the amended version, but please check and add the additional item if necessary. Secondly, data collected via Teams might be subject to completion of a DPIA form (What is a DPIA? | ICO) for submission to Lisa Holmes (lisa.holmes@education.ox.ac.uk). Please discuss this with your supervisor as needed.

Please also continue to follow all current guidance issued by CUREC during the pandemic, notably COVID-19: CUREC guidance on research involving human participants, and on internet-based research: https://researchsupport.admin.ox.ac.uk/governance/ethics/coronavirus. If relevant, please also check the CUREC website for their best practice research guides: https://researchsupport.admin.ox.ac.uk/governance/ethics/resources/bpg

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

Good luck with your research study.

With kind regards,

Dr. Sandra Mathers
Department of Education
University of Oxford

Appendix H. Output of SPSS for the Internal Consistency of the Scale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.834	.840	21

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.882	.878	21

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.722	.727	2

Appendix I. Output of SPSS for One-way Repeated Measures of ANOVA

I.1 Descriptive Statistics for Normality Check

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Indian_Comprehensibility	90	1	6	4.07	1.130	-.564	.254	.067	.503
Indian_Warmth	90	1	6	3.39	1.233	.096	.254	-.488	.503
Indian Foreign-accentedness	90	1	6	2.38	1.403	.843	.254	-.143	.503
Chinese_Comprehensibility	90	2	6	4.79	.977	-.373	.254	-.514	.503
Chinese_Warmth	90	1	6	4.39	1.177	-.509	.254	.369	.503
Chinese Foreign-accentedness	90	1	6	1.48	.902	2.367	.254	6.904	.503
Glaswegian_Comprehensibility	90	1	6	4.63	1.022	-.823	.254	1.137	.503
Glaswegian_Warmth	90	1	6	3.91	1.098	.023	.254	-.359	.503
Glaswegian Foreign-accentedness	90	1	6	3.62	1.540	-.264	.254	-.954	.503
Italian_Comprehensibility	90	1	6	3.24	1.275	.192	.254	-.846	.503
Italian_Warmth	90	1	6	2.93	1.261	.197	.254	-.581	.503
Italian Foreign-accentedness	90	1	6	2.14	1.303	.785	.254	-.508	.503
RP_Comprehensibility	90	2	6	5.67	.653	-2.746	.254	10.654	.503
RP_Warmth	90	1	6	5.32	.946	-1.669	.254	3.813	.503
RP Foreign-accentedness	90	1	6	5.70	.771	-3.786	.254	17.532	.503
Malaysia_Comprehensibility	90	2	6	4.32	1.069	-.172	.254	-.356	.503
Malaysia_Warmth	90	1	6	3.62	1.001	.205	.254	.236	.503
Maylaysia Foreign-accentedness	90	1	6	1.81	1.027	1.665	.254	3.425	.503
Liverpool_Comprehensibility	90	1	6	3.22	1.270	.243	.254	-.356	.503
Liverpool_Warmth	90	1	5	2.83	1.104	.031	.254	-.586	.503
Liverpool Foreign-accentedness	90	1	6	3.04	1.728	.264	.254	-1.274	.503
Valid N (listwise)	90								

I.2 Results of Repeated Measures of ANOVA and Pairwise Comparisons for Comprehensibility

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Accent	Sphericity Assumed	409.067	6	68.178	93.745	.000	.513
	Greenhouse-Geisser	409.067	4.946	82.706	93.745	.000	.513
	Huynh-Feldt	409.067	5.272	77.590	93.745	.000	.513
	Lower-bound	409.067	1.000	409.067	93.745	.000	.513
Error(Accent)	Sphericity Assumed	388.362	534	.727			
	Greenhouse-Geisser	388.362	440.199	.882			
	Huynh-Feldt	388.362	469.221	.828			
	Lower-bound	388.362	89.000	4.364			

Pairwise Comparisons

Measure: MEASURE_1

(I) Accent	(J) Accent	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	-.722*	.121	.000	-1.102	-.343
	3	-.567*	.100	.000	-.879	-.254
	4	.822*	.115	.000	.464	1.181
	5	-1.600*	.123	.000	-1.985	-1.215
	6	-.256	.112	.532	-.607	.096
	7	.844*	.146	.000	.386	1.303
2	1	.722*	.121	.000	.343	1.102
	3	.156	.111	1.000	-.190	.501
	4	1.544*	.145	.000	1.091	1.998
	5	-.878*	.100	.000	-1.190	-.566
	6	.467*	.111	.001	.120	.813
	7	1.567*	.141	.000	1.124	2.009
3	1	.567*	.100	.000	.254	.879
	2	-.156	.111	1.000	-.501	.190
	4	1.389*	.131	.000	.979	1.799
	5	-1.033*	.104	.000	-1.359	-.708
	6	.311	.121	.248	-.067	.690
	7	1.411*	.137	.000	.983	1.839
4	1	-.822*	.115	.000	-1.181	-.464
	2	-1.544*	.145	.000	-1.998	-1.091
	3	-1.389*	.131	.000	-1.799	-.979
	5	-2.422*	.150	.000	-2.891	-1.953
	6	-1.078*	.132	.000	-1.492	-.664
	7	.022	.143	1.000	-.425	.470
5	1	1.600*	.123	.000	1.215	1.985
	2	.878*	.100	.000	.566	1.190
	3	1.033*	.104	.000	.708	1.359
	4	2.422*	.150	.000	1.953	2.891
	6	1.344*	.122	.000	.964	1.725
	7	2.444*	.146	.000	1.988	2.900
6	1	.256	.112	.532	-.096	.607
	2	-.467*	.111	.001	-.813	-.120
	3	-.311	.121	.248	-.690	.067
	4	1.078*	.132	.000	.664	1.492
	5	-1.344*	.122	.000	-1.725	-.964
	7	1.100*	.138	.000	.669	1.531
7	1	-.844*	.146	.000	-1.303	-.386
	2	-1.567*	.141	.000	-2.009	-1.124
	3	-1.411*	.137	.000	-1.839	-.983
	4	-.022	.143	1.000	-.470	.425
	5	-2.444*	.146	.000	-2.900	-1.988
	6	-1.100*	.138	.000	-1.531	-.669

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Note: 1=Indian, 2=Chinese, 3=Glaswegian, 4=Italian, 5=RP, 6=Malaysian, 7=Liverpudlian

I.3 Results of Repeated Measures of ANOVA and Pairwise Comparisons for Social-Attractiveness

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Accent	Sphericity Assumed	410.108	6	68.351	76.513	.000	.462
	Greenhouse-Geisser	410.108	4.598	89.199	76.513	.000	.462
	Huynh-Feldt	410.108	4.879	84.058	76.513	.000	.462
	Lower-bound	410.108	1.000	410.108	76.513	.000	.462
Error(Accent)	Sphericity Assumed	477.035	534	.893			
	Greenhouse-Geisser	477.035	409.192	1.166			
	Huynh-Feldt	477.035	434.221	1.099			
	Lower-bound	477.035	89.000	5.360			

Pairwise Comparisons

Measure: MEASURE_1

(I) Accent	(J) Accent	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	-1.000*	.160	.000	-1.499	-.501
	3	-.522*	.112	.000	-.872	-.172
	4	.456*	.121	.006	.079	.832
	5	-1.933*	.156	.000	-2.422	-1.445
	6	-.233	.131	1.000	-.644	.177
	7	.556*	.125	.000	.166	.945
2	1	1.000*	.160	.000	.501	1.499
	3	.478	.162	.086	-.029	.985
	4	1.456*	.171	.000	.921	1.991
	5	-.933*	.128	.000	-1.334	-.532
	6	.767*	.135	.000	.344	1.189
	7	1.556*	.167	.000	1.032	2.079
3	1	.522*	.112	.000	.172	.872
	2	-.478	.162	.086	-.985	.029
	4	.978*	.140	.000	.541	1.414
	5	-1.411*	.126	.000	-1.806	-1.016
	6	.289	.132	.668	-.125	.703
	7	1.078*	.130	.000	.673	1.483
4	1	-.456*	.121	.006	-.832	-.079
	2	-1.456*	.171	.000	-1.991	-.921
	3	-.978*	.140	.000	-1.414	-.541
	5	-2.389*	.168	.000	-2.916	-1.862
	6	-.689*	.137	.000	-1.119	-.259
	7	.100	.125	1.000	-.292	.492
5	1	1.933*	.156	.000	1.445	2.422
	2	.933*	.128	.000	.532	1.334
	3	1.411*	.126	.000	1.016	1.806
	4	2.389*	.168	.000	1.862	2.916
	6	1.700*	.130	.000	1.294	2.106
	7	2.489*	.149	.000	2.022	2.956
6	1	.233	.131	1.000	-.177	.644
	2	-.767*	.135	.000	-1.189	-.344
	3	-.289	.132	.668	-.703	.125
	4	.689*	.137	.000	.259	1.119
	5	-1.700*	.130	.000	-2.106	-1.294
	7	.789*	.131	.000	.380	1.198
7	1	-.556*	.125	.000	-.945	-.166
	2	-1.556*	.167	.000	-2.079	-1.032
	3	-1.078*	.130	.000	-1.483	-.673
	4	-.100	.125	1.000	-.492	.292
	5	-2.489*	.149	.000	-2.956	-2.022
	6	-.789*	.131	.000	-1.198	-.380

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Note: 1=Indian, 2=Chinese, 3=Glaswegian, 4=Italian, 5=RP, 6=Malaysian, 7=Liverpudlian

I.4 Results of Repeated Measures of ANOVA and Pairwise Comparisons for Foreign-Accentedness

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Accent	Sphericity Assumed	1118.908	6	186.485	148.769	.000	.626
	Greenhouse-Geisser	1118.908	4.524	247.304	148.769	.000	.626
	Huynh-Feldt	1118.908	4.797	233.270	148.769	.000	.626
	Lower-bound	1118.908	1.000	1118.908	148.769	.000	.626
Error(Accent)	Sphericity Assumed	669.378	534	1.254			
	Greenhouse-Geisser	669.378	402.673	1.662			
	Huynh-Feldt	669.378	426.899	1.568			
	Lower-bound	669.378	89.000	7.521			

Pairwise Comparisons

Measure: MEASURE_1

(I) Accent	(J) Accent	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
1	2	.900*	.133	.000	.483	1.317
	3	-1.244*	.193	.000	-1.848	-.641
	4	.233	.153	1.000	-.246	.713
	5	-3.322*	.158	.000	-3.816	-2.828
	6	.567*	.139	.002	.133	1.000
	7	-.667	.216	.055	-1.341	.007
2	1	-.900*	.133	.000	-1.317	-.483
	3	-2.144*	.165	.000	-2.659	-1.629
	4	-.667*	.139	.000	-1.100	-.233
	5	-4.222*	.126	.000	-4.617	-3.828
	6	-.333*	.093	.012	-.626	-.041
	7	-1.567*	.199	.000	-2.188	-.945
3	1	1.244*	.193	.000	.641	1.848
	2	2.144*	.165	.000	1.629	2.659
	4	1.478*	.188	.000	.890	2.065
	5	-2.078*	.168	.000	-2.604	-1.552
	6	1.811*	.179	.000	1.250	2.372
	7	.578	.199	.096	-.043	1.199
4	1	-.233	.153	1.000	-.713	.246
	2	.667*	.139	.000	.233	1.100
	3	-1.478*	.188	.000	-2.065	-.890
	5	-3.556*	.152	.000	-4.030	-3.081
	6	.333	.142	.448	-.111	.778
	7	-.900*	.184	.000	-1.474	-.326
5	1	3.322*	.158	.000	2.828	3.816
	2	4.222*	.126	.000	3.828	4.617
	3	2.078*	.168	.000	1.552	2.604
	4	3.556*	.152	.000	3.081	4.030
	6	3.889*	.130	.000	3.483	4.295
	7	2.656*	.196	.000	2.042	3.269
6	1	-.567*	.139	.002	-1.000	-.133
	2	.333*	.093	.012	.041	.626
	3	-1.811*	.179	.000	-2.372	-1.250
	4	-.333	.142	.448	-.778	.111
	5	-3.889*	.130	.000	-4.295	-3.483
	7	-1.233*	.195	.000	-1.843	-.624
7	1	.667	.216	.055	-.007	1.341
	2	1.567*	.199	.000	.945	2.188
	3	-.578	.199	.096	-1.199	.043
	4	.900*	.184	.000	.326	1.474
	5	-2.656*	.196	.000	-3.269	-2.042
	6	1.233*	.195	.000	.624	1.843

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Note: 1=Indian, 2=Chinese, 3=Glaswegian, 4=Italian, 5=RP, 6=Malaysian, 7=Liverpudlian

Appendix J. Results of More Precise Identification of Each English Variety's Origin

Labels for Chinese English Variety

Country	N	%	Region	N	%
China	89	98.9	Northern China	26	28.9
			Southern China	3	3.3
			Beijing	3	3.3
			Shanghai	2	2.2
			Eastern China	2	2.2
			Henan province	1	1.1
			Jiangsu province	1	1.1
			Zhejiang province	1	1.1

Labels for RP

Country	N	%	Region	N	%
UK	75	83.3	London	29	32.2
USA	11	12.2	England/ southern UK	5	5.6
Canada	1	1.1	Oxford	3	3.3
			RP	2	2.2
			New York	2	2.2
			Cambridge	1	1.1

Labels for Indian English Variety

Country	N	%	Region	N	%
India	45	50	New Delhi	5	5.6
France	5	5.6	Tokyo	1	1.1
Pakistan	5	5.6	Sicily	1	1.1
South Asian countries	4	4.4	Delhi	1	1.1
Japan	3	3.3	Sindi	1	1.1
Arabic countries	2	2.2	Lahore	1	1.1
Italy	2	2.2			

Spanish-speaking countries	2	2.2
Korea	2	2.2
Singapore	2	2.2
China	1	1.1
Philippines	1	1.1
Malaysia	1	1.1
Germany	1	1.1
Thailand	1	1.1

Labels for Liverpudlian English Variety

Country	N	%	Region	N	%
UK	20	22.2	Scotland	6	6.7
India	11	12.2	Liverpool	2	2.2
France	9	10	Osio	2	2.2
Italy	4	4.4	Dublin	1	1.1
European countries	3	3.3	Edinburgh	1	1.1
Australia	2	2.2	London	1	1.1
Germany	2	2.2	Manchester	1	1.1
Norway	2	2.2	North Ireland	1	1.1
Russia	2	2.2	Paris	1	1.1
Spain	2	2.2	Northern UK	1	1.1
Greece	1	1.1			
South Africa	1	1.1			
Middle East	1	1.1			
Romania	1	1.1			
Thailand	1	1.1			

Labels for Glaswegian English Variety

Country	N	%	Region	N	%
UK	19	21.1	Scotland	8	8.9
Australia	4	4.4	Northern UK	4	4.4
India	4	4.4	Dublin	2	2.2
Ireland	4	4.4	London	2	2.2

Germany	3	3.3	Glasgow	1	1.1
China	3	3.3	Edinburgh	1	1.1
New Zealand	2	2.2	Seattle	1	1.1
Russia	2	2.2			
Spain	2	2.2			
France	1	1.1			
Canada	1	1.1			
Singapore	1	1.1			
Japan	1	1.1			
Korea	1	1.1			
Latin American countries	1	1.1			
Arabic countries	1	1.1			
Philippines	1	1.1			
Thailand	1	1.1			

Labels for Italian English Variety

Country	N	%	Region	N	%
India	53	58.9	New Delhi	5	5.6
Italy	11	12.2	Rome	1	1.1
Spain	8	8.9	Sicily	1	1.1
France	6	6.7	Southern Italy	1	1.1
Pakistan	2	2.2	London	1	1.1
Russia	2	2.2	Paris	1	1.1
Middle East	2	2.2	Rio de Janeiro	1	1.1
African countries	1	1.1	Turkey	1	1.1
Arabic countries	1	1.1			
Latin American countries	1	1.1			
Portugal	1	1.1			
Southeast Asian countries	1	1.1			
Nepal	1	1.1			
Mexico	1	1.1			
Turkey	1	1.1			

Labels for Malaysian English Variety

Country	N	%	Region	N	%
China	47	52.2	Southern China	9	10
Japan	8	8.9	Hong Kong	3	3.3
Korea	8	8.9	Guangzhou	2	2.2
Singapore	3	3.3	Shenzhen	1	1.1
Asian countries	2	2.2	Hebei	1	1.1
Arabic countries	1	1.1	Hunan	1	1
European countries	1	1.1	Northern China	1	1.1
France	1	1.1	Seoul	1	1.1
Germany	1	1.1	Shanghai	1	1.1
Malaysia	1	1.1	Singapore	1	1.1
UK	1	1.1			

Appendix K. Output of SPSS for the Relationship Between Study Abroad and Comprehensibility, Social-Attractiveness and Foreign-Accentedness

K.1 Descriptive Statistic for Normality Check of An Independent Samples T-Tests

Descriptives

	SA			Statistic	Std. Error
Indian_Comprehensibility	SA	Mean		4.29	.161
		95% Confidence Interval for Mean	Lower Bound	3.96	
			Upper Bound	4.61	
		5% Trimmed Mean		4.35	
		Median		5.00	
		Variance		1.165	
		Std. Deviation		1.079	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-1.183	.354
		Kurtosis		1.263	.695
	NSA	Mean		3.84	.171
		95% Confidence Interval for Mean	Lower Bound	3.50	
			Upper Bound	4.19	
		5% Trimmed Mean		3.85	
		Median		4.00	
		Variance		1.316	
		Std. Deviation		1.147	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.060	.354
		Kurtosis		.035	.695
Indian_Warmth	SA	Mean		3.62	.175
		95% Confidence Interval for Mean	Lower Bound	3.27	
			Upper Bound	3.97	
		5% Trimmed Mean		3.64	
		Median		4.00	
		Variance		1.377	
		Std. Deviation		1.173	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.087	.354
		Kurtosis		-.175	.695
	NSA	Mean		3.16	.188
		95% Confidence Interval for Mean	Lower Bound	2.78	
			Upper Bound	3.53	
		5% Trimmed Mean		3.12	
		Median		3.00	
		Variance		1.589	
		Std. Deviation		1.261	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.335	.354
		Kurtosis		-.417	.695
Indian Foreign-accentedness	SA	Mean		2.49	.228
		95% Confidence Interval for Mean	Lower Bound	2.03	
			Upper Bound	2.95	
		5% Trimmed Mean		2.38	
		Median		2.00	
		Variance		2.346	
		Std. Deviation		1.532	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		.776	.354
		Kurtosis		-.500	.695
	NSA	Mean		2.27	.189
		95% Confidence Interval for Mean	Lower Bound	1.89	
			Upper Bound	2.65	
		5% Trimmed Mean		2.17	
		Median		2.00	
		Variance		1.609	
		Std. Deviation		1.268	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.868	.354
		Kurtosis		.286	.695
Chinese_Comprehensibility	SA	Mean		4.82	.143
		95% Confidence Interval for Mean	Lower Bound	4.53	
			Upper Bound	5.11	
		5% Trimmed Mean		4.88	
		Median		5.00	
		Variance		.922	
		Std. Deviation		.960	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		2	
		Skewness		-.594	.354
		Kurtosis		.292	.695
	NSA	Mean		4.76	.150
		95% Confidence Interval for Mean	Lower Bound	4.45	
			Upper Bound	5.06	
		5% Trimmed Mean		4.78	
		Median		5.00	
		Variance		1.007	
		Std. Deviation		1.004	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		2	
		Skewness		-.185	.354
		Kurtosis		-1.077	.695
Chinese_Warmth	SA	Mean		4.24	.166
		95% Confidence Interval for Mean	Lower Bound	3.91	
			Upper Bound	4.58	
		5% Trimmed Mean		4.29	
		Median		4.00	
		Variance		1.234	
		Std. Deviation		1.111	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-.303	.354
		Kurtosis		.588	.695
	NSA	Mean		4.53	.184
		95% Confidence Interval for Mean	Lower Bound	4.16	
			Upper Bound	4.90	
		5% Trimmed Mean		4.62	
		Median		4.00	
		Variance		1.527	
		Std. Deviation		1.236	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.760	.354
		Kurtosis		.608	.695
Chinese Foreign-accentedness	SA	Mean		1.47	.148
		95% Confidence Interval for Mean	Lower Bound	1.17	
			Upper Bound	1.76	
		5% Trimmed Mean		1.31	
		Median		1.00	
		Variance		.982	
		Std. Deviation		.991	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		2.884	.354
		Kurtosis		9.816	.695
	NSA	Mean		1.49	.122
		95% Confidence Interval for Mean	Lower Bound	1.24	
			Upper Bound	1.73	
		5% Trimmed Mean		1.41	
		Median		1.00	
		Variance		.665	
		Std. Deviation		.815	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		1.486	.354
		Kurtosis		1.106	.695
Glaswegian_Comprehensibility	SA	Mean		4.84	.127
		95% Confidence Interval for Mean	Lower Bound	4.59	
			Upper Bound	5.10	
		5% Trimmed Mean		4.88	
		Median		5.00	
		Variance		.725	
		Std. Deviation		.852	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		1	
		Skewness		-.383	.354
		Kurtosis		-.336	.695
	NSA	Mean		4.42	.170
		95% Confidence Interval for Mean	Lower Bound	4.08	
			Upper Bound	4.76	
		5% Trimmed Mean		4.49	
		Median		5.00	
		Variance		1.295	
		Std. Deviation		1.138	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-.816	.354
		Kurtosis		.947	.695
Glaswegian_Warmth	SA	Mean		3.98	.154
		95% Confidence Interval for Mean	Lower Bound	3.67	
			Upper Bound	4.29	
		5% Trimmed Mean		3.98	
		Median		4.00	
		Variance		1.068	
		Std. Deviation		1.033	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		2	
		Skewness		.046	.354
		Kurtosis		-.495	.695
	NSA	Mean		3.84	.174
		95% Confidence Interval for Mean	Lower Bound	3.49	
			Upper Bound	4.20	
		5% Trimmed Mean		3.85	
		Median		4.00	
		Variance		1.362	
		Std. Deviation		1.167	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.047	.354
		Kurtosis		-.262	.695
Glaswegian Foreign-accentedness	SA	Mean		3.93	.212
		95% Confidence Interval for Mean	Lower Bound	3.51	
			Upper Bound	4.36	
		5% Trimmed Mean		3.98	
		Median		4.00	
		Variance		2.018	
		Std. Deviation		1.421	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.325	.354
		Kurtosis		-.810	.695

	NSA	Mean		4.42	.170
		95% Confidence Interval for Mean	Lower Bound	4.08	
			Upper Bound	4.76	
		5% Trimmed Mean		4.49	
		Median		5.00	
		Variance		1.295	
		Std. Deviation		1.138	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-.816	.354
		Kurtosis		.947	.695
Glaswegian_Warmth	SA	Mean		3.98	.154
		95% Confidence Interval for Mean	Lower Bound	3.67	
			Upper Bound	4.29	
		5% Trimmed Mean		3.98	
		Median		4.00	
		Variance		1.068	
		Std. Deviation		1.033	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		2	
		Skewness		.046	.354
		Kurtosis		-.495	.695
	NSA	Mean		3.84	.174
		95% Confidence Interval for Mean	Lower Bound	3.49	
			Upper Bound	4.20	
		5% Trimmed Mean		3.85	
		Median		4.00	
		Variance		1.362	
		Std. Deviation		1.167	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.047	.354
		Kurtosis		-.262	.695
Glaswegian Foreign-accentedness	SA	Mean		3.93	.212
		95% Confidence Interval for Mean	Lower Bound	3.51	
			Upper Bound	4.36	
		5% Trimmed Mean		3.98	
		Median		4.00	
		Variance		2.018	
		Std. Deviation		1.421	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.325	.354
		Kurtosis		-.810	.695
	NSA	Mean		3.31	.240
		95% Confidence Interval for Mean	Lower Bound	2.83	
			Upper Bound	3.79	
		5% Trimmed Mean		3.29	
		Median		3.00	
		Variance		2.583	
		Std. Deviation		1.607	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		-.123	.354
		Kurtosis		-1.130	.695
Italian_Comprehensibility	SA	Mean		3.60	.189
		95% Confidence Interval for Mean	Lower Bound	3.22	
			Upper Bound	3.98	
		5% Trimmed Mean		3.59	
		Median		3.00	
		Variance		1.609	
		Std. Deviation		1.268	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.045	.354
		Kurtosis		-1.012	.695
	NSA	Mean		2.89	.178
		95% Confidence Interval for Mean	Lower Bound	2.53	
			Upper Bound	3.25	
		5% Trimmed Mean		2.88	
		Median		3.00	
		Variance		1.419	
		Std. Deviation		1.191	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		.308	.354
		Kurtosis		-.628	.695
Italian_Warmth	SA	Mean		3.04	.180
		95% Confidence Interval for Mean	Lower Bound	2.68	
			Upper Bound	3.41	
		5% Trimmed Mean		3.02	
		Median		3.00	
		Variance		1.453	
		Std. Deviation		1.205	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.074	.354
		Kurtosis		-.373	.695
	NSA	Mean		2.82	.197
		95% Confidence Interval for Mean	Lower Bound	2.43	
			Upper Bound	3.22	
		5% Trimmed Mean		2.78	
		Median		3.00	
		Variance		1.740	
		Std. Deviation		1.319	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.343	.354
		Kurtosis		-.610	.695
Italian Foreign-accentedness	SA	Mean		2.22	.198
		95% Confidence Interval for Mean	Lower Bound	1.82	
			Upper Bound	2.62	
		5% Trimmed Mean		2.12	
		Median		2.00	
		Variance		1.768	
		Std. Deviation		1.330	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.847	.354
		Kurtosis		-.061	.695
	NSA	Mean		2.07	.192
		95% Confidence Interval for Mean	Lower Bound	1.68	
			Upper Bound	2.45	
		5% Trimmed Mean		1.99	
		Median		1.00	
		Variance		1.655	
		Std. Deviation		1.286	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		.742	.354
		Kurtosis		-.996	.695
RP_Comprehensibility	SA	Mean		5.73	.074
		95% Confidence Interval for Mean	Lower Bound	5.58	
			Upper Bound	5.88	
		5% Trimmed Mean		5.78	
		Median		6.00	
		Variance		.245	
		Std. Deviation		.495	
		Minimum		4	
		Maximum		6	
		Range		2	
		Interquartile Range		1	
		Skewness		-1.664	.354
		Kurtosis		2.012	.695
	NSA	Mean		5.60	.116
		95% Confidence Interval for Mean	Lower Bound	5.37	
			Upper Bound	5.83	
		5% Trimmed Mean		5.72	
		Median		6.00	
		Variance		.609	
		Std. Deviation		.780	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		-2.750	.354
		Kurtosis		9.646	.695
RP_Warmth	SA	Mean		5.38	.128
		95% Confidence Interval for Mean	Lower Bound	5.12	
			Upper Bound	5.64	
		5% Trimmed Mean		5.44	
		Median		6.00	
		Variance		.740	
		Std. Deviation		.860	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		1	
		Skewness		-1.058	.354
		Kurtosis		-.126	.695
	NSA	Mean		5.27	.154
		95% Confidence Interval for Mean	Lower Bound	4.96	
			Upper Bound	5.58	
		5% Trimmed Mean		5.40	
		Median		6.00	
		Variance		1.064	
		Std. Deviation		1.031	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-2.001	.354
		Kurtosis		5.540	.695
RP Foreign-accentedness	SA	Mean		5.69	.122
		95% Confidence Interval for Mean	Lower Bound	5.44	
			Upper Bound	5.94	
		5% Trimmed Mean		5.81	
		Median		6.00	
		Variance		.674	
		Std. Deviation		.821	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		0	
		Skewness		-4.515	.354
		Kurtosis		24.659	.695
	NSA	Mean		5.71	.108
		95% Confidence Interval for Mean	Lower Bound	5.49	
			Upper Bound	5.93	
		5% Trimmed Mean		5.84	
		Median		6.00	
		Variance		.528	
		Std. Deviation		.727	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		0	
		Skewness		-2.835	.354
		Kurtosis		7.813	.695
Malaysia_Comprehensibility	SA	Mean		4.49	.158
		95% Confidence Interval for Mean	Lower Bound	4.17	
			Upper Bound	4.81	
		5% Trimmed Mean		4.54	
		Median		4.00	
		Variance		1.119	
		Std. Deviation		1.058	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		-.271	.354
		Kurtosis		-.197	.695

	NSA	Mean		4.16	.159
		95% Confidence Interval for Mean	Lower Bound	3.84	
			Upper Bound	4.48	
		5% Trimmed Mean		4.17	
		Median		4.00	
		Variance		1.134	
		Std. Deviation		1.065	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		2	
		Skewness		-.088	.354
		Kurtosis		-.331	.695
Malaysia_Warmth	SA	Mean		3.73	.112
		95% Confidence Interval for Mean	Lower Bound	3.51	
			Upper Bound	3.96	
		5% Trimmed Mean		3.68	
		Median		4.00	
		Variance		.564	
		Std. Deviation		.751	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		1	
		Skewness		.826	.354
		Kurtosis		.463	.695
	NSA	Mean		3.51	.179
		95% Confidence Interval for Mean	Lower Bound	3.15	
			Upper Bound	3.87	
		5% Trimmed Mean		3.48	
		Median		4.00	
		Variance		1.437	
		Std. Deviation		1.199	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		.221	.354
		Kurtosis		-.341	.695
Maylaysia Foreign-accentedness	SA	Mean		1.80	.170
		95% Confidence Interval for Mean	Lower Bound	1.46	
			Upper Bound	2.14	
		5% Trimmed Mean		1.65	
		Median		1.00	
		Variance		1.300	
		Std. Deviation		1.140	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		1.856	.354
		Kurtosis		3.901	.695
	NSA	Mean		1.82	.136
		95% Confidence Interval for Mean	Lower Bound	1.55	
			Upper Bound	2.10	
		5% Trimmed Mean		1.73	
		Median		2.00	
		Variance		.831	
		Std. Deviation		.912	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		1	
		Skewness		1.310	.354
		Kurtosis		2.239	.695
Liverpool_Comprehensibility	SA	Mean		3.51	.200
		95% Confidence Interval for Mean	Lower Bound	3.11	
			Upper Bound	3.91	
		5% Trimmed Mean		3.51	
		Median		3.00	
		Variance		1.801	
		Std. Deviation		1.342	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		.152	.354
		Kurtosis		-.870	.695
	NSA	Mean		2.93	.169
		95% Confidence Interval for Mean	Lower Bound	2.59	
			Upper Bound	3.27	
		5% Trimmed Mean		2.90	
		Median		3.00	
		Variance		1.291	
		Std. Deviation		1.136	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.136	.354
		Kurtosis		.312	.695
Liverpool_Warmth	SA	Mean		2.89	.150
		95% Confidence Interval for Mean	Lower Bound	2.59	
			Upper Bound	3.19	
		5% Trimmed Mean		2.88	
		Median		3.00	
		Variance		1.010	
		Std. Deviation		1.005	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		-.050	.354
		Kurtosis		-.337	.695
	NSA	Mean		2.78	.179
		95% Confidence Interval for Mean	Lower Bound	2.42	
			Upper Bound	3.14	
		5% Trimmed Mean		2.75	
		Median		3.00	
		Variance		1.449	
		Std. Deviation		1.204	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		.123	.354
		Kurtosis		-.749	.695
Liverpool Foreign-accentedness	SA	Mean		3.40	.280
		95% Confidence Interval for Mean	Lower Bound	2.84	
			Upper Bound	3.96	
		5% Trimmed Mean		3.39	
		Median		4.00	
		Variance		3.518	
		Std. Deviation		1.876	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		4	
		Skewness		-.031	.354
		Kurtosis		-1.469	.695
	NSA	Mean		2.69	.224
		95% Confidence Interval for Mean	Lower Bound	2.24	
			Upper Bound	3.14	
		5% Trimmed Mean		2.63	
		Median		2.00	
		Variance		2.265	
		Std. Deviation		1.505	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		.477	.354
		Kurtosis		-.967	.695

K.2 Results of Independent Samples T-Tests

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Indian_Comprehensibility	Equal variances assumed	.018	.894	1.893	88	.062	.444	.235	-.022	.911
	Equal variances not assumed			1.893	87.673	.062	.444	.235	-.022	.911
Chinese_Comprehensibility	Equal variances assumed	.744	.391	.322	88	.748	.067	.207	-.345	.478
	Equal variances not assumed			.322	87.830	.748	.067	.207	-.345	.478
Glaswegian_Comprehensibility	Equal variances assumed	3.567	.062	1.993	88	.049	.422	.212	.001	.843
	Equal variances not assumed			1.993	81.517	.050	.422	.212	.001	.844
Italian_Comprehensibility	Equal variances assumed	1.434	.234	2.741	88	.007	.711	.259	.196	1.227
	Equal variances not assumed			2.741	87.655	.007	.711	.259	.196	1.227
RP_Comprehensibility	Equal variances assumed	3.466	.066	.968	88	.336	.133	.138	-.141	.407
	Equal variances not assumed			.968	74.508	.336	.133	.138	-.141	.408
Malaysia_Comprehensibility	Equal variances assumed	.171	.680	1.490	88	.140	.333	.224	-.111	.778
	Equal variances not assumed			1.490	87.996	.140	.333	.224	-.111	.778
Liverpool_Comprehensibility	Equal variances assumed	4.786	.031	2.204	88	.030	.578	.262	.057	1.099
	Equal variances not assumed			2.204	85.668	.030	.578	.262	.057	1.099
Indian_Warmth	Equal variances assumed	.219	.641	1.818	88	.072	.467	.257	-.044	.977
	Equal variances not assumed			1.818	87.552	.073	.467	.257	-.044	.977
Indian Foreign-accentedness	Equal variances assumed	2.608	.110	.750	88	.456	.222	.296	-.367	.811
	Equal variances not assumed			.750	85.045	.456	.222	.296	-.367	.812
Chinese_Warmth	Equal variances assumed	.877	.352	-1.166	88	.247	-.289	.248	-.781	.203
	Equal variances not assumed			-1.166	87.021	.247	-.289	.248	-.781	.203
Chinese Foreign-accentedness	Equal variances assumed	.008	.931	-.116	88	.908	-.022	.191	-.402	.358
	Equal variances not assumed			-.116	84.851	.908	-.022	.191	-.403	.358
Glaswegian_Warmth	Equal variances assumed	1.122	.292	.574	88	.568	.133	.232	-.328	.595
	Equal variances not assumed			.574	86.730	.568	.133	.232	-.328	.595
Glaswegian Foreign-accentedness	Equal variances assumed	1.336	.251	1.946	88	.055	.622	.320	-.013	1.258
	Equal variances not assumed			1.946	86.694	.055	.622	.320	-.013	1.258
Italian_Warmth	Equal variances assumed	.847	.360	.834	88	.406	.222	.266	-.307	.752
	Equal variances not assumed			.834	87.290	.406	.222	.266	-.307	.752
Italian Foreign-accentedness	Equal variances assumed	.005	.944	.564	88	.574	.156	.276	-.392	.704
	Equal variances not assumed			.564	87.904	.574	.156	.276	-.392	.704
RP_Warmth	Equal variances assumed	.094	.760	.555	88	.580	.111	.200	-.287	.509
	Equal variances not assumed			.555	85.263	.580	.111	.200	-.287	.509
RP Foreign-accentedness	Equal variances assumed	.005	.945	-.136	88	.892	-.022	.163	-.347	.303
	Equal variances not assumed			-.136	86.730	.892	-.022	.163	-.347	.303
Malaysia_Warmth	Equal variances assumed	10.079	.002	1.054	88	.295	.222	.211	-.197	.641
	Equal variances not assumed			1.054	73.908	.295	.222	.211	-.198	.642
Maylaysia Foreign-accentedness	Equal variances assumed	1.273	.262	-.102	88	.919	-.022	.218	-.455	.410
	Equal variances not assumed			-.102	83.941	.919	-.022	.218	-.455	.411
Liverpool_Warmth	Equal variances assumed	2.213	.140	.475	88	.636	.111	.234	-.353	.576
	Equal variances not assumed			.475	85.278	.636	.111	.234	-.354	.576
Liverpool Foreign-accentedness	Equal variances assumed	5.098	.026	1.984	88	.050	.711	.358	-.001	1.424
	Equal variances not assumed			1.984	84.051	.051	.711	.358	-.002	1.424

K.3 Results of Mann-Whitney U Test

Test Statistics[a]

	Indian_Comprehensibility	Chinese_Comprehensibility	Glaswegian_Comprehensibility	Italian_Comprehensibility	RP_Comprehensibility	Malaysia_Comprehensibility	Liverpool_Comprehensibility	Indian_Warmth	Chinese_Warmth	Glaswegian_Warmth	Italian_Warmth
Mann-Whitney U	737.500	968.500	805.500	705.500	957.000	837.500	785.500	787.000	839.500	941.000	901.500
Wilcoxon W	1772.500	2003.500	1840.500	1740.500	1992.000	1872.500	1820.500	1822.000	1874.500	1976.000	1936.500
Z	-2.313	-.371	-1.761	-2.551	-.581	-1.478	-1.898	-1.873	-1.467	-.599	-.920
Asymp. Sig. (2-tailed)	.021	.710	.078	.011	.561	.139	.058	.061	.142	.549	.358

a. Grouping Variable: SA

RP_Warmth	Malaysia_Warmth	Liverpool_Warmth	Indian Foreign-accentedness	Chinese Foreign-accentedness	Glaswegian Foreign-accentedness	Italian Foreign-accentedness	RP Foreign-accentedness	Maylaysia Foreign-accentedness	Liverpool Foreign-accentedness
962.000	890.000	951.000	957.000	965.500	792.000	942.000	977.000	937.000	797.000
1997.000	1925.000	1986.000	1992.000	2000.500	1827.000	1977.000	2012.000	1972.000	1832.000
-.456	-1.043	-.515	-.464	-.476	-1.813	-.605	-.412	-.660	-1.773
.649	.297	.606	.643	.634	.070	.545	.681	.509	.076

K.4 Descriptive Statistics for Normality Check of One-Way ANOVA Tests

Descriptives

	SAPlace1			Statistic	Std. Error
Indian_Comprehensibility	UK	Mean		4.32	.204
		95% Confidence Interval for Mean	Lower Bound	3.91	
			Upper Bound	4.74	
		5% Trimmed Mean		4.39	
		Median		5.00	
		Variance		1.292	
		Std. Deviation		1.137	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-1.275	.421
		Kurtosis		1.679	.821
	Non-UK	Mean		4.21	.261
		95% Confidence Interval for Mean	Lower Bound	3.65	
			Upper Bound	4.78	
		5% Trimmed Mean		4.29	
		Median		4.50	
		Variance		.951	
		Std. Deviation		.975	
		Minimum		2	
		Maximum		5	
		Range		3	
		Interquartile Range		1	
		Skewness		-1.073	.597
		Kurtosis		.367	1.154
	NSA	Mean		3.84	.171
		95% Confidence Interval for Mean	Lower Bound	3.50	
			Upper Bound	4.19	
		5% Trimmed Mean		3.85	
		Median		4.00	
		Variance		1.316	
		Std. Deviation		1.147	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.060	.354
		Kurtosis		.035	.695
Indian_Warmth	UK	Mean		3.77	.221
		95% Confidence Interval for Mean	Lower Bound	3.32	
			Upper Bound	4.23	
		5% Trimmed Mean		3.80	
		Median		4.00	
		Variance		1.514	
		Std. Deviation		1.230	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.342	.421
		Kurtosis		.173	.821
	Non-UK	Mean		3.29	.266
		95% Confidence Interval for Mean	Lower Bound	2.71	
			Upper Bound	3.86	
		5% Trimmed Mean		3.26	
		Median		3.00	
		Variance		.989	
		Std. Deviation		.994	
		Minimum		2	
		Maximum		5	
		Range		3	
		Interquartile Range		1	
		Skewness		.425	.597
		Kurtosis		-.552	1.154
	NSA	Mean		3.16	.188
		95% Confidence Interval for Mean	Lower Bound	2.78	
			Upper Bound	3.53	
		5% Trimmed Mean		3.12	
		Median		3.00	
		Variance		1.589	
		Std. Deviation		1.261	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.335	.354
		Kurtosis		-.417	.695
Indian Foreign-accentedness	UK	Mean		2.35	.265
		95% Confidence Interval for Mean	Lower Bound	1.81	
			Upper Bound	2.90	
		5% Trimmed Mean		2.25	
		Median		2.00	
		Variance		2.170	
		Std. Deviation		1.473	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		.873	.421
		Kurtosis		-.279	.821
	Non-UK	Mean		2.79	.447
		95% Confidence Interval for Mean	Lower Bound	1.82	
			Upper Bound	3.75	
		5% Trimmed Mean		2.71	
		Median		2.50	
		Variance		2.797	
		Std. Deviation		1.672	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		.624	.597
		Kurtosis		-.730	1.154
	NSA	Mean		2.27	.189
		95% Confidence Interval for Mean	Lower Bound	1.89	
			Upper Bound	2.65	
		5% Trimmed Mean		2.17	
		Median		2.00	
		Variance		1.609	
		Std. Deviation		1.268	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.868	.354
		Kurtosis		.286	.695
Chinese_Comprehensibility	UK	Mean		4.90	.163
		95% Confidence Interval for Mean	Lower Bound	4.57	
			Upper Bound	5.24	
		5% Trimmed Mean		4.95	
		Median		5.00	
		Variance		.824	
		Std. Deviation		.908	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		2	
		Skewness		-.372	.421
		Kurtosis		-.649	.821
	Non-UK	Mean		4.64	.289
		95% Confidence Interval for Mean	Lower Bound	4.02	
			Upper Bound	5.27	
		5% Trimmed Mean		4.71	
		Median		5.00	
		Variance		1.170	
		Std. Deviation		1.082	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		-.855	.597
		Kurtosis		1.511	1.154
	NSA	Mean		4.76	.150
		95% Confidence Interval for Mean	Lower Bound	4.45	
			Upper Bound	5.06	
		5% Trimmed Mean		4.78	
		Median		5.00	
		Variance		1.007	
		Std. Deviation		1.004	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		2	
		Skewness		-.185	.354
		Kurtosis		-1.077	.695
Chinese_Warmth	UK	Mean		4.42	.206
		95% Confidence Interval for Mean	Lower Bound	4.00	
			Upper Bound	4.84	
		5% Trimmed Mean		4.48	
		Median		4.00	
		Variance		1.318	
		Std. Deviation		1.148	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-.637	.421
		Kurtosis		1.166	.821
	Non-UK	Mean		3.86	.254
		95% Confidence Interval for Mean	Lower Bound	3.31	
			Upper Bound	4.41	
		5% Trimmed Mean		3.84	
		Median		4.00	
		Variance		.901	
		Std. Deviation		.949	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		.321	.597
		Kurtosis		1.631	1.154
	NSA	Mean		4.53	.184
		95% Confidence Interval for Mean	Lower Bound	4.16	
			Upper Bound	4.90	
		5% Trimmed Mean		4.62	
		Median		4.00	
		Variance		1.527	
		Std. Deviation		1.236	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.760	.354
		Kurtosis		.608	.695
Chinese Foreign-accentedness	UK	Mean		1.58	.201
		95% Confidence Interval for Mean	Lower Bound	1.17	
			Upper Bound	1.99	
		5% Trimmed Mean		1.41	
		Median		1.00	
		Variance		1.252	
		Std. Deviation		1.119	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		2.609	.421
		Kurtosis		7.759	.821
	Non-UK	Mean		1.21	.155
		95% Confidence Interval for Mean	Lower Bound	.88	
			Upper Bound	1.55	
		5% Trimmed Mean		1.13	
		Median		1.00	
		Variance		.335	
		Std. Deviation		.579	
		Minimum		1	
		Maximum		3	
		Range		2	
		Interquartile Range		0	
		Skewness		2.803	.597
		Kurtosis		7.679	1.154
	NSA	Mean		1.49	.122
		95% Confidence Interval for Mean	Lower Bound	1.24	
			Upper Bound	1.73	
		5% Trimmed Mean		1.41	
		Median		1.00	
		Variance		.665	
		Std. Deviation		.815	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		1.486	.354
		Kurtosis		1.106	.695
Glaswegian_Comprehensibility	UK	Mean		4.90	.126
		95% Confidence Interval for Mean	Lower Bound	4.65	
			Upper Bound	5.16	
		5% Trimmed Mean		4.89	
		Median		5.00	
		Variance		.490	
		Std. Deviation		.700	
		Minimum		4	
		Maximum		6	
		Range		2	
		Interquartile Range		1	
		Skewness		.135	.421
		Kurtosis		-.840	.821
	Non-UK	Mean		4.71	.304
		95% Confidence Interval for Mean	Lower Bound	4.06	
			Upper Bound	5.37	
		5% Trimmed Mean		4.74	
		Median		5.00	
		Variance		1.297	
		Std. Deviation		1.139	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		2	
		Skewness		-.439	.597
		Kurtosis		-1.119	1.154
	NSA	Mean		4.42	.170
		95% Confidence Interval for Mean	Lower Bound	4.08	
			Upper Bound	4.76	
		5% Trimmed Mean		4.49	
		Median		5.00	
		Variance		1.295	
		Std. Deviation		1.138	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-.816	.354
		Kurtosis		.947	.695
Glaswegian_Warmth	UK	Mean		3.97	.182
		95% Confidence Interval for Mean	Lower Bound	3.60	
			Upper Bound	4.34	
		5% Trimmed Mean		3.98	
		Median		4.00	
		Variance		1.032	
		Std. Deviation		1.016	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		2	
		Skewness		-.340	.421
		Kurtosis		-.363	.821
	Non-UK	Mean		4.00	.296
		95% Confidence Interval for Mean	Lower Bound	3.36	
			Upper Bound	4.64	
		5% Trimmed Mean		3.94	
		Median		4.00	
		Variance		1.231	
		Std. Deviation		1.109	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		2	
		Skewness		.789	.597
		Kurtosis		-.609	1.154
	NSA	Mean		3.84	.174
		95% Confidence Interval for Mean	Lower Bound	3.49	
			Upper Bound	4.20	
		5% Trimmed Mean		3.85	
		Median		4.00	
		Variance		1.362	
		Std. Deviation		1.167	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.047	.354
		Kurtosis		-.262	.695
Glaswegian Foreign-accentedness	UK	Mean		4.00	.262
		95% Confidence Interval for Mean	Lower Bound	3.46	
			Upper Bound	4.54	
		5% Trimmed Mean		4.06	
		Median		4.00	
		Variance		2.133	
		Std. Deviation		1.461	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.412	.421
		Kurtosis		-.605	.821
	Non-UK	Mean		3.79	.366
		95% Confidence Interval for Mean	Lower Bound	3.00	
			Upper Bound	4.58	
		5% Trimmed Mean		3.76	
		Median		4.00	
		Variance		1.874	
		Std. Deviation		1.369	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		3	
		Skewness		-.182	.597
		Kurtosis		-1.268	1.154
	NSA	Mean		3.31	.240
		95% Confidence Interval for Mean	Lower Bound	2.83	
			Upper Bound	3.79	
		5% Trimmed Mean		3.29	
		Median		3.00	
		Variance		2.583	
		Std. Deviation		1.607	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		-.123	.354
		Kurtosis		-1.130	.695
Italian_Comprehensibility	UK	Mean		3.68	.243
		95% Confidence Interval for Mean	Lower Bound	3.18	
			Upper Bound	4.17	
		5% Trimmed Mean		3.68	
		Median		4.00	
		Variance		1.826	
		Std. Deviation		1.351	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		-.057	.421
		Kurtosis		-1.048	.821
	Non-UK	Mean		3.43	.291
		95% Confidence Interval for Mean	Lower Bound	2.80	
			Upper Bound	4.06	
		5% Trimmed Mean		3.42	
		Median		3.00	
		Variance		1.187	
		Std. Deviation		1.089	
		Minimum		2	
		Maximum		5	
		Range		3	
		Interquartile Range		2	
		Skewness		.212	.597
		Kurtosis		-1.123	1.154
	NSA	Mean		2.89	.178
		95% Confidence Interval for Mean	Lower Bound	2.53	
			Upper Bound	3.25	
		5% Trimmed Mean		2.88	
		Median		3.00	
		Variance		1.419	
		Std. Deviation		1.191	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		.308	.354
		Kurtosis		-.628	.695
Italian_Warmth	UK	Mean		3.39	.195
		95% Confidence Interval for Mean	Lower Bound	2.99	
			Upper Bound	3.79	
		5% Trimmed Mean		3.37	
		Median		3.00	
		Variance		1.178	
		Std. Deviation		1.086	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		.143	.421
		Kurtosis		.180	.821
	Non-UK	Mean		2.29	.304
		95% Confidence Interval for Mean	Lower Bound	1.63	
			Upper Bound	2.94	
		5% Trimmed Mean		2.26	
		Median		2.00	
		Variance		1.297	
		Std. Deviation		1.139	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		2	
		Skewness		.439	.597
		Kurtosis		-1.119	1.154
	NSA	Mean		2.82	.197
		95% Confidence Interval for Mean	Lower Bound	2.43	
			Upper Bound	3.22	
		5% Trimmed Mean		2.78	
		Median		3.00	
		Variance		1.740	
		Std. Deviation		1.319	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.343	.354
		Kurtosis		-.610	.695
Italian Foreign-accentedness	UK	Mean		2.32	.251
		95% Confidence Interval for Mean	Lower Bound	1.81	
			Upper Bound	2.84	
		5% Trimmed Mean		2.21	
		Median		2.00	

		Variance		1.959	
		Std. Deviation		1.400	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.859	.421
		Kurtosis		-.018	.821
	Non-UK	Mean		2.00	.314
		95% Confidence Interval for Mean	Lower Bound	1.32	
			Upper Bound	2.68	
		5% Trimmed Mean		1.94	
		Median		1.50	
		Variance		1.385	
		Std. Deviation		1.177	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		2	
		Skewness		.661	.597
		Kurtosis		-1.160	1.154
	NSA	Mean		2.07	.192
		95% Confidence Interval for Mean	Lower Bound	1.68	
			Upper Bound	2.45	
		5% Trimmed Mean		1.99	
		Median		1.00	
		Variance		1.655	
		Std. Deviation		1.286	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		.742	.354
		Kurtosis		-.996	.695
RP_Comprehensibility	UK	Mean		5.71	.095
		95% Confidence Interval for Mean	Lower Bound	5.52	
			Upper Bound	5.90	
		5% Trimmed Mean		5.77	
		Median		6.00	
		Variance		.280	
		Std. Deviation		.529	
		Minimum		4	
		Maximum		6	
		Range		2	
		Interquartile Range		1	
		Skewness		-1.672	.421
		Kurtosis		2.137	.821
	Non-UK	Mean		5.79	.114
		95% Confidence Interval for Mean	Lower Bound	5.54	
			Upper Bound	6.03	
		5% Trimmed Mean		5.82	
		Median		6.00	
		Variance		.181	
		Std. Deviation		.426	
		Minimum		5	
		Maximum		6	
		Range		1	
		Interquartile Range		0	
		Skewness		-1.566	.597
		Kurtosis		.501	1.154
	NSA	Mean		5.60	.116
		95% Confidence Interval for Mean	Lower Bound	5.37	
			Upper Bound	5.83	
		5% Trimmed Mean		5.72	
		Median		6.00	
		Variance		.609	
		Std. Deviation		.780	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		-2.750	.354
		Kurtosis		9.646	.695
RP_Warmth	UK	Mean		5.29	.162
		95% Confidence Interval for Mean	Lower Bound	4.96	
			Upper Bound	5.62	
		5% Trimmed Mean		5.36	
		Median		6.00	
		Variance		.813	
		Std. Deviation		.902	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		1	
		Skewness		-.924	.421
		Kurtosis		-.336	.821
	Non-UK	Mean		5.57	.202
		95% Confidence Interval for Mean	Lower Bound	5.13	
			Upper Bound	6.01	
		5% Trimmed Mean		5.63	
		Median		6.00	
		Variance		.571	
		Std. Deviation		.756	
		Minimum		4	
		Maximum		6	
		Range		2	
		Interquartile Range		1	
		Skewness		-1.526	.597
		Kurtosis		.936	1.154
	NSA	Mean		5.27	.154
		95% Confidence Interval for Mean	Lower Bound	4.96	
			Upper Bound	5.58	
		5% Trimmed Mean		5.40	
		Median		6.00	
		Variance		1.064	
		Std. Deviation		1.031	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-2.001	.354
		Kurtosis		5.540	.695
RP Foreign-accentedness	UK	Mean		5.55	.173
		95% Confidence Interval for Mean	Lower Bound	5.20	
			Upper Bound	5.90	
		5% Trimmed Mean		5.70	
		Median		6.00	
		Variance		.923	
		Std. Deviation		.961	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		-3.766	.421
		Kurtosis		17.232	.821
	Non-UK	Mean		6.00	.000
		95% Confidence Interval for Mean	Lower Bound	6.00	
			Upper Bound	6.00	
		5% Trimmed Mean		6.00	
		Median		6.00	
		Variance		.000	
		Std. Deviation		.000	
		Minimum		6	
		Maximum		6	
		Range		0	
		Interquartile Range		0	
		Skewness		.	.
		Kurtosis		.	.
	NSA	Mean		5.71	.108
		95% Confidence Interval for Mean	Lower Bound	5.49	
			Upper Bound	5.93	
		5% Trimmed Mean		5.84	
		Median		6.00	
		Variance		.528	
		Std. Deviation		.727	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		0	
		Skewness		-2.835	.354
		Kurtosis		7.813	.695
Malaysia_Comprehensibility	UK	Mean		4.52	.196
		95% Confidence Interval for Mean	Lower Bound	4.12	
			Upper Bound	4.92	
		5% Trimmed Mean		4.55	
		Median		4.00	
		Variance		1.191	
		Std. Deviation		1.092	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		-.208	.421
		Kurtosis		-.560	.821
	Non-UK	Mean		4.43	.272
		95% Confidence Interval for Mean	Lower Bound	3.84	
			Upper Bound	5.02	
		5% Trimmed Mean		4.48	
		Median		4.00	
		Variance		1.033	
		Std. Deviation		1.016	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		1	
		Skewness		-.544	.597
		Kurtosis		1.623	1.154
	NSA	Mean		4.16	.159
		95% Confidence Interval for Mean	Lower Bound	3.84	
			Upper Bound	4.48	
		5% Trimmed Mean		4.17	
		Median		4.00	
		Variance		1.134	
		Std. Deviation		1.065	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		2	
		Skewness		-.088	.354
		Kurtosis		-.331	.695
Malaysia_Warmth	UK	Mean		3.74	.131
		95% Confidence Interval for Mean	Lower Bound	3.47	
			Upper Bound	4.01	
		5% Trimmed Mean		3.68	
		Median		4.00	
		Variance		.531	
		Std. Deviation		.729	
		Minimum		3	
		Maximum		6	
		Range		3	
		Interquartile Range		1	
		Skewness		1.000	.421
		Kurtosis		1.685	.821
	Non-UK	Mean		3.71	.221
		95% Confidence Interval for Mean	Lower Bound	3.24	
			Upper Bound	4.19	
		5% Trimmed Mean		3.68	
		Median		3.50	
		Variance		.681	
		Std. Deviation		.825	
		Minimum		3	
		Maximum		5	
		Range		2	
		Interquartile Range		1	
		Skewness		.625	.597
		Kurtosis		-1.192	1.154
	NSA	Mean		3.51	.179
		95% Confidence Interval for Mean	Lower Bound	3.15	
			Upper Bound	3.87	
		5% Trimmed Mean		3.48	
		Median		4.00	
		Variance		1.437	
		Std. Deviation		1.199	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		.221	.354
		Kurtosis		-.341	.695
Maylaysia Foreign-accentedness	UK	Mean		1.81	.204
		95% Confidence Interval for Mean	Lower Bound	1.39	
			Upper Bound	2.22	
		5% Trimmed Mean		1.66	
		Median		1.00	
		Variance		1.295	
		Std. Deviation		1.138	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		1	
		Skewness		2.002	.421
		Kurtosis		5.113	.821
	Non-UK	Mean		1.79	.318
		95% Confidence Interval for Mean	Lower Bound	1.10	
			Upper Bound	2.47	
		5% Trimmed Mean		1.65	
		Median		1.00	
		Variance		1.412	
		Std. Deviation		1.188	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		1	
		Skewness		1.762	.597
		Kurtosis		3.165	1.154
	NSA	Mean		1.82	.136
		95% Confidence Interval for Mean	Lower Bound	1.55	
			Upper Bound	2.10	
		5% Trimmed Mean		1.73	
		Median		2.00	
		Variance		.831	
		Std. Deviation		.912	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		1	
		Skewness		1.310	.354
		Kurtosis		2.239	.695
Liverpool_Comprehensibility	UK	Mean		3.52	.245
		95% Confidence Interval for Mean	Lower Bound	3.02	
			Upper Bound	4.02	
		5% Trimmed Mean		3.52	
		Median		3.00	
		Variance		1.858	
		Std. Deviation		1.363	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.048	.421
		Kurtosis		-.758	.821
	Non-UK	Mean		3.50	.359
		95% Confidence Interval for Mean	Lower Bound	2.72	
			Upper Bound	4.28	
		5% Trimmed Mean		3.44	
		Median		3.00	
		Variance		1.808	
		Std. Deviation		1.345	
		Minimum		2	
		Maximum		6	
		Range		4	
		Interquartile Range		3	
		Skewness		.443	.597
		Kurtosis		-1.037	1.154
	NSA	Mean		2.93	.169
		95% Confidence Interval for Mean	Lower Bound	2.59	
			Upper Bound	3.27	
		5% Trimmed Mean		2.90	
		Median		3.00	
		Variance		1.291	
		Std. Deviation		1.136	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		2	
		Skewness		.136	.354
		Kurtosis		.312	.695
Liverpool_Warmth	UK	Mean		3.03	.188
		95% Confidence Interval for Mean	Lower Bound	2.65	
			Upper Bound	3.42	
		5% Trimmed Mean		3.04	
		Median		3.00	
		Variance		1.099	
		Std. Deviation		1.048	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		-.068	.421
		Kurtosis		-.591	.821
	Non-UK	Mean		2.57	.228
		95% Confidence Interval for Mean	Lower Bound	2.08	
			Upper Bound	3.06	
		5% Trimmed Mean		2.58	
		Median		3.00	
		Variance		.725	
		Std. Deviation		.852	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		-.694	.597
		Kurtosis		.103	1.154
	NSA	Mean		2.78	.179
		95% Confidence Interval for Mean	Lower Bound	2.42	
			Upper Bound	3.14	
		5% Trimmed Mean		2.75	
		Median		3.00	
		Variance		1.449	
		Std. Deviation		1.204	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		2	
		Skewness		.123	.354
		Kurtosis		-.749	.695
Liverpool Foreign-accentedness	UK	Mean		3.84	.341
		95% Confidence Interval for Mean	Lower Bound	3.14	
			Upper Bound	4.54	
		5% Trimmed Mean		3.88	
		Median		4.00	
		Variance		3.606	
		Std. Deviation		1.899	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		4	
		Skewness		-.377	.421
		Kurtosis		-1.380	.821
	Non-UK	Mean		2.43	.388
		95% Confidence Interval for Mean	Lower Bound	1.59	
			Upper Bound	3.27	
		5% Trimmed Mean		2.37	
		Median		2.50	
		Variance		2.110	
		Std. Deviation		1.453	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		3	
		Skewness		.341	.597
		Kurtosis		-1.439	1.154
	NSA	Mean		2.69	.224
		95% Confidence Interval for Mean	Lower Bound	2.24	
			Upper Bound	3.14	
		5% Trimmed Mean		2.63	
		Median		2.00	
		Variance		2.265	
		Std. Deviation		1.505	
		Minimum		1	
		Maximum		6	
		Range		5	
		Interquartile Range		3	
		Skewness		.477	.354
		Kurtosis		-.967	.695

K.5 Results of One-way ANOVA Tests

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Indian_Comprehensibility	Between Groups	4.558	2	2.279	1.818	.168
	Within Groups	109.042	87	1.253		
	Total	113.600	89			
Indian_Warmth	Between Groups	7.201	2	3.601	2.444	.093
	Within Groups	128.188	87	1.473		
	Total	135.389	89			
Indian Foreign-accentedness	Between Groups	2.902	2	1.451	.733	.484
	Within Groups	172.254	87	1.980		
	Total	175.156	89			
Chinese_Comprehensibility	Between Groups	.754	2	.377	.389	.679
	Within Groups	84.235	87	.968		
	Total	84.989	89			
Chinese_Warmth	Between Groups	4.926	2	2.463	1.809	.170
	Within Groups	118.463	87	1.362		
	Total	123.389	89			
Chinese Foreign-accentedness	Between Groups	1.306	2	.653	.798	.453
	Within Groups	71.150	87	.818		
	Total	72.456	89			
Glaswegian_Comprehensibility	Between Groups	4.355	2	2.178	2.140	.124
	Within Groups	88.545	87	1.018		
	Total	92.900	89			
Glaswegian_Warmth	Between Groups	.410	2	.205	.167	.847
	Within Groups	106.879	87	1.228		
	Total	107.289	89			
Glaswegian Foreign-accentedness	Between Groups	9.154	2	4.577	1.971	.145
	Within Groups	202.002	87	2.322		
	Total	211.156	89			
Italian_Comprehensibility	Between Groups	11.975	2	5.988	3.927	.023
	Within Groups	132.647	87	1.525		
	Total	144.622	89			
Italian_Warmth	Between Groups	12.810	2	6.405	4.327	.016
	Within Groups	128.790	87	1.480		
	Total	141.600	89			
Italian Foreign-accentedness	Between Groups	1.548	2	.774	.450	.639
	Within Groups	149.574	87	1.719		
	Total	151.122	89			
RP_Comprehensibility	Between Groups	.456	2	.228	.528	.592
	Within Groups	37.544	87	.432		
	Total	38.000	89			
RP_Warmth	Between Groups	1.040	2	.520	.575	.565
	Within Groups	78.616	87	.904		
	Total	79.656	89			
RP Foreign-accentedness	Between Groups	1.978	2	.989	1.690	.191
	Within Groups	50.922	87	.585		
	Total	52.900	89			
Malaysia_Comprehensibility	Between Groups	2.574	2	1.287	1.130	.328
	Within Groups	99.082	87	1.139		
	Total	101.656	89			
Malaysia_Warmth	Between Groups	1.118	2	.559	.553	.577
	Within Groups	88.037	87	1.012		
	Total	89.156	89			
Maylaysia Foreign-accentedness	Between Groups	.015	2	.008	.007	.993
	Within Groups	93.774	87	1.078		
	Total	93.789	89			
Liverpool_Comprehensibility	Between Groups	7.514	2	3.757	2.403	.096
	Within Groups	136.042	87	1.564		
	Total	143.556	89			
Liverpool_Warmth	Between Groups	2.326	2	1.163	.953	.390
	Within Groups	106.174	87	1.220		
	Total	108.500	89			
Liverpool Foreign-accentedness	Between Groups	30.556	2	15.278	5.650	.005
	Within Groups	235.267	87	2.704		
	Total	265.822	89			

K.6 Results of Multiple Comparisons with Bonferroni Method

Multiple Comparisons

Bonferroni

Dependent Variable	(I) SAPlace1	(J) SAPlace1	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Indian Foreign-accentedness	UK	Non-UK	-.431	.453	1.000	-1.54	.68
		NSA	.088	.328	1.000	-.71	.89
	Non-UK	UK	.431	.453	1.000	-.68	1.54
		NSA	.519	.431	.694	-.53	1.57
	NSA	UK	-.088	.328	1.000	-.89	.71
		Non-UK	-.519	.431	.694	-1.57	.53
Chinese Foreign-accentedness	UK	Non-UK	.366	.291	.635	-.34	1.08
		NSA	.092	.211	1.000	-.42	.61
	Non-UK	UK	-.366	.291	.635	-1.08	.34
		NSA	-.275	.277	.971	-.95	.40
	NSA	UK	-.092	.211	1.000	-.61	.42
		Non-UK	.275	.277	.971	-.40	.95
Glaswegian Foreign-accentedness	UK	Non-UK	.214	.491	1.000	-.98	1.41
		NSA	.689	.356	.168	-.18	1.56
	Non-UK	UK	-.214	.491	1.000	-1.41	.98
		NSA	.475	.466	.935	-.66	1.61
	NSA	UK	-.689	.356	.168	-1.56	.18
		Non-UK	-.475	.466	.935	-1.61	.66
Italian Foreign-accentedness	UK	Non-UK	.323	.422	1.000	-.71	1.35
		NSA	.256	.306	1.000	-.49	1.00
	Non-UK	UK	-.323	.422	1.000	-1.35	.71
		NSA	-.067	.401	1.000	-1.05	.91
	NSA	UK	-.256	.306	1.000	-1.00	.49
		Non-UK	.067	.401	1.000	-.91	1.05
RP Foreign-accentedness	UK	Non-UK	-.452	.246	.211	-1.05	.15
		NSA	-.163	.179	1.000	-.60	.27
	Non-UK	UK	.452	.246	.211	-.15	1.05
		NSA	.289	.234	.662	-.28	.86
	NSA	UK	.163	.179	1.000	-.27	.60
		Non-UK	-.289	.234	.662	-.86	.28
Maylaysia Foreign-accentedness	UK	Non-UK	.021	.334	1.000	-.80	.84
		NSA	-.016	.242	1.000	-.61	.58
	Non-UK	UK	-.021	.334	1.000	-.84	.80
		NSA	-.037	.318	1.000	-.81	.74
	NSA	UK	.016	.242	1.000	-.58	.61
		Non-UK	.037	.318	1.000	-.74	.81
Liverpool Foreign-accentedness	UK	Non-UK	1.410*	.530	.028	.12	2.70
		NSA	1.150*	.384	.011	.21	2.09
	Non-UK	UK	-1.410*	.530	.028	-2.70	-.12
		NSA	-.260	.503	1.000	-1.49	.97
	NSA	UK	-1.150*	.384	.011	-2.09	-.21
		Non-UK	.260	.503	1.000	-.97	1.49
Indian_Comprehensibility	UK	Non-UK	.108	.360	1.000	-.77	.99
		NSA	.478	.261	.212	-.16	1.12
	Non-UK	UK	-.108	.360	1.000	-.99	.77
		NSA	.370	.343	.850	-.47	1.21
	NSA	UK	-.478	.261	.212	-1.12	.16
		Non-UK	-.370	.343	.850	-1.21	.47
Chinese_Comprehensibility	UK	Non-UK	.260	.317	1.000	-.51	1.03
		NSA	.148	.230	1.000	-.41	.71
	Non-UK	UK	-.260	.317	1.000	-1.03	.51
		NSA	-.113	.301	1.000	-.85	.62
	NSA	UK	-.148	.230	1.000	-.71	.41
		Non-UK	.113	.301	1.000	-.62	.85
Glaswegian_Comprehensibility	UK	Non-UK	.189	.325	1.000	-.60	.98
		NSA	.481	.235	.132	-.09	1.06
	Non-UK	UK	-.189	.325	1.000	-.98	.60
		NSA	.292	.309	1.000	-.46	1.05
	NSA	UK	-.481	.235	.132	-1.06	.09
		Non-UK	-.292	.309	1.000	-1.05	.46
Italian_Comprehensibility	UK	Non-UK	.249	.398	1.000	-.72	1.22
		NSA	.789*	.288	.023	.08	1.49
	Non-UK	UK	-.249	.398	1.000	-1.22	.72
		NSA	.540	.378	.470	-.38	1.46
	NSA	UK	-.789*	.288	.023	-1.49	-.08
		Non-UK	-.540	.378	.470	-1.46	.38
RP_Comprehensibility	UK	Non-UK	-.076	.212	1.000	-.59	.44
		NSA	.110	.153	1.000	-.26	.48
	Non-UK	UK	.076	.212	1.000	-.44	.59
		NSA	.186	.201	1.000	-.31	.68
	NSA	UK	-.110	.153	1.000	-.48	.26
		Non-UK	-.186	.201	1.000	-.68	.31
Malaysia_Comprehensibility	UK	Non-UK	.088	.344	1.000	-.75	.93
		NSA	.361	.249	.454	-.25	.97
	Non-UK	UK	-.088	.344	1.000	-.93	.75
		NSA	.273	.327	1.000	-.52	1.07
	NSA	UK	-.361	.249	.454	-.97	.25
		Non-UK	-.273	.327	1.000	-1.07	.52
Liverpool_Comprehensibility	UK	Non-UK	.016	.403	1.000	-.97	1.00
		NSA	.583	.292	.147	-.13	1.30
	Non-UK	UK	-.016	.403	1.000	-1.00	.97
		NSA	.567	.383	.427	-.37	1.50
	NSA	UK	-.583	.292	.147	-1.30	.13
		Non-UK	-.567	.383	.427	-1.50	.37

Indian_Warmth	UK	Non-UK	.488	.391	.644	-.47	1.44
		NSA	.619	.283	.095	-.07	1.31
	Non-UK	UK	-.488	.391	.644	-1.44	.47
		NSA	.130	.371	1.000	-.78	1.04
	NSA	UK	-.619	.283	.095	-1.31	.07
		Non-UK	-.130	.371	1.000	-1.04	.78
Chinese_Warmth	UK	Non-UK	.562	.376	.415	-.36	1.48
		NSA	-.114	.272	1.000	-.78	.55
	Non-UK	UK	-.562	.376	.415	-1.48	.36
		NSA	-.676	.357	.185	-1.55	.20
	NSA	UK	.114	.272	1.000	-.55	.78
		Non-UK	.676	.357	.185	-.20	1.55
Glaswegian_Warmth	UK	Non-UK	-.032	.357	1.000	-.90	.84
		NSA	.123	.259	1.000	-.51	.75
	Non-UK	UK	.032	.357	1.000	-.84	.90
		NSA	.156	.339	1.000	-.67	.98
	NSA	UK	-.123	.259	1.000	-.75	.51
		Non-UK	-.156	.339	1.000	-.98	.67
Italian_Warmth	UK	Non-UK	1.101*	.392	.018	.14	2.06
		NSA	.565	.284	.150	-.13	1.26
	Non-UK	UK	-1.101*	.392	.018	-2.06	-.14
		NSA	-.537	.372	.460	-1.45	.37
	NSA	UK	-.565	.284	.150	-1.26	.13
		Non-UK	.537	.372	.460	-.37	1.45
RP_Warmth	UK	Non-UK	-.281	.306	1.000	-1.03	.47
		NSA	.024	.222	1.000	-.52	.57
	Non-UK	UK	.281	.306	1.000	-.47	1.03
		NSA	.305	.291	.893	-.41	1.01
	NSA	UK	-.024	.222	1.000	-.57	.52
		Non-UK	-.305	.291	.893	-1.01	.41
Malaysia_Warmth	UK	Non-UK	.028	.324	1.000	-.76	.82
		NSA	.231	.235	.985	-.34	.80
	Non-UK	UK	-.028	.324	1.000	-.82	.76
		NSA	.203	.308	1.000	-.55	.95
	NSA	UK	-.231	.235	.985	-.80	.34
		Non-UK	-.203	.308	1.000	-.95	.55
Liverpool_Warmth	UK	Non-UK	.461	.356	.596	-.41	1.33
		NSA	.254	.258	.979	-.37	.88
	Non-UK	UK	-.461	.356	.596	-1.33	.41
		NSA	-.206	.338	1.000	-1.03	.62
	NSA	UK	-.254	.258	.979	-.88	.37
		Non-UK	.206	.338	1.000	-.62	1.03

*. The mean difference is significant at the 0.05 level.

K.7 Results of Kruskal-Wallis H Test

Test Statistics[a,b]

	Indian_Comprehensibility	Chinese_Comprehensibility	Glaswegian_Comprehensibility	Italian_Comprehensibility	RP_Comprehensibility	Malaysia_Comprehensibility	Liverpool_Comprehensibility	Indian_Warmth	Chinese_Warmth	Glaswegian_Warmth
Kruskal-Wallis H	.240	.503	.083	.367	.130	.042	.019	2.180	3.283	.053
df	1	1	1	1	1	1	1	1	1	1
Asymp. Sig.	.624	.478	.773	.545	.718	.837	.890	.140	.070	.818

a. Kruskal Wallis Test

b. Grouping Variable: SAPlace1

Italian_Warmth	RP_Warmth	Malaysia_Warmth	Liverpool_Warmth	Indian Foreign-accentedness	Chinese Foreign-accentedness	Glaswegian Foreign-accentedness	Italian Foreign-accentedness	RP Foreign-accentedness	Maylaysia Foreign-accentedness	Liverpool Foreign-accentedness
7.531	1.068	.046	1.820	.721	1.519	.264	.465	5.645	.041	5.939
1	1	1	1	1	1	1	1	1	1	1
.006	.301	.830	.177	.396	.218	.607	.495	.018	.840	.015

Appendix L. Output of SPSS for the Relationship between Study Abroad and Variety Recognition

L.1 Results of Pearson Chi-Square Test of Independence (SA and NSA Groups)

Indian Variety Recognition Correctness * SA

Crosstab

			SA	NSA	Total
Indian Variety Recognition Correctness	Incorrect	Count	20	25	45
		% within Indian Variety Recognition Correctness	44.4%	55.6%	100.0%
		% within SA	44.4%	55.6%	50.0%
		% of Total	22.2%	27.8%	50.0%
	Correct	Count	25	20	45
		% within Indian Variety Recognition Correctness	55.6%	44.4%	100.0%
		% within SA	55.6%	44.4%	50.0%
		% of Total	27.8%	22.2%	50.0%
Total		Count	45	45	90
		% within Indian Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.111[a]	1	.292		
Continuity Correction[b]	.711	1	.399		
Likelihood Ratio	1.113	1	.291		
Fisher's Exact Test				.399	.200
Linear-by-Linear Association	1.099	1	.295		
N of Valid Cases	90				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.50.

b. Computed only for a 2x2 table

Chinese Variety Recognition Correctness * SA

Crosstab

			SA	NSA	Total
Chinese Variety Recognition Correctness	Incorrect	Count	1	0	1
		% within Chinese Variety Recognition Correctness	100.0%	0.0%	100.0%
		% within SA	2.2%	0.0%	1.1%
		% of Total	1.1%	0.0%	1.1%
	Correct	Count	44	45	89
		% within Chinese Variety Recognition Correctness	49.4%	50.6%	100.0%
		% within SA	97.8%	100.0%	98.9%
		% of Total	48.9%	50.0%	98.9%
Total		Count	45	45	90
		% within Chinese Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.011[a]	1	.315		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	1.398	1	.237		
Fisher's Exact Test				1.000	.500
Linear-by-Linear Association	1.000	1	.317		
N of Valid Cases	90				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .50.

b. Computed only for a 2x2 table

Glaswegian Variety Recognition Correctness * SA

Crosstab

			SA	NSA	Total
Glaswegian Variety Recognition Correctness	Incorrect	Count	32	39	71
		% within Glaswegian Variety Recognition Correctness	45.1%	54.9%	100.0%
		% within SA	71.1%	86.7%	78.9%
		% of Total	35.6%	43.3%	78.9%
	Correct	Count	13	6	19
		% within Glaswegian Variety Recognition Correctness	68.4%	31.6%	100.0%
		% within SA	28.9%	13.3%	21.1%
		% of Total	14.4%	6.7%	21.1%
Total		Count	45	45	90
		% within Glaswegian Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.269[a]	1	.071		
Continuity Correction[b]	2.402	1	.121		
Likelihood Ratio	3.332	1	.068		
Fisher's Exact Test				.120	.060
Linear-by-Linear Association	3.233	1	.072		
N of Valid Cases	90				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.50.

Italian Variety Recognition Correctness * SA

Crosstab

			SA	NSA	Total
Italian Variety Recognition Correctness	Incorrect	Count	39	40	79
		% within Italian Variety Recognition Correctness	49.4%	50.6%	100.0%
		% within SA	86.7%	88.9%	87.8%
		% of Total	43.3%	44.4%	87.8%
	Correct	Count	6	5	11
		% within Italian Variety Recognition Correctness	54.5%	45.5%	100.0%
		% within SA	13.3%	11.1%	12.2%
		% of Total	6.7%	5.6%	12.2%
Total		Count	45	45	90
		% within Italian Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.104[a]	1	.748		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.104	1	.747		
Fisher's Exact Test				1.000	.500
Linear-by-Linear Association	.102	1	.749		
N of Valid Cases	90				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.50.

b. Computed only for a 2x2 table

RP Variety Recognition Correctness * SA

Crosstab

			SA		
			SA	NSA	Total
RP Variety Recognition Correctness	Incorrect	Count	6	9	15
		% within RP Variety Recognition Correctness	40.0%	60.0%	100.0%
		% within SA	13.3%	20.0%	16.7%
		% of Total	6.7%	10.0%	16.7%
	Correct	Count	39	36	75
		% within RP Variety Recognition Correctness	52.0%	48.0%	100.0%
		% within SA	86.7%	80.0%	83.3%
		% of Total	43.3%	40.0%	83.3%
Total		Count	45	45	90
		% within RP Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.720[a]	1	.396		
Continuity Correction[b]	.320	1	.572		
Likelihood Ratio	.724	1	.395		
Fisher's Exact Test				.573	.286
Linear-by-Linear Association	.712	1	.399		
N of Valid Cases	90				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.50.

b. Computed only for a 2x2 table

Malaysia Variety Recognition Correctness * SA

Crosstab

			SA		
			SA	NSA	Total
Malaysia Variety Recognition Correctness	Incorrect	Count	45	44	89
		% within Malaysia Variety Recognition Correctness	50.6%	49.4%	100.0%
		% within SA	100.0%	97.8%	98.9%
		% of Total	50.0%	48.9%	98.9%
	Correct	Count	0	1	1
		% within Malaysia Variety Recognition Correctness	0.0%	100.0%	100.0%
		% within SA	0.0%	2.2%	1.1%
		% of Total	0.0%	1.1%	1.1%
Total		Count	45	45	90
		% within Malaysia Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.011[a]	1	.315		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	1.398	1	.237		
Fisher's Exact Test				1.000	.500
Linear-by-Linear Association	1.000	1	.317		
N of Valid Cases	90				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .50.

Liverpool Variety Recognition Correctness * SA

Crosstab

			SA		
			SA	NSA	Total
Liverpool Variety Recognition Correctness	Incorrect	Count	33	37	70
		% within Liverpool Variety Recognition Correctness	47.1%	52.9%	100.0%
		% within SA	73.3%	82.2%	77.8%
		% of Total	36.7%	41.1%	77.8%
	Correct	Count	12	8	20
		% within Liverpool Variety Recognition Correctness	60.0%	40.0%	100.0%
		% within SA	26.7%	17.8%	22.2%
		% of Total	13.3%	8.9%	22.2%
Total		Count	45	45	90
		% within Liverpool Variety Recognition Correctness	50.0%	50.0%	100.0%
		% within SA	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.029[a]	1	.310		
Continuity Correction[b]	.579	1	.447		
Likelihood Ratio	1.034	1	.309		
Fisher's Exact Test				.447	.224
Linear-by-Linear Association	1.017	1	.313		
N of Valid Cases	90				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.00.

L.2 Results of Pearson Chi-Square Test of Independence (SA in the UK, SA not in the UK and NSA Groups)

Indian Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
Indian Variety Recognition Correctness	Incorrect	Count	13	7	25	45
		Expected Count	15.5	7.0	22.5	45.0
		% within Indian Variety Recognition Correctness	28.9%	15.6%	55.6%	100.0%
		% within SAPlace1	41.9%	50.0%	55.6%	50.0%
		% of Total	14.4%	7.8%	27.8%	50.0%
	Correct	Count	18	7	20	45
		Expected Count	15.5	7.0	22.5	45.0
		% within Indian Variety Recognition Correctness	40.0%	15.6%	44.4%	100.0%
		% within SAPlace1	58.1%	50.0%	44.4%	50.0%
		% of Total	20.0%	7.8%	22.2%	50.0%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within Indian Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.362[a]	2	.506
Likelihood Ratio	1.367	2	.505
Linear-by-Linear Association	1.340	1	.247
N of Valid Cases	90		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.00.

Chinese Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
Chinese Variety Recognition Correctness	Incorrect	Count	0	1	0	1
		Expected Count	.3	.2	.5	1.0
		% within Chinese Variety Recognition Correctness	0.0%	100.0%	0.0%	100.0%
		% within SAPlace1	0.0%	7.1%	0.0%	1.1%
		% of Total	0.0%	1.1%	0.0%	1.1%
	Correct	Count	31	13	45	89
		Expected Count	30.7	13.8	44.5	89.0
		% within Chinese Variety Recognition Correctness	34.8%	14.6%	50.6%	100.0%
		% within SAPlace1	100.0%	92.9%	100.0%	98.9%
		% of Total	34.4%	14.4%	50.0%	98.9%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within Chinese Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.490[a]	2	.064
Likelihood Ratio	3.784	2	.151
Linear-by-Linear Association	.030	1	.864
N of Valid Cases	90		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .16.

Glaswegian Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
Glaswegian Variety Recognition Correctness	Incorrect	Count	19	13	39	71
		Expected Count	24.5	11.0	35.5	71.0
		% within Glaswegian Variety Recognition Correctness	26.8%	18.3%	54.9%	100.0%
		% within SAPlace1	61.3%	92.9%	86.7%	78.9%
		% of Total	21.1%	14.4%	43.3%	78.9%
	Correct	Count	12	1	6	19
		Expected Count	6.5	3.0	9.5	19.0
		% within Glaswegian Variety Recognition Correctness	63.2%	5.3%	31.6%	100.0%
		% within SAPlace1	38.7%	7.1%	13.3%	21.1%
		% of Total	13.3%	1.1%	6.7%	21.1%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within Glaswegian Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.040[a]	2	.011
Likelihood Ratio	8.850	2	.012
Linear-by-Linear Association	6.451	1	.011
N of Valid Cases	90		

Italian Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
Italian Variety Recognition Correctness	Incorrect	Count	25	14	40	79
		Expected Count	27.2	12.3	39.5	79.0
		% within Italian Variety Recognition Correctness	31.6%	17.7%	50.6%	100.0%
		% within SAPlace1	80.6%	100.0%	88.9%	87.8%
		% of Total	27.8%	15.6%	44.4%	87.8%
	Correct	Count	6	0	5	11
		Expected Count	3.8	1.7	5.5	11.0
		% within Italian Variety Recognition Correctness	54.5%	0.0%	45.5%	100.0%
		% within SAPlace1	19.4%	0.0%	11.1%	12.2%
		% of Total	6.7%	0.0%	5.6%	12.2%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within Italian Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.471[a]	2	.176
Likelihood Ratio	4.982	2	.083
Linear-by-Linear Association	.918	1	.338
N of Valid Cases	90		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.71.

RP Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
RP Variety Recognition Correctness	Incorrect	Count	3	3	9	15
		Expected Count	5.2	2.3	7.5	15.0
		% within RP Variety Recognition Correctness	20.0%	20.0%	60.0%	100.0%
		% within SAPlace1	9.7%	21.4%	20.0%	16.7%
		% of Total	3.3%	3.3%	10.0%	16.7%
	Correct	Count	28	11	36	75
		Expected Count	25.8	11.7	37.5	75.0
		% within RP Variety Recognition Correctness	37.3%	14.7%	48.0%	100.0%
		% within SAPlace1	90.3%	78.6%	80.0%	83.3%
		% of Total	31.1%	12.2%	40.0%	83.3%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within RP Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.679[a]	2	.432
Likelihood Ratio	1.804	2	.406
Linear-by-Linear Association	1.297	1	.255
N of Valid Cases	90		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.33.

Malaysia Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
Malaysia Variety Recognition Correctness	Incorrect	Count	31	14	44	89
		Expected Count	30.7	13.8	44.5	89.0
		% within Malaysia Variety Recognition Correctness	34.8%	15.7%	49.4%	100.0%
		% within SAPlace1	100.0%	100.0%	97.8%	98.9%
		% of Total	34.4%	15.6%	48.9%	98.9%
	Correct	Count	0	0	1	1
		Expected Count	.3	.2	.5	1.0
		% within Malaysia Variety Recognition Correctness	0.0%	0.0%	100.0%	100.0%
		% within SAPlace1	0.0%	0.0%	2.2%	1.1%
		% of Total	0.0%	0.0%	1.1%	1.1%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within Malaysia Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.011[a]	2	.603
Likelihood Ratio	1.398	2	.497
Linear-by-Linear Association	.869	1	.351
N of Valid Cases	90		

a. 3 cells (50.0%) have expected count less than 5. The

Liverpool Variety Recognition Correctness * SAPlace1

Crosstab

			SAPlace1			
			UK	Non-UK	NSA	Total
Liverpool Variety Recognition Correctness	Incorrect	Count	21	12	37	70
		Expected Count	24.1	10.9	35.0	70.0
		% within Liverpool Variety Recognition Correctness	30.0%	17.1%	52.9%	100.0%
		% within SAPlace1	67.7%	85.7%	82.2%	77.8%
		% of Total	23.3%	13.3%	41.1%	77.8%
	Correct	Count	10	2	8	20
		Expected Count	6.9	3.1	10.0	20.0
		% within Liverpool Variety Recognition Correctness	50.0%	10.0%	40.0%	100.0%
		% within SAPlace1	32.3%	14.3%	17.8%	22.2%
		% of Total	11.1%	2.2%	8.9%	22.2%
Total		Count	31	14	45	90
		Expected Count	31.0	14.0	45.0	90.0
		% within Liverpool Variety Recognition Correctness	34.4%	15.6%	50.0%	100.0%
		% within SAPlace1	100.0%	100.0%	100.0%	100.0%
		% of Total	34.4%	15.6%	50.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.831[a]	2	.243
Likelihood Ratio	2.758	2	.252
Linear-by-Linear Association	2.025	1	.155

Appendix M. Output of SPSS for Openness to Linguistic Diversity

M.1 Frequencies

Statistics

		I like to hear varieties of English different from standard English.	I would like to learn varieties of English different from standard English in English listening classrooms.
N	Valid	90	90
	Missing	0	0
Mean		4.61	4.32
Std. Deviation		1.251	1.437
Minimum		1	1
Maximum		6	6

I like to hear varieties of English different from standard English.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.1	1.1	1.1
	2	5	5.6	5.6	6.7
	3	11	12.2	12.2	18.9
	4	21	23.3	23.3	42.2
	5	25	27.8	27.8	70.0
	6	27	30.0	30.0	100.0
	Total	90	100.0	100.0	

I would like to learn varieties of English different from standard English in English listening classrooms.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	6.7	6.7	6.7
	2	4	4.4	4.4	11.1
	3	12	13.3	13.3	24.4
	4	23	25.6	25.6	50.0
	5	23	25.6	25.6	75.6
	6	22	24.4	24.4	100.0
	Total	90	100.0	100.0	

M.2 Independent Samples Test for Comparison between SA and NSA Groups

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
I like to hear varieties of English different from standard English.	Equal variances assumed	1.312	.255	-.084	88	.933	-.022	.265	-.549	.505
	Equal variances not assumed			-.084	86.591	.933	-.022	.265	-.550	.505
I would like to learn varieties of English different from standard English in English listening classrooms.	Equal variances assumed	2.786	.099	1.251	88	.214	.378	.302	-.222	.978
	Equal variances not assumed			1.251	83.487	.214	.378	.302	-.223	.978

M.3 One-way ANOVA for Comparison across SA in the UK, SA not in the UK and NSA Groups

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
I like to hear varieties of English different from standard English.	Based on Mean	1.680	2	87	.192
	Based on Median	1.273	2	87	.285
	Based on Median and with adjusted df	1.273	2	84.631	.285
	Based on trimmed mean	1.712	2	87	.187
I would like to learn varieties of English different from standard English in English listening classrooms.	Based on Mean	1.780	2	87	.175
	Based on Median	1.384	2	87	.256
	Based on Median and with adjusted df	1.384	2	74.475	.257
	Based on trimmed mean	1.832	2	87	.166

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I like to hear varieties of English different from standard English.	Between Groups	5.689	2	2.844	1.851	.163
	Within Groups	133.700	87	1.537		
	Total	139.389	89			
I would like to learn varieties of English different from standard English in English listening classrooms.	Between Groups	5.002	2	2.501	1.218	.301
	Within Groups	178.654	87	2.053		
	Total	183.656	89			

Appendix N. Output of SPSS for Self-Desirability of Accents in English Production

Statistics

		Chinese Self-desirability	Glaswegian Self-desirability	Indian Self-desirability	Italian Self-desirability	RP Self-desirability	Malaysia Self-desirability	Liverpool Self-desirability
N	Valid	90	90	89	90	90	90	90
	Missing	0	0	1	0	0	0	0
Mean		2.07	2.68	1.843	1.53	5.13	1.86	1.81
Std. Deviation		1.270	1.262	.9641	.767	1.083	1.012	.911
Minimum		1	1	1.0	1	1	1	1
Maximum		6	5	5.0	4	6	6	4