Japanese EFL Learners’ Perceptions of Different Accents in Spoken English

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Abstract

Due to the worldwide spread and diversification of English, there is far more variety in English accents than ever before. Nonetheless, most Japanese English language learners have continuously been only exposed to “native” English accents, particularly Received Pronunciation (RP) and General American (GA), in their English language classrooms. As the number of “non-native” English speakers exceeds the number of “native” English speakers in the world, it has been recently questioned whether exposing English language learners to only “native” English accents in English language classrooms is appropriate in this globalised world. The present study attempts to investigate 78 Japanese EFL learners’ perceptions of different accents in spoken English. More specifically, the study examines the influence of “native” and “non-native” English accents on Japanese EFL learners’ perceptions of grammaticality. Four “native” English speakers (i.e., the UK, the US, and Australia) and four “non-native” English speakers (i.e., Vietnam, Japan, Zimbabwe, and Russia) provided the speech samples used in the study. To measure the Japanese EFL learners’ perceptions of grammaticality, they were asked to listen to thirty-two grammatical and ungrammatical sentences read out by the eight speakers and judge each sentence using binary categories (i.e., grammatical/ungrammatical). Moreover, they were asked to identify the place of origins of each speaker and label them as either “native” speaker or “non-native” speaker. The potential underlying factors influencing their judgements and evaluations are discussed, and the implications for research and teaching are also suggested.

Keywords: perceptions of grammaticality, language attitudes, native/non-native dichotomy, English accents

Data Availability Statement: All relevant data are within this paper.
Introduction

According to Flowerdew (2011), there are approximately 400 million people who speak English as a first language, 300-500 million people who speak it as a second language, and 750 million people who speak it as a foreign language. These figures clearly demonstrate that “native” English speakers are significantly outnumbered by “non-native” English speakers. Despite the existence of numerous inner-circle (e.g., the US, the UK, Australia), outer-circle (e.g., India, Singapore, Zimbabwe), and expanding-circle (e.g., Japan, Vietnam, Russia) English accents, Japan is one of the many EFL countries which has continuously given the most power and status to “native” inner-circle English accents, particularly General American (GA) and Received Pronunciation (RP), in English language classrooms. As stated in the Course of Study proposed by the Japanese Ministry of Education, Culture, Sports, Science, and Technology (MEXT) (2011), English language teachers in Japanese junior and senior high schools are required to teach “contemporary standard pronunciation.” Although no particular pronunciation model is specified, numerous researchers (e.g., Matsuda, 2002; Orikasa, 2016) illustrate that there is an implicit support for the use of the “native” English speaker pronunciation model, particularly GA and RP, in English language classes in Japanese junior and senior high schools, and the other “non-native” English accents have little or no place. Considering the sociolinguistic reality of English, it is questionable whether the sole reliance of the “native” English speaker pronunciation model in ELT classrooms is appropriate. As there is a risk of language learners developing preconceived views towards certain English accents, there is a need for a better understanding of language learners’ perceptions of different English accents. In spite of the existence of numerous studies on this matter, due to the complex nature of accent perception, there are still many aspects that are yet to be explored. This present study aims to investigate the effects of “native” and “non-native” English accents on Japanese EFL learners’ perceptions of grammaticality. An overview of the relevant framework and research on English accents will be discussed in the following section.

Background

Native/Non-Native Dichotomy

Since English encompasses local, social, and functional variation on a wider scale than any other language (Coulmas, 2013), it is not only being used just as a singular term but also as a plural form (i.e., “Englishes”). The changes in the ownership of English have led to the development of the World Englishes (WEs) paradigm. The WEs paradigm challenges the anglocentric view that inner-circle English varieties, particularly American and British English, should be given superiority over the outer-circle and expanding-circle varieties. Offering a more heterogeneous perspective, WEs researchers (e.g., Kachru, 1985; Kirkpatrick, 2014) consider all English varieties to be linguistically equal, and their ultimate goal is to celebrate the pluricentricity of English and seek variety recognition.

In the context of ELT, English users are often categorised as either a “native” English speaker or “non-native” English speaker. However, since the development of the WEs paradigm, the issues of using this distinction have been highlighted by a number of scholars (e.g., Faez, 2011; Seidhlofer, 2011; Tokumoto & Shibata, 2011). This dichotomy is considered to create an unbalanced power-dynamic structure in which “native” English speakers hold authority over “non-native” English speaker. For instance, as Seidhlofer (2011) explains, the negation prefix “non” used in “non-native” English speaker implies a negative connotation that there is some sense of deficiency which perpetuates the notion of linguistic imperialism. Another problematic nature of the native/non-native speaker dichotomy is that it fails to adequately capture the diverse nature of the individuals’ linguistic backgrounds. In recognition of the complex and problematic nature of the two terms (i.e., “native” English speaker and “non-native” English speaker), they will be written in inverted commas throughout this article.
Language Attitudes

The Complex Mechanism of Language Attitudes

Language attitude is considered to reflect two sequential steps: social categorisation and stereotyping (e.g., Lambert, 1967; Ryan 1983). Based on linguistic cues, such as accents, vocabulary, and grammar, which are considered to signal the socio-economic, geographical, and ethnic backgrounds of the speaker (e.g., Lippi-Green, 2012; Nesdale, A.R. & Rooney, 1990; Nesdale, D. & Rooney, 1996), individuals identify which social group the speaker belongs to. They associate them with the stereotypical traits of the inferred group (Ryan, 1983), and the stereotypical traits then work as a basis for social evaluation of the speaker. As Rubin, Coles, and Barnett (2016) explain further, when individuals hear even brief samples of speech varieties (e.g., accents) produced by low prestige groups, it can cue negative attributions of the individual speaker.

While language attitudes have been typically explained in terms of social categorisation and stereotyping, it has been recently argued that there are other mechanisms involved in the language attitudes process. Dragojevic and Giles (2016) illustrate that processing fluency, which they define as “the ease or difficulty with which information is processed” (p. 397), influences one’s attitudes towards accents. Dragojevic, Giles, Beck, and Tatum (2017) examined the effects of accent strengths on language attitudes. In the first study, they asked “native” English speakers from the US to listen to speech recordings produced by a mild-accented Punjabi speaker and a heavy-accented Punjabi speaker and evaluate each speech recording. In the second study, the same participants were asked to listen to speech recordings produced by a mild-accented Mandarin speaker and a heavy-accented Mandarin speaker and evaluate each speech recording. The results of the two studies indicated that the speech produced by the heavy-accented speaker was evaluated more negatively than the speech produced by the mild-accented speaker. Since all the participants were able to correctly identify that both the mild-accented and the heavy-accented Punjabi speakers were from India and that the mild-accented and the heavy-accented Mandarin speakers were from China, this illustrates that the speakers with differing accent strength were categorised in the same social group. If stereotyping was the only factor influencing the participants’ evaluations, the evaluations of the mild and heavy-accented speakers should have been more or less the same. However, as the heavy-accented speakers were evaluated more negatively than the mild-accented speakers in both cases, the stereotyping-based account of language attitude cannot seem to fully explain the results. Since heavier accents are considered to be more difficult to process than milder accents, Dragojevic et al. (2017) conclude that processing fluency has an impact on the language attitudes process as well.

Research on Perceptions of Different English Accents

Early language attitudinal studies have primarily focused on investigating the attitudes of “native” English speakers on regional English accents (e.g., Giles, 1970; Tucker & Lambert, 1969). More recently, researchers have started to investigate “native” English speakers’ attitudes towards “native” and “non-native” English accents (e.g., Bresnahan, Ohashi, Nebashi, Liu, & Shearman, 2002; Kubota 2001; Lindemann, 2003, 2005) as well as continued their investigation on “native” English speakers’ attitudes towards regional English accents (e.g., Dixon, Mahoney, & Cocks, 2002; Watson & Clark, 2014). The attitudinal studies focusing on “native” English speakers’ perceptions of “native” and “non-native” English accents have generally demonstrated that “native” English speakers are likely to evaluate the speech samples produced by “native” English speakers more positively than the speech samples produced by “non-native” English speakers.

In addition, other studies have looked at the effects of accents on their perceptions of credibility,
intelligibility, comprehensibility, and grammaticality. Accents and credibility have found to be closely linked, as demonstrated in Lev-Ari and Keysar’s (2010) study. In their study, they examined whether trivia statements (e.g., “Ants don’t sleep.”) read out by “non-native” English speakers, are perceived as less true than the trivia statements read out by “native” English speakers. A great deal of research has also been conducted to investigate the complex relationship between accents and intelligibility and comprehensibility (e.g., Kennedy & Trofimovich, 2008; Munro & Derwing, 1999; Munro, Derwing, & Morton, 2006). These studies have demonstrated that “native” English speakers are likely to find speech samples produced by “native” English speakers more intelligible and comprehensible than speech produced by “non-native” English speakers. Some studies have shown that familiarity with “non-native” English accents may increase the understanding of speech samples produced by “non-native” English speakers (e.g., Gass & Varonis, 1984; Kennedy & Trofimovich, 2008). Other studies, however, have suggested that accent familiarity has little or no effect on “native” English speakers’ perceptions of intelligibility and comprehensibility (e.g., Lepage & LaCharité, 2015; Major 2007; Major, Fitzmaurice, Bunta, & Balasubramanian, 2002; Munro et al., 2006). As can be seen from the contradictory results, the influence of accent familiarity on perceptions of intelligibility and comprehensibility is complex. Being familiar with a particular accent does not always seem to be advantageous to “native” English speaking listeners.

The relationship between accents and perceptions of grammaticality has also been recently under investigation (e.g., Kennedy, 2015; Ruivivar & Collins, 2017). Kennedy (2015) examined whether accent played a role in “native” English speakers’ perceptions of grammaticality. In his study, a total of 16 “native” English speakers were asked to rate 16 grammatical utterances produced by “non-native” English speakers in terms of accentedness and grammaticality on a six-point bipolar scale. The results seem to indicate that the utterances produced by the “non-native” English speakers who were rated as having a stronger accent were more likely to be rated as ungrammatical. A study conducted by Ruivivar and Collins (2017) also looked at the relationship between accents and grammatical judgements. In the spoken grammaticality judgement test in which eight “native” English speakers participated, the participants were asked to rate the speech samples which included nonstandard grammar read out by “native” English speakers and “native” Tagalog speakers in terms of grammatical acceptability on a 1000-point range scale. The results revealed that the speech samples read out by “native” Tagalog speakers were more likely to be evaluated as ungrammatical than the speech samples produced by “native” English speakers, which further indicates that accents influence “native” English speakers’ perceptions of grammaticality.

There have also been research investigating “non-native” English speakers’ perceptions of different English accents. An extensive body of research has focused on investigating Japanese EFL learners’ attitudes towards English accents (e.g., Fraser, 2006; Matsuda, 2003; McKenzie, 2008, 2010; McKenzie & Gilmore, 2017; Tokumoto & Shibata, 2011). Most studies have shown that Japanese EFL learners generally hold a positive bias towards “native” English accents and a negative bias towards “non-native” English accents. Moreover, several studies have investigated the influence of different English accents on Japanese EFL learners’ perceptions of intelligibility and comprehensibility (e.g., Major, 2007; Major et al., 2002; Munro et al., 2006; Orikasa, 2016). Contrary to the studies focusing on “native” English speakers’ perceptions on English accents, in Orikasa’s (2016) study, the Japanese EFL learners did not seem to find the speech samples produced by “native” English speakers the most intelligible. The results seem to be indicating that English accents have different effects on “native” and “non-native” English speakers’ perceptions of intelligibility. Although several studies have focused on investigating the influences of English accents on “non-native” English speakers’ perceptions of intelligibility and comprehensibility, there seems to be a serious lack of research which investigates “non-native” English speakers’ perceptions of credibility and grammaticality.
Research Questions

As there is currently a dearth of research on the effects of accents on “non-native” English speakers’ perceptions of grammaticality, the present study seeks to investigate whether different English accents influence “non-native” English speakers’ perceptions of grammaticality. Given the need for a further understanding of the complex nature of English language learners’ perceptions of different English accents, this study aims to answer the following research questions:

1. Do Japanese EFL learners view English speakers from inner-circle countries as “native” English speakers and English speakers from outer-circle and expanding-circle as “non-native” English speakers?
2. Do accents affect Japanese EFL learners’ perceptions of grammaticality?

Methodology

Participants

Japanese EFL Learners

The participants used in the study were English language learners, specifically Japanese EFL learners. A total of 78 first-year undergraduate students of four intact classes at two Japanese private universities located in central Tokyo were selected. One was a co-educational university (n=39) and the other was a women’s university (n=39). The students studying at the co-educational university were law majors, while the students studying at the women’s university were English majors. The majority of the participants were female (n=55). All 78 participants were enrolled in at least one compulsory English subject. Apart from one of the participants who had lived abroad for several years in an English-speaking country, all the participants are thought to have at least six years of formal learning of English as a “subject” class in their junior and senior high schools and two years of informal learning as a “foreign language activity” class in their elementary schools.

“Native” English Speaking Participants

To compare the Japanese EFL learners’ results, “native” English speakers were also needed. In all, 35 “native” English speakers participated in the study. The majority of “native” English speakers were from the US (n=26). The other “native” English speakers were from Canada (n=4), Australia (n=2), the UK (n=2), and South Africa (n=1). Out of the 33 participants who reported that they have learnt at least one second/foreign language, 21 reported that they have learnt Japanese. Although regional and social class variations exist among “native” English speakers, the “native” English speaking participants were grouped as a single category for this study as they were primarily included to provide a baseline for comparison with the Japanese EFL learners.

Accents Selected for the Study

A total of eight speakers of English (four males and four females) were selected for the study with the help of three evaluators. The eight speakers consisted of four inner-circle English speakers (i.e., American, British, and Australian English), one outer-circle English speaker (i.e., Zimbabwean English), and three expanding-circle English speakers (i.e., Japanese English, Vietnamese English, and Russian English). A pseudonym and code were given to each speaker so that the speakers could be easily identified. The British male speaker, for instance, was given the name “Charles” and the code “S-NS1-M-UK” (“Speaker - Native Speaker 1 - Male - Place of origin: UK”).
As the study conducted by Lev-Ari and Keysar (2010) categorised accents into “native,” “mild,” and “heavy,” the eight accents included in this study were also categorised as “native,” “mild,” and “heavy.” The details of each speaker are summarised in Table 1.

### Data Collection Methods

#### Spoken Grammaticality Judgement Test

As the two studies (i.e., Kennedy, 2015; Ruivivar & Collins, 2017) which also investigated the influence of different English accents on listeners’ perceptions of grammaticality employ a spoken grammaticality judgement test, this current study employed a spoken grammaticality judgement test as well. This study used binary categories (i.e., grammatical/ungrammatical) to measure listeners’ perceptions of grammaticality as it is considered to require less effort on the part of the participants than the use of gradient scales.

### Table 1 Summary of the Eight Speakers

| Speaker (Code)   | First language(s) | Speech Variety       | Accent Type |
|------------------|-------------------|----------------------|-------------|
| Charles (S-NS1-M-UK) | English           | British English      | “Native”    |
| Thi (S-NNS2-F-VN)  | Vietnamese        | Vietnamese English   | Heavy       |
| Taro (S-NNS3-M-JP) | Japanese          | Japanese English     | Heavy       |
| Bill (S-NS4-M-AU)  | English           | Australian English   | “Native”    |
| Nigel (S-NNS5-M-ZW) | Shona             | Zimbabwean English   | Mild        |
| Elizabeth (S-NS6-F-UK) | English          | British English      | “Native”    |
| Samantha (S-NS7-F-US) | English, Japanese | American English     | “Native”    |
| Anastasia (S-NNS8-F-RU) | Russian       | Russian English      | Mild        |

Both the Japanese EFL learners and “native” English speakers evaluated a total of 32 sentences read out by the eight speakers (see Appendix). Each speaker read several ungrammatical sentences and grammatical sentences. Each sentence contained at least 15 words and less than 21 words. The sentences used in the spoken grammaticality judgement test were evaluated as low intermediate level on the Oxford Text Checker, with approximately 97% of the words (excluding proper nouns) being included in the Oxford 3000. The sentences with grammatical errors were based on the sentences included the Japanese Learner English (JLE) Corpus. The main types of grammatical errors were incorrect subject-verb agreement, plural forms, and comparative forms and omission of particles. The grammatical sentences were based on the passages included in the official TOEIC workbook published by the Institute for International Business Communication (IIBC) printed in 2016.

The sound quality, speed, naturalness, and clarity of each recording were ensured so that they would
be roughly the same. The recordings used in the spoken grammaticality judgement test were created on iMovie, which is a video-editing software for Apple computers. Using this software, the audio recordings were edited so that the volume of each recording was the same. The audio recordings of the 32 sentences were ordered randomly. A ding sound effect was inserted after each sentence to indicate that the sentence had ended. To obtain the participants’ intuitions, they only heard the sentences once and had five seconds to judge each sentence.

**Verbal-Guise Technique (VGT)**

Verbal-Guise Technique (VGT), which uses multiple speakers to provide the speech recordings, has been commonly used to investigate the implicit attitudes of different speech varieties. The VGT employed in this study used speech recordings of the same eight speakers used in the spoken grammaticality judgement test. Both the Japanese EFL learners and “native” English speaking participants evaluated the eight speakers in terms of three traits (i.e., pleasantness, comprehensibility, intelligence) on a six-point bipolar scale.

**NS/NNS Categorisation Task**

In the NS/NNS identification task, the participants had to categorise the eight speakers as either “native” speaker or “non-native” speaker. They were also asked to write down the places of origin of the eight speakers as an open-ended question. It has been commonly assumed that the term “native speaker” is used to refer to the speakers from inner-circle countries and “non-native speaker” to those from outer-circle and expanding-circle countries, but this task was employed to see whether this is an accurate portrayal of how Japanese EFL learners and “native” English speakers categorise the spoken English varieties. It must be noted that the Japanese EFL learners and the “native” English speakers themselves were not aware of the three categories of the spoken English varieties.

**Procedure**

The pilot study was conducted in July 2017 to test out the platform and determine the details of the data collection methods used in the main study. The main study was conducted in December 2017. The Japanese students in the two classes that were held in a classroom with computers conducted the spoken grammaticality judgement test and the VGT online through the use of Google Forms. The NS/NNS categorisation task was done on paper. As the students in the other two classes did not have access to a computer, they were given paper versions of the online tasks. The “native” English speaking participants were individually asked to do the spoken grammaticality judgement test, VGT, and the NS/NNS categorisation task online through the use of Google Forms in January 2018. The grammaticality judgement test, VGT, and the NS/NNS categorisation task were done as three separate tasks; the participants were first asked to do the grammaticality judgement test, followed by the VGT and the NS/NNS categorisation task.

**Data Analysis**

The data collected from the spoken grammaticality judgement test were analysed by calculating the accuracy rates for each speaker. The overall mean accuracy rates of both grammatical and ungrammatical sentences, the mean accuracy rates of grammatical sentences, and the mean accuracy rates of ungrammatical sentences for each speaker were calculated to examine the patterns of the Japanese EFL learners’ judgements. The data obtained from the VGT were analysed by calculating the mean and standard deviation of the evaluations of Japanese EFL learners (NNS) and “native” English speakers (NS) for each speaker in terms of the three traits. The internal consistency reliability was measured by Cronbach’s alpha (α). The data obtained from the NS/NNS categorisation task were
analysed by looking at the NS/NNS identification rates and recognition rates of the place of origin of each speaker. The Japanese EFL learners’ data were compared against the “native” English speaking participants’ data.

Results

Spoken Grammaticality Judgement Test

Japanese EFL Learners’ Accuracy Rates

Table 2 shows the Japanese EFL learners’ mean accuracy rates of the spoken grammaticality judgement test. The overall accuracy rates do not seem to differ significantly depending on the speaker. However, when comparing the accuracy rates between the sentences that included a grammatical error and no grammatical error, a pattern seems to emerge. The mean accuracy rate for ungrammatical sentences read by Taro (S-NNS3-M-JP) was the highest, whereas Samantha (S-NS7-F-US) was the lowest. The mean accuracy rate for grammatical sentences read out by Nigel (S-NNS5-M-ZW) was the highest whereas Thi (S-NNS2-F-VN) was the lowest. The results seem to be showing that the sentences read out by the speakers who the Japanese EFL learners identified as “non-native” English speakers were more likely to be accurately judged as ungrammatical than the sentences read out by those who were identified as “native” English speakers. Moreover, the sentences read out by the speakers who the Japanese EFL learners identified as “native” English speakers were more likely to be accurately judged as grammatical than the sentences read out by those who were identified as “non-native” English speakers.

Table 2 Japanese EFL Learners’ Average Accuracy Rates for Each Speaker

| Speaker (Code)    | Overall accuracy rate | Accuracy rate of ungrammatical sentences | Accuracy rate of grammatical sentences |
|-------------------|-----------------------|------------------------------------------|----------------------------------------|
| Charles (S-NS1-M-UK) | 52.4%                 | 18.9%                                     | 63.5%                                  |
| Thi (S-NNS2-F-VN)  | 44.9%                 | 48.6%                                     | 41.2%                                  |
| Taro (S-NNS3-M-JP) | 55.7%                 | 60.8%                                     | 50.7%                                  |
| Bill (S-NS4-M-AU)  | 56.1%                 | 43.9%                                     | 68.2%                                  |
| Nigel (S-NNS5-M-ZW) | 61.1%                 | 52.7%                                     | 69.6%                                  |
| Elizabeth (S-NS6-F-UK) | 48.6%                 | 40.5%                                     | 56.8%                                  |
| Samantha (S-NS7-F-US) | 40.5%                 | 18.2%                                     | 62.8%                                  |
| Anastasia (S-NNS8-F-RU) | 52.7%                 | 36.5%                                     | 68.9%                                  |
The pattern became clearer when the accuracy rates were averaged according to accent type, as shown in Table 3. As mentioned earlier, Charles (S-NS1-M-UK), Bill (S-NS4-M-AU), Elizabeth (S-NS7-F-UK), and Samantha (S-NS7-F-US) were categorised as “native,” Nigel (S-NNS5-M-ZW) and Anastasia (S-NNS8-F-RU) were categorised as “mild,” and Thi (S-NNS2-F-VN) and Taro (S-NNS3-M-JP) were categorised as “heavy.” Table 3 illustrates how Japanese EFL learners were slightly more likely to detect grammatical errors when read out by speakers with heavier “non-native” accents than “native” accents and milder accents. Japanese EFL learners seemed more likely to judge ungrammatical sentences as correct when read out by speakers with “native” and milder accents than heavier accents.

Table 3  Japanese EFL Learners’ Average Accuracy Rates for Each Accent Type

| Accent type | Overall Accuracy rate | Accuracy rate of ungrammatical sentences | Accuracy rate of grammatical sentences |
|-------------|-----------------------|----------------------------------------|----------------------------------------|
| “Native”  (UK+US+AU) | 49.4% | 30.4% | 62.8% |
| Mild (ZW+RU) | 56.9% | 44.6% | 69.3% |
| Heavy (JP+VN) | 50.3% | 54.7% | 46.0% |

Comparing Japanese EFL Learners’ and “Native” English Speakers’ Results

The overall mean accuracy rates of all 32 sentences included in the spoken grammaticality judgement test was 51.5% for the Japanese EFL learners and 88.5% for the “native” English speaking participants. In comparison to the Japanese EFL learners, the “native” English speaking participants had a much higher mean accuracy rate, as can be seen in Figure 1. The “native” English speaking participants’ overall mean accuracy rate for Taro (S-NNS3-M-JP) was significantly lower than the other seven speakers. The speakers with the overall average accuracy rates which were over 90% were Charles (S-NS1-M-UK), Elizabeth (S-NS7-F-UK), Samantha (S-NS7-F-US), and Anastasia (S-NNS8-F-RU).

![Figure 1](image://image.png)
The speakers with the overall mean accuracy rates which were over 80% were Bill (S-NS4-M-AU) and Thi (S-NNS2-F-VN). As illustrated in Figure 2, the Japanese EFL learners’ mean accuracy rate of the ungrammatical sentences was 40.0%, whereas the “native” English speaking participants’ mean accuracy rate of the ungrammatical sentences was 88.8%. The Japanese EFL learners’ mean accuracy rate of the grammatical sentences was 60.2%, whereas the “native” English speaking participants’ overall mean accuracy rate of the grammatical sentences was 88.8%, as can be seen in Figure 3. From the results, it seems that the Japanese EFL learners generally found it more difficult to identify the ungrammatical sentences than the grammatical sentences. The “native” English speaking participants did not seem to have much difference in identifying the grammatical and ungrammatical sentences.
Accuray Rates According to Grammatical Error Type

Out of the 32 sentences, there were eight sentences in total in which direct comparisons were possible. Although it would have been better if there were more direct comparisons, only four comparisons were included in the spoken grammaticality judgement test to avoid the grammatical errors from being too salient. As shown in row 2 and 3 of Table 4, when Elizabeth (S-NS7-F-UK) and Taro (S-NNS3-M-JP) read out sentences that had the ungrammatical construction of “*there is + plural form,” the Japanese EFL learners were significantly more likely to pick up the grammatical error when Taro (S-NNS3-M-JP) read it out. When Samantha (S-NS7-F-US) and Anastasia (S-NNS8-F-RU) read out sentences that omitted “the” from the sentence, the Japanese EFL learners were slightly more likely to pick up on the grammatical error when read out by Anastasia (S-NNS8-F-RU). When Bill (S-NS4-M-AU) and Taro (S-NNS3-M-JP) both read sentences that included “*more dirty,” the Japanese EFL learners were more likely to judge the sentence as ungrammatical when read out by Taro (S-NNS3-M-JP). The “native” English speaking participants’ accuracy rates of these two sentences are particularly low in comparison to the other six examples, as shown in Table 4. This shows how not all “native” English speaking participants consider “*more dirty” as ungrammatical. Nonetheless, the Japanese EFL learners were more likely to judge the sentence as ungrammatical when it was read out by Taro (S-NNS3-M-JP). When Anastasia (S-NNS8-F-RU) and Thi (S-NNS2-F-VN) read out the ungrammatical sentences that included “*two child,” the Japanese EFL learners were slightly more likely to judge the sentence as ungrammatical when read out by Thi (S-NNS2-F-VN). Although it is difficult to generalise from only four comparisons, there seems to be a trend that the Japanese EFL learners are slightly more likely to detect grammatical errors when read out by “non-native” English speakers. It seems that the Japanese EFL learners are slightly harsher towards “non-native” speakers with heavier accents than the “non-native” speakers with milder accents.

Verbal-Guise Technique (VGT)

Cronbach’s alpha (α) was 0.877 (3.s.f.) for the Japanese EFL learners and 0.878 (3 s.f.) for the “native” English speaking participants, indicating a high internal consistency reliability within both groups. Table 5 shows the calculation of means and standard deviations of the evaluations of Japanese EFL learners and “native” English speaking participants for each speaker in terms of the three traits. Anastasia (S-NNS8-F-RU) was rated by the Japanese EFL learners the most positively in terms of all three traits. Japanese EFL learners rated Taro (S-NNS3-M-JP) the lowest in terms of all three traits. The “native” English speaking participants also evaluated Anastasia (S-NNS8-F-RU) as the most pleasant speaker out of the eight speakers. The speaker rated by the “native” English speaking participants as the least pleasant speaker was Taro (S-NNS3-M-JP). The “native” English speaking participants rated Samantha (S-NS7-F-US) as the most comprehensible and Taro (S-NNS3-M-JP) as the least comprehensible. Anastasia (S-NNS8-F-RU) was rated by the “native” English speakers as the most intelligent and Taro (S-NNS3-M-JP) as the least intelligent. The standard deviations show that there is far more variety in the ratings done by the Japanese EFL learners than the “native” English speaking participants. The “native” English speaking participants generally rated the speakers more positively than the Japanese EFL learners. However, the “native” English speaking participants rated Taro (S-NNS3-M-JP) significantly more negatively than the Japanese EFL learners in terms of comprehensibility.
Table 4 Direct Comparisons of the Grammatical Errors

| Speaker (Code)   | Error example          | Error type               | Japanese EFL learners’ accuracy rate | “Native” English speakers’ accuracy rate |
|------------------|------------------------|--------------------------|--------------------------------------|----------------------------------------|
| Elizabeth (S-NS6-F-UK) | *There is + plural form | Subject verb agreement   | 33.8%                                | 91.4%                                  |
| Taro (S-NNS3-M-JP)   | *There is + plural form | Subject verb agreement   | 62.2%                                | 91.4%                                  |
| Bill (S-NS4-M-AU)      | *More dirty            | Comparative form         | 44.6%                                | 62.9%                                  |
| Taro (S-NNS3-M-JP)     | *More dirty            | Comparative form         | 62.2%                                | 57.1%                                  |
| Samantha (S-NS7-F-US)  | *Best golf player      | Omission of a particle   | 25.7%                                | 100.0%                                 |
| Anastasia (S-NNS8-F-RU) | *Best cook             | Omission of a particle   | 36.5%                                | 100.0%                                 |
| Anastasia (S-NNS8-F-RU) | *Two child             | Plural form              | 36.5%                                | 100.0%                                 |
| Thi (S-NNS2-F-VN)      | *Two child             | Plural form              | 44.6%                                | 94.3%                                  |

Results of the NS/NNS Identification Task

**NS/ NNS Categorisation**

In the NS/NNS identification task, both Japanese EFL learners and “native” English speaking participants had to categorise the eight speakers into “NS” or “NNS.” Table 6 shows the Japanese EFL learners’ and “native” English speaking participants’ identification rates of each speaker.

The majority of Japanese EFL learners and “native” English speaking participants identified Charles (S-NS1-M-UK), Bill (S-NS4-M-AU), Elizabeth (S-NS6-F-UK), and Samantha (S-NS7-F-US) as “NS.” Over half the Japanese EFL learners identified Nigel (S-NNS5-M-ZW) as “NS” (60%). On the other hand, over half the “native” English speakers identified Nigel (S-NNS5-M-ZW) as “NNS” (57.1%). The two groups also identified Anastasia (S-NNS8-F-RU) differently. There were more participants among the Japanese EFL learners who identified Anastasia (S-NNS8-F-RU) as “NS” (68%), whereas there were more participants among the “native” English speaking participants who identified the speaker as “NNS” (94.3%). Both groups categorised Thi (S-NNS2-F-VN) and Taro (S-NNS3-M-JP) as “NNS.”
Table 5 Mean Evaluations and Standard Deviations in Terms of the Three Traits

| Speaker (Code) | Participants* | Pleasant       | Comprehensible | Intelligent    |
|---------------|---------------|----------------|----------------|---------------|
| Charles (S-NS1-M-UK) | JEL           | 4.32 (1.20)    | 4.82 (1.25)    | 4.62 (1.31)   |
|               | NES           | 4.97 (1.18)    | 5.74 (0.44)    | 4.86 (1.06)   |
| Thi (S-NNS2-F-VN)  | JEL           | 3.25 (1.34)    | 4.82 (1.25)    | 3.29 (1.31)   |
|               | NES           | 4.37 (1.21)    | 5.74 (0.44)    | 4.57 (0.85)   |
| Taro (S-NNS3-M-JP) | JEL           | 2.29 (1.07)    | 2.82 (1.52)    | 2.50 (1.31)   |
|               | NES           | 4.83 (1.38)    | 1.49 (0.74)    | 4.02 (1.15)   |
| Bill (S-NS4-M-AU)  | JEL           | 3.86 (1.40)    | 4.14 (1.61)    | 4.18 (1.41)   |
|               | NES           | 5.29 (0.83)    | 5.94 (0.24)    | 5.31 (0.76)   |
| Nigel (S-NNS5-M-ZW) | JEL           | 3.61 (1.43)    | 4.00 (1.39)    | 3.74 (1.35)   |
|               | NES           | 5.31 (0.72)    | 5.49 (0.66)    | 5.17 (0.71)   |
| Elizabeth (S-NS6-F-UK) | JEL         | 3.91 (1.42)    | 4.37 (1.34)    | 4.28 (1.34)   |
|               | NES           | 5.06 (1.14)    | 5.71 (0.67)    | 5.09 (0.95)   |
| Samantha (S-NS7-F-US) | JEL         | 3.96 (1.20)    | 4.40 (1.16)    | 4.16 (1.27)   |
|               | NES           | 5.06 (0.97)    | 5.89 (0.53)    | 4.97 (1.12)   |
| Anastasia (S-NNS8-F-RU) | JEL         | 5.08 (1.08)    | 5.41 (0.84)    | 5.26 (0.93)   |
|               | NES           | 5.34 (0.68)    | 5.34 (0.68)    | 5.29 (0.75)   |

* Japanese EFL learners (n=75), "Native" English speakers (n=35)

Identifying the Speakers’ Places of Origin

The participants were also asked to write the places of origin of the eight speakers as an open-ended question. The Japanese EFL learners’ mean recognition rate for the eight speakers was 22.8% and the “native” English speakers’ mean recognition rate was 45.0%, indicating that the “native” English speakers were generally better at recognising the places of origin of the eight speakers than the Japanese EFL learners. Table 7 shows the percentages of the correctly and incorrectly identified place of origin of the eight speakers.

The speaker with the highest recognition rate among the Japanese EFL learners was Taro (S-NNS3-M-JP) at 57.3%. The speaker with the lowest recognition rate among the Japanese EFL learners was Anastasia (S-NNS8-F-RU) at 0.0%. Among the “native” English speakers, the speakers with the highest recognition rates were Elizabeth (S-NS6-F-UK) and Samantha (S-NS7-F-US) at 97.1%. The speakers with the lowest recognition rates among the “native” English speakers” were Nigel (S-NNS5-M-ZW) and Anastasia (S-NNS8-F-RU) at 0.0%. More than 70 % of the Japanese EFL learners identified Charles (S-NS1-M-UK), Bill (S-NS4-M-AU), Elizabeth (S-NS6-F-UK), Samantha (S-NS7-F-US), and Anastasia (S-NNS8-F-RU) as a speaker from an inner-circle country (e.g., the US, the UK, Australia, Ireland). More than 70 % of the Japanese EFL learners identified Thi (S-NNS2-F-VN) and Taro (S-NNS3-M-JP) as a speaker from a non-inner-circle country.
Table 6  Results of the NS/NNS Identification Task

| Speaker (Code) | NS/NNS | Japanese EFL learners’ identification rate (frequency: n=75) | “Native” English speakers’ identification rate (frequency: n=35) |
|---------------|--------|------------------------------------------------------------|---------------------------------------------------------------|
| Charles       | NS     | 78.7% (59)                                                 | 88.6% (31)                                                   |
| (S-NS1-M-UK)  | NNS    | 22.3% (16)                                                 | 11.4% (4)                                                    |
| Thi           | NS     | 16.0% (12)                                                 | 0.0% (0)                                                     |
| (S-NNS2-F-VN) | NNS    | 84.0% (63)                                                 | 100.0% (35)                                                  |
| Taro          | NS     | 8.0% (6)                                                   | 2.9% (1)                                                     |
| (S-NNS3-M-JP) | NNS    | 92.0% (69)                                                 | 97.1% (34)                                                   |
| Bill          | NS     | 76.0% (57)                                                 | 100.0% (35)                                                  |
| (S-NS4-M-AU)  | NNS    | 24.0% (18)                                                 | 0.0% (0)                                                     |
| Nigel         | NS     | 60.0% (45)                                                 | 43.9% (15)                                                   |
| (S-NNS5-M-ZW) | NNS    | 40.0% (30)                                                 | 57.1% (20)                                                   |
| Elizabeth     | NS     | 82.7% (62)                                                 | 100.0% (35)                                                  |
| (S-NS6-F-UK)  | NNS    | 17.3% (13)                                                 | 0.0% (0)                                                     |
| Samantha      | NS     | 68.0% (51)                                                 | 97.1% (34)                                                   |
| (S-NS7-F-US)  | NNS    | 32.0% (24)                                                 | 2.9% (1)                                                     |
| Anastasia     | NS     | 68.0% (51)                                                 | 5.7% (2)                                                     |
| (S-NNS8-F-RU) | NNS    | 32.0% (24)                                                 | 94.3% (33)                                                   |

In comparison to the “native” English speakers’ recognition rates, the Japanese EFL learners had a lower recognition rates for Charles (S-NS1-M-UK), Bill (S-NS4-M-AU), Elizabeth (S-NS6-F-UK), and Samantha (S-NS7-F-US). The Japanese EFL learners’ recognition rate for Taro (S-NNS3-M-JP) was slightly higher than the “native” English speakers. More than half the Japanese EFL learners were able to correctly identify the place of origin of Taro (S-NNS3-M-JP). Both the Japanese EFL learners’ and “native” English speakers’ recognition rates for Thi (S-NNS2-F-VN), Nigel (S-NNS5-M-ZW), and Anastasia (S-NNS8-F-RU) were equally extremely low. The recognition rates for these three speakers were less than ten percent.

Although the recognition rates of the Japanese EFL learners were quite low, there seems to be some indication that they were distinguishing between inner-circle and non-inner-circle countries. For instance, although only 37.3% (n=28) of the Japanese EFL learners correctly identified Charles’ (S-NS1-M-UK) place of origin as the UK, 77.0% (n=57) of them identified that he was from an inner-circle country (i.e., the UK, the USA, Australia, Canada, Ireland). For Bill (S-NS4-M-AU), Elizabeth (S-NS6-F-UK), and Samantha (S-NS7-F-US) as well, the majority of Japanese EFL learners identified them to be from inner-circle countries. For Thi (S-NNS2-F-VN) and Taro (S-NNS3-M-JP), the majority of Japanese EFL learners identified their places of origin as expanding-circle countries, suggesting that many Japanese EFL learners were able to identify her speech variety as non-inner-circle English. On the other hand, over 65 percent of Japanese EFL learners identified Nigel’s (S-NNS5-M-ZW) and Anastasia’s (S-NNS8-F-RU) places of origin as inner-circle countries. This explains why many Japanese EFL learners categorised them as “NS.” Interestingly, more Japanese EFL learners identified Anastasia (S-NNS8-F-RU) as a speaker from the US than Samantha (S-NS7-F-US) who was the actual speaker from the US.
The results from the NS/NNS categorisation task revealed that the majority of Japanese EFL learners identified Charles (S-NS1-M-UK), Bill (S-NS4-M-AU), Nigel (S-NNS5-M-ZW), Elizabeth (S-NS6-F-UK), Samantha (S-NS7-F-US), and Anastasia (S-NNS8-F-RU) as “native” English speakers. The majority of the Japanese EFL learners identified Thi (S-NNS2-F-VN) and Taro (S-NNS3-M-JP) as “non-native” English speakers. It seems that unless the speaker has a “heavy” accent, the Japanese EFL learners are likely to categorise them as a “native” English speaker. As the Japanese EFL learners identified the Zimbabwean speaker and Russian speaker as “native” English speakers, it initially appeared that they were not just distinguishing between speakers from inner-circle countries and speakers from non-inner-circle countries. However, when the Japanese EFL learners were asked to identify the place of origin of Nigel (S-NSS-5-M-ZW) and Anastasia (S-NNS8-F-RU), more than 60% of them identified Nigel (S-NSS-5-M-ZW) and Anastasia (S-NNS8-F-RU) as speakers from inner-circle countries, which suggests that the majority of Japanese EFL learners were in fact distinguishing between inner-circle English accents and non-inner-circle English accents. The majority of the Japanese EFL learners identified the “native” English speakers and “non-native” English speakers with mild accents who they believed to be from inner-circle countries as “native” English speakers, whereas the “non-native” English speakers with heavy accents were identified as “non-native” English speakers. It may be that they were just not able to hear the subtle differences between the “native” English accents and the mild “non-native” English accents.

**Discussion**

### Categorising the Speakers into “NS” and “NNS”

Table 7 Results of the Place of Origin Identification Task

| Speaker (Code) | Place of origin | Recognition | Japanese EFL learners’ recognition rate | “Native” English speakers’ recognition rate |
|----------------|-----------------|-------------|----------------------------------------|------------------------------------------|
| Charles (S-NS1-M-UK) | UK | Correct | 37.3% (28) | 74.3% (26) |
| | | Incorrect | 62.7% (47) | 25.7% (9) |
| Thi (S-NNS2-F-VN) | Vietnam | Correct | 4.0% (3) | 8.6% (3) |
| | | Incorrect | 96.0% (72) | 91.4% (32) |
| Taro (S-NNS3-M-JP) | Japan | Correct | 57.3% (43) | 31.4% (11) |
| | | Incorrect | 42.7% (32) | 68.6% (24) |
| Bill (S-NS4-M-AU) | Australia | Correct | 12.0% (9) | 51.4% (18) |
| | | Incorrect | 88.0% (66) | 48.6% (17) |
| Nigel (S-NNS5-M-ZW) | Zimbabwe | Correct | 1.3% (1) | 0.0% (0) |
| | | Incorrect | 98.7% (74) | 100.0% (35) |
| Elizabeth (S-NS6-F-UK) | UK | Correct | 33.3% (24) | 97.1% (34) |
| | | Incorrect | 66.6% (51) | 2.9% (1) |
| Samantha (S-NS7-F-US) | USA | Correct | 40.0% (30) | 97.1% (34) |
| | | Incorrect | 60.0% (45) | 2.9% (1) |
| Anastasia (S-NNS8-F-RU) | Russia | Correct | 0.0% (0) | 0.0% (0) |
| | | Incorrect | 100.0% (75) | 100.0% (35) |

The majority of the Japanese EFL learners identified the “native” English speakers and “non-native” English speakers with mild accents who they believed to be from inner-circle countries as “native” English speakers, whereas the “non-native” English speakers with heavy accents were identified as “non-native” English speakers. It may be that they were just not able to hear the subtle differences between the “native” English accents and the mild “non-native” English accents.
The majority of the “native” English speaking participants identified Charles (S-NS1-M-UK), Bill (S-NS4-M-AU), Elizabeth (S-NS6-F-UK), and Samantha (S-NS7-F-US) as “native” English speakers. This shows that the majority of the “native” English speaking participants only consider speakers from inner-circle countries as “native” English speakers. The “native” English participants were more consistent with their judgements of determining whether the speaker was a “native” English speaker or “non-native” English speaker than the Japanese EFL learners. With the exception of Nigel (S-NS5-M-ZW), the judgements by the “native” English speakers were almost unanimous for the rest of the seven speakers. It seems that the majority of “native” English participants had a clear idea of who falls into the category of a “native” English speaker and a “non-native” English speaker.

The Influence of Different English Accents on Perceptions of Grammaticality

A spoken grammaticality judgement test was employed to investigate whether the speakers’ accents had an influence on the Japanese EFL learners’ perceptions of grammaticality. The results seem to indicate that there is some influence of the accents of the speakers on the Japanese EFL learners’ perceptions of grammaticality. The mean accuracy rates of grammatical sentences and ungrammatical sentences show that the Japanese EFL learners were more likely to judge the sentences read out by Charles (S-NS1-M-UK), Bill (NS4-M-AU), Elizabeth (S-NS6-F-UK), and Samantha (S-NS7-F-US) (i.e., “native” English speakers) and Anastasia (S-NNS8-F-RU) and Nigel (S-NNS5-M-ZW) (i.e., “non-native” English speakers with mild accents) as grammatical than the sentences read out by Thi (S-NNS2-F-VN) and Taro (S-NNS3-M-JP) (i.e., “non-native” English speakers with heavy accents). When the ungrammatical sentences were categorised according to error type, a similar pattern appeared. The Japanese EFL learners were more likely to pick up on the grammatical error when the sentence was read out by a “non-native” English speaker than a “native” English speaker. This seems to be suggesting that Japanese EFL learners were somewhat harsher towards the speakers who are “non-native” English speakers with heavy accents and more forgiving towards the “native” English speakers and the “non-native” English speakers with mild accents.

It is likely that a combination of different factors influenced the Japanese EFL learners’ grammaticality judgements of the 32 sentences. Firstly, the Japanese EFL learners’ English proficiency level needs to be considered. The difference in the English proficiency level between the Japanese EFL learners and “native” English speaking participants may explain why the Japanese EFL learners’ overall accuracy rates were lower than the “native” English speaking participants’ accuracy rates. The Japanese EFL learners may have found the grammatical judgement test to be more difficult than the “native” English speaking participants. The Japanese EFL learners may have found the judgement task too difficult and led them to randomly evaluate some of the sentences.

The fact that even the “native” English speakers were not able to obtain perfect scores for the majority of the sentences included in the spoken grammaticality judgement test gives evidence that identifying grammatical errors by just listening to the sentences is a complex task. As Vandergrift (1999) explains, listening to speech is not an easy task as listeners need to identify sounds, vocabulary and grammar structures, interpret stress and intonation, and retain the information gathered in order to comprehend what the speaker is saying. Listening to speech in a foreign language is even more difficult and requires more effort. On top of being asked to evaluate sentences in a foreign language (i.e., English), the Japanese EFL learners had to listen to the speech produced by eight speakers with different accents. The different English accents may have served as a distraction from the main task of judging the grammaticality of the sentences. As it was shown in the VGT employed in the current study, the Japanese EFL learners rated the speakers with heavier “non-native” English accents more negatively in terms of comprehensibility in comparison to the other speakers with “native” and milder “non-
native” English accents. If the Japanese EFL learners had trouble understanding what the speakers were saying, they would have had difficulty in assessing whether the sentences were grammatical or not.

The Japanese EFL learners’ grammaticality judgements may also have been influenced by their preconceived attitudes towards the English accents. A number of studies on speech recognition (e.g., McGurk & MacDonald, 1976; Raveh & Lavie, 2014) demonstrate that human auditory perception can be easily manipulated. For instance, Raveh and Lavie’s (2014) study illustrate that high visual perceptual load in a task can affect the detection of stimuli in hearing (i.e., inattentional deafness). When participants were asked to perform a visual search task, their auditory detection sensitivity was significantly reduced when performing the task of higher perceptual load. What this study shows is that auditory perception can be easily distorted by different stimuli. Lindemann and Subtielu (2013) argue that the attitudinal biases of the speaker can have a similar influence on the perception of speech. That is, the biases that the listeners hold towards the speakers can influence the way they hear the speech. As the results from the NS/NNS categorisation task showed that the Japanese EFL learners were distinguishing the accents between “native” English speakers from inner-circle countries and “non-native” English speakers from non-inner-circle countries, they may have associated the stereotypic traits with the speakers that they heard. Numerous studies have indicated (e.g., Fraser, 2006; Matsuda, 2003; McKenzie, 2008, 2010; McKenzie & Gilmore, 2017; Tokumoto & Shibata, 2011) that Japanese EFL learners tend to hold negative attitudes towards “non-native” English accents. The results from the VGT employed in the current study, McKenzie’s (2008, 2010) study, and McKenzie and Gilmore’s (2017) study also suggested that the Japanese EFL learners specifically evaluated the speakers with heavier “non-native” English accents in terms of intelligence more negatively than the speakers with “native” or milder “non-native” English accents. Therefore, the Japanese EFL learners may have expected the speakers who they believed to be “non-native” English speakers to make more grammatical errors than the speakers who they believed to be “native” English speakers. Although it is difficult determine to what extent the Japanese EFL learners’ biased attitudes influenced their auditory perceptions of the sentences, it seems plausible to assume that their preconceived attitudes played a part in their grammaticality judgements, which caused them to be somewhat harsher towards the speakers who they believed to be “non-native” English speakers than the speakers who they believed to be “native” English speakers.

Although the studies conducted by Kennedy (2015) and Ruivivar and Collins (2017) showed that “native” English speakers’ perceptions of grammaticality were influenced by different English accents, the current study was not able to produce similar results. No obvious pattern was identifiable from the “native” English speaking participants’ results. The difference in results may possibly be because the participants’ perceptions of grammaticality were measured differently. The participants were asked to rate the grammaticality of each sentence on a discrete six-point scale in Kennedy’s (2015) study and a computer-based 1000-point range scale in Ruivivar and Collins’s study (2017), but the participants in the current study were asked to judge the grammaticality of each sentence using binary categories (i.e., grammatical/ungrammatical). The “native” English speaking participants’ mean accuracy rates of the grammatical and ungrammatical sentences did not seem to conform to the pattern identified in the Japanese EFL learners’ results, which suggests that the perceptions of grammaticality were influenced by the different English accents for only the Japanese EFL learners in this study.

**Limitations of the Study**

There were a number of limitations associated with the current study, some of which were anticipated beforehand but could not be controlled for, and others that became only apparent after collecting the results. Firstly, the 34 “native” English speaking participants who participated in the study were asked
to do the spoken grammaticality judgement test, VGT, and the NS/NNS categorisation task remotely online, predominantly due to availability. Although they were given detailed instructions of how to do each task, it is impossible to know if they precisely followed each instruction.

Having the participants evaluate speech samples in terms of grammaticality and the three traits (i.e., pleasantness, intelligence, comprehensibility) is not without problems. Communication features, such as the speech rate, speaker variables, such as age, gender, and voice pitch, and hearer variables, such as mood, have an influence on the way individuals evaluate speech samples (Derwing & Munro, 2005; Garrett, 2010). Although this study has tried to minimise the influences that were controllable (e.g., age, speech rate, volume), there were still other variables (e.g., mood) that were inevitably uncontrollable.

A final limitation was that the sentences in the spoken grammaticality judgement test were played only once. Although they were only played once to obtain the intuitions of the perceptions of grammaticality, the Japanese EFL learners’ low accuracy rates for the majority of the sentences in the spoken grammaticality judgement test suggest that the spoken grammaticality judgement test may have been too difficult. Perhaps if the participants had been allowed to listen to the speech samples more than once, the results may have differed.

**Conclusion**

**Implications for Research**

As the investigation of the influence of accents on perception of grammaticality has been a fairly new area of research, this study hoped to be one of the few studies that investigate the complex relationship between accents and perception of grammaticality. The results of this study seem to suggest that the Japanese EFL learners’ perceptions of grammaticality were influenced by the speakers’ accents. Due to the lack of research on “non-native” English speakers’ perceptions of grammaticality, there is a need for follow-up studies to see whether similar results will be produced. As the results of the “native” English speakers were not able to confirm the results obtained by previously done research (e.g., Kennedy, 2015; Ruivivar & Collins, 2017), further research for understanding the relationship between different English accents and “native” English speakers’ perceptions is also needed. Although this current study used binary categories (i.e., grammatical/ungrammatical) to measure perception of grammaticality, it can also be measured using gradient scales. It would be worthwhile to see whether a difference in the way of measuring grammaticality would have an influence on the results. Multiple methods should be employed to further examine the complex relationship between accents and perception of grammaticality.

**Implications for Teaching**

The results of this study may have several pedagogical implications for teaching English in Japan. As the results seem to suggest that the Japanese EFL learners generally hold a positive bias towards inner-circle English accents as the more “correct” and “attractive” forms of speech and a negative bias towards expanding-circle English accents, several assumptions can be made. Japanese EFL learners seem to be branding their own accents and other expanding-circle English accents as “incorrect” and “deviate” forms of speech. This may have a negative impact on the learners’ growth process as they may fear to make mistakes in English, which can prevent them from using it. Stigmatising other expanding-circle English accents may also be dangerous as it can serve as a basis for prejudicial behaviour and discrimination. Hence, for Japanese EFL learners to become more accepting towards their own accents and other expanding-circle English accents, the current ELT practice in Japan may
need to be reexamined. Since the majority of Japanese EFL learners have only been exposed to inner-circle English accents, particularly RP and GA, in their English language classrooms, it may be advantageous to expose them to other outer-circle and expanding-circle English accents as well. As McKenzie (2010) argues, considering the current position of English, which is used as a lingua franca to communicate with speakers with different first languages, it is not reasonable to impose a single pronunciation model in English language classrooms. By exposing Japanese EFL learners to multiple English accents, they are likely to become more familiar with them. As some studies (e.g., Gass & Varonis, 1984; Kennedy & Trofimovich, 2008) illustrate that familiarity with accents may help with increasing one’s comprehensibility, exposing Japanese EFL learners to a variety of English accents may increase their comprehension and tolerance to them. Japanese EFL learners may also become aware that inner-circle English accents are not the only legitimate forms of communication and that they do not necessarily need to adopt “native” English accents to be successful users of English.

Final Remarks

This study hoped to uncover some of the preconceived views that Japanese EFL learners hold towards different accents in spoken English. As investigating perceptions of different English accents is complex and multifaceted, further research is needed to provide insights that will be beneficial for researchers, policymakers, teachers, and, consequently, English language learners themselves. Researchers, policymakers, and teachers should work together so that they can create an effective language learning environment in which English language learners will be prepared to be successful communicators in this globalised world.

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Appendix

Sentences included in the spoken grammaticality judgement test (an asterisk is placed in front of sentences that are ungrammatical):
1. I recently accepted a job in Memphis City, and I am going to start taking the bus. (Charles, S-NS1-M-UK)
2. *I am quite busy because I take care of my two child and my husband. (Thi, S-NNS2-F-VN)
3. I wanted to let you know that someone from the maintenance department will be inspecting the plumbing tomorrow. (Taro, S-NNS3-M-JP)
4. *I have no experience about baseball, but when my kids started baseball, I became the assistant coach of their team. (Bill, S-NS4-M-AU)
5. *I have three kids in total. They (are) in elementary school and play baseball every weekend. (Nigel, S-NNS5-M-ZW)
6. Over the next two months, the city streets department will be repairing walkways along Main, Duval and Carolyn avenues. (Elizabeth, S-NS6-F-UK)
7. *My husband is best golf player in my family. My daughter plays golf better than my son. (Samantha, S-NS7-F-US)
8. Good afternoon. I would like to welcome you all to today’s seminar on telephone sales techniques. (Anastasia, S-NNS8-F-RU)
9. *There is five pens on the desk. I got them at the stationary shop. (Elizabeth, S-NS6-F-UK)
10. I frequently travel for business, often carrying fragile samples with me on the plane. (Bill, S-NS4-M-AU)
11. If you have a vision problem, our computerised laser surgery may be able to help. (Thi, S-NNS2-F-VN)
12. *I am going to buy present for my family at the department store in London tomorrow. (Charles, S-NS1-M-UK)
13. His room is more dirty than mine. I think he needs to hire a cleaner. (Taro, S-NNS3-M-JP)
14. *My son and daughter are in my home now. I have to go back to my home. (Nigel, S-NNS5-M-ZW)
15. *My husband birthday is on December 30th. I will make a special cake for him. (Samantha, S-NS7-F-US)
16. Mr. Lee first came into national fame in the 1970s when he starred in several popular comedies. (Anastasia, S-NNS8-F-RU)
17. Thanks for calling Fresh Goods, the only vegetarian restaurant in town offering dishes made entirely from locally grown ingredients. (Charles, S-NS1-M-UK)
18. *I am a piano teacher and another I play the organ at a marriage-hall. (Thi, S-NNS2-F-VN)
19. I would like to start our meeting by reviewing the results of the customer feedback survey. (Elizabeth, S-NS6-F-UK)
20. My room is more dirty than this room. In my room, there is no space for a computer. (Bill, S-NS4-M-AU)
21. *There is four people and two pets in my family. We have a cat and a dog. (Taro, S-NNS3-M-JP)
22. *The train ticket to Victoria Station will cost about twenty pounds for two child and one adult. (Anastasia, S-NNS8-F-RU)
23. At today’s workshop we’re going to focus our attention on the interview stage of the job search process. (Nigel, S-NNS5-M-ZW)
24. The lodge offers easy access to the surrounding forests and rivers that the region is famous for. (Samantha, S-NS7-F-US)
25. These days, since work is busy, I have no time to go on a trip outside business trips. (Charles, S-NS1-M-UK)
26. We would like to remind passengers to be polite to others at all times. (Bill, S-NS4-M-AU)
27. Starting this April, the North-South express train will no longer be stopping at Green Street Station. (Thi, S-NNS2-F-VN)
28. Free samples are being offered only to customers who have purchased Fruity Juices from our online store. (Samantha, S-NS7-F-US)
29. *This is a nice and gorgeous restaurant. There are three couples, two waiters, and one piano players. (Elizabeth, S-NS6-F-UK)
30. *My son is best cook in the world. He makes so many delicious dishes. (Anastasia, S-NNS8-F-RU)
31. At today’s workshop we’re going to focus our attention on the interview stage of the job search process. (Nigel, S-NNS5-M-ZW)
32. Please remain mindful of those around you and keep mobile phone use at a minimum when you ride the train. (Taro, S-NNS3-M-JP)

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i In 2008, English language classes (i.e., “foreign language activity”) became compulsory to students in fifth and sixth grade at Japanese elementary schools. Unlike “subject” classes, the primary focus of the foreign language activity is to introduce the students to the English language and different cultures (MEXT, n.d.).

ii The Oxford Text Checker is a tool that assesses the level of a text based on the vocabulary included (Oxford University Press, n.d.).

iii The Oxford 3000 is a vocabulary list which includes the 3000 most important words to learn in English. The words included in the list are the words that are most frequently used across different types of text, based on the data of the British National Corpus and the Oxford Corpus Collection (Oxford University Press, n.d.).

iv The JLE Corpus, which is a corpus created by the National Institute of Information and Communications Technology (NICT), is composed of 1.2 million words from the transcripts of 1281 Japanese English learners’ audio-recorded speech samples (NICT, n.d.).