

**The effects on listening skills as a result of an increase
in exposure to Glasgow Standard English on EFL
learners in secondary school**

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ABSTRACT

Many EFL students report not understanding native speakers when travelling to areas where English is spoken. This study examines the effect of incorporating an unfamiliar accent, such as Glasgow Standard English (GSE), on secondary students' listening skills. For this study, the researcher used five tests, taken from Cambridge B1 Preliminary English Test (PET) part three and recruited a Glasgow Standard English native speaker to record a version of the recordings in this unfamiliar accent. Two groups of students of 4th of ESO from Institut Vescomtat de Cabrera in Hostalric (Catalonia) were selected; one group as the control group and the other one as the experimental group. Both groups were given a first pre-test in the familiar accent, that is, General British (GB), in order to determine their initial competence. Then, in the intervention phase, they were given three tests; the control group in GB and the experimental group in GSE. Finally, both groups were given a post-test in the familiar accent (GB) in order to determine the progress of their listening skills. Results indicated that both groups improved their listening skills. However, exposure to GSE did not improve students' listening skills to a greater extent. On the contrary, the group who improved the most was the control group, not exposed to GSE. Nonetheless, figures did not show any statistically significant difference in the levels of comprehension between groups. In conclusion, no effect of short-term exposure to an unfamiliar accent (GSE) was found on listening skills.

Keywords: Glasgow Standard English, General British, native, accentedness, intelligibility, comprehensibility, listening,

RESUM

Molts estudiants d'anglès com a llengua estrangera afirmen no entendre els parlants nadius quan viatgen a àrees on l'anglès és l'idioma nadiu. Aquest estudi examina quin efecte té la incorporació d'un accent no familiar, com el *Glasgow Standard English* (GSE), en la comprensió oral dels estudiants de secundària. Per aquest estudi, l'investigador va utilitzar cinc tests, extrets de la part tres del B1 Preliminary English Test (PET) de Cambridge i va reclutar un parlant nadiu de *Glasgow Standard English* per gravar una versió dels àudios en aquest accent no familiar. Es van seleccionar dos grups d'estudiant de 4t d'ESO de l'Institut Vescomtat de Cabrera d'Hostalric (Catalunya); un grup com a grup de control i l'altre com a grup experimental. A ambdós grups se'ls va donar un primer pretest en l'accent familiar, és a dir en *General British* (GB), per tal de determinar la seva comprensió oral inicial. Després, durant la fase d'intervenció, se'ls va donar tres tests; al grup de control en GB i al grup experimental en GSE. Finalment, a ambdós grups se'ls va donar un posttest en l'accent familiar (GB) per tal de determinar

el progrés de la seva comprensió oral. Els resultats van indicar que ambdós grups havien millorat la seva comprensió oral. Tanmateix, l'exposició al GSE no havia fet millorar més la comprensió oral dels estudiants. Al contrari, el grup que havia millorat més havia sigut el grup de control. No obstant això, les dades no mostraven cap diferència estadística significativa de la comprensió oral entre grups. En conclusió, no es va trobar cap efecte a curt termini de l'exposició a un accent no familiar (GSE) en la comprensió oral.

Paraules clau: *Glasgow Standard English*, *General British*, nadiu, accent, intel·ligibilitat, comprensibilitat, comprensió oral.

1. INTRODUCTION

As foreign learners of English, who has not visited the British Isles for the first time and discovered how little they understood? Most learners admit that they have had the feeling that the English they have been studying is not the English they hear from native speakers. According to Hughes, Trudgill and Watt (2005, p. 2-3), in general, the accent taught to foreign learners is General British (GB), formerly named Receive Pronunciation (RP). This is not the accent of any particular region or area. In fact, it is estimated that only about 3 to 5 per cent of the population in Britain speaks it, but it is an accent of high prestige and it is the accent among the well-educated and those in the upper reaches of the social scale. However, it is the most widely understood of all accents thanks to its use by BBC newsreaders. As a result, the learner, who speaks in this accent, has the best chance of being understood across the British Isles.

This paper aims to determine whether exposure to different accents, thus different pronunciations, rather than being only exposed to General British, can benefit foreign learners of English. The hypothesis is that becoming familiar to different ways of pronouncing the words can help the brain to process the information faster and more efficiently. And this could also help understanding a variety of accents and make it easier to understand General British. In other words, it could enhance learners' oral comprehension.

The first part of this paper focuses on the relevant literature available and on some important concepts regarding pronunciation and listening skills. First, the boundaries of the concepts 'dialect' and 'accent' are set. Then, all the features under the term 'pronunciation' are reviewed, in order to analyse the differences between the two accents used in this study, General British and Glasgow Standard English. Finally, relationship among the terms 'accentedness', 'intelligibility' and 'comprehensibility' is defined and established, and existing research in the field is explored.

The second part of this paper is devoted to answering the research questions raised in this study and to test the hypotheses. Therefore, there is a description of the methodology, the participants, and the data collection instruments and process. Then, the data is thoroughly analysed. Finally, there is a section with the conclusions reached through the findings. The limitations of this study are also pointed out in this section, as well as, a proposal for future research.

2. THEORETICAL FRAMEWORK

There are different factors that can cause comprehension difficulties in various degrees and, occasionally, lead to a communication breakdown. In fact, a communication process is a two-way process that concerns both the speaker and the listener (Zielinski, 2008, cited in Grant, 2004, p. 11). Not only is the speaker responsible for being understood, but the listener is responsible for understanding the message, as well. Therefore, the listener can also take a variety of actions to improve comprehension.

The message itself is one of the elements that can make comprehension difficult. The listener and, especially, a foreign language learner, may not know some lexis or some grammar structures and can have comprehension issues because of pronunciation. In the case of lexis, grammar and morphology, it depends on the proficiency level of the students but it is also true that each English speaking region has its lexis and grammar singularities. According to Hughes, Trudgill & Watt (2005, p. 11-12), these singularities in grammar, at morphology and syntax level, and vocabulary are referred to as dialects whereas the term 'accent' only refers to varieties of pronunciation.

In this study, only the pronunciation variable is analysed. That is, the differences in pronunciation between different accents that can have an impact on a listener's comprehension.

2.1. Pronunciation features

Differences in pronunciation between accents is the first concept that comes into mind when thinking about accentedness. Historically, pronunciation only focused on segmental articulation. This is, the individual sounds produced in a language that are transcribed in the form of consonants and vowels. However, the definition of pronunciation has broadened. Multiple researchers have proved that pronunciation includes segmental articulation, suprasegmental articulation, such as stress, rhythm or intonation, and paralinguistic and extralinguistic features (Grant, 2014, p. 5). In fact, Fraser (2001, p. 6 cited in Grant, 2014) defines the term pronunciation as "All those aspects of speech which make for an easily intelligible flow of speech, including

segmental articulation, rhythm, intonation and phrasing, and more peripherally even gesture, body language and eye contact” (p. 14).

2.1.1. Segmental articulation

As mentioned above, segmental articulation refers to individual sounds. Each language, and more specifically each accent, uses a definite set of sounds. Furthermore, it must be taken into account that the same sound is not produced equally at any given time. It changes every time it is produced. Sounds are not produced independently. On the contrary, sounds are articulated as a continuum (Cruttenden, 2014, p. 41). Therefore, the same sound can change depending on the sounds before and after it, the position in the word, the role of the word, the speed of the speech, or the speaker itself (Grant, 2014, p. 23).

According to Werker (1989, cited in Grant, 2014, p. 29), at birth human beings have the capacity to perceive all sounds. However, over time and as a result of exposure to the mother tongue, this capacity becomes limited to the sounds and patterns produced in the mother tongue. Therefore, there is an inability to identify the phonetic contrast between two foreign sounds (Grant, 2014, p. 25). For instance, General British uses 12 different vowel sounds whereas Spanish uses only 5 vowel sounds. In terms of comprehension of different accents, having a limited number of vowel sounds in the mother tongue can be regarded as an advantage at some point. Thus, a different pronunciation of a word can go unnoticed by a foreign language learner if at least one of the sounds is foreign to his mother tongue, as he is not able to identify the contrast and he identifies the sounds as the same one.

Not all sound contrasts have the same importance in order to understand a message. Some of them are more important than others. Thus, they carry a higher functional load and can impede communication while others have almost no effects (Cruttenden, 2014, p. 5). Different authors applied this ‘functional load’ concept to different fields of linguistics, but Brown was one of the first to apply it to pronunciation teaching. In English, there are numerous pairs to take into account. Therefore, Brown (1988) wanted to know which pairs were more important to teach in the foreign language lesson when time was limited. His study analysed different variables, such as pairs typically conflicted by learners, pairs articulated in similar ways, cumulative frequency of occurrence, pairs distinctive in all native accents of English, pairs that give rise to numerous minimal pairs, or pairs that could be found in the same context, in order to classify all pairs according to their importance. Finally, he produced a table, where ‘10’ indicates the most priority contrasts and ‘1’ the less priority ones to be addressed in ESL

lessons according to their degree of disruption in comprehensibility (to see the table: Brown, 1991).

Brown's conclusions were just a theory because they were never tested empirically. It was not until 2006 that Munro and Derwing proved them to be empirically valid. In their study, 13 Canadian English speakers had to rate different sentences, containing high functional load and low functional load errors produced by Cantonese non-native speakers, for their degree of accentedness and comprehensibility. Results showed that sentences containing high functional load errors had a greater impact on listeners' perception of accentedness and comprehensibility.

2.1.2. Suprasegmental articulation

Suprasegmental articulation, also known as prosody, analyses the features of length, pitch and loudness, which affect larger chunks of utterances (Cruttenden, 2014, p. 54). According to Celce-Murcia, Brinton & Goodwin (2010, cited in Grant, 2014, p. 18), suprasegmental discrepancies can result in more serious misunderstandings than segmental discrepancies because suprasegmental articulation helps identify words, the speaker's intention and the most important information.

Word stress is as important to word recognition as the sequence of phonemes (Cruttenden, 2014, p. 255). Words with two or more syllables have a stronger syllable, which tends to be longer in duration and vowels sounds tend to be full and clear. A wrong stress pattern can impede identifying where one word finishes and another one starts or can lead to mistaking a word for another one (Grant, 2014, p. 16).

Over the last seventy years, English has been described as a 'stress-timed' language. That is, with equal amount of time between stressed syllables. However, all studies have failed to prove this theory. The only rule of English rhythm is the 'borrowing rule'. According to this rule, syllables with short vowels borrow time from an immediately preceding syllable containing a full vowel (Cruttenden, 2014, p. 271-273).

When words are not pronounced in isolation but they are part of an utterance, there are variations in their pronunciation. Connected speech can be compared to word stress but accentuation is determined by meaning in context. Thus, lexical words, such as nouns, verbs, adjectives and adverbs, are stressed, whereas grammatical words, such as articles or preposition, are weakened or reduced (Grant, 2014, p. 17; Cruttenden, 2014, p. 270).

Intonation is the rise and fall of pitch of the voice (Grant, 2014, p. 17-18). It helps to distinguish where the division of utterances is, and it carries different types of meaning,

discourse and attitude. Although the variations within this feature between languages and dialects is not as great as that involved in segments, it can cause a strong foreign accent and lead to misunderstandings (Cruttenden, 2014, p. 277).

Finally, Grant (2014, p. 17) adds another suprasegmental feature; pausing. Thought groups and pausing makes the division of long utterances possible and helps listeners to process the message.

2.1.3. Paralinguistic and extralinguistic features

Paralinguistic and extra linguistic features include the broadest pronunciation components (Grant, 2014, p. 15). Some of them are physical, such as sex, age or phonetic organs sizes, while others are habits, such as vocalisations to express hesitation ([m] or [ə]), irritation (dental click) or admiration (whistle) (Cruttenden, 2014, p. 54-55).

Speech rate can be especially important as it can affect communication. According to Munro & Derwing (1995), native speakers require a longer time to process non-native speakers. Furthermore, non-native speakers usually speak slower than native speakers. In fact, slowing their speech may impede understanding because speech rate and comprehensibility are U-shaped. That is, at first comprehensibility increases when speech rate increases but, beyond a certain point, it starts to decrease (Kang, Thomson & Moran, 2018, p. 117).

2.2. General British (GB) compared to Glasgow Standard English (GSE)

In order to conduct this study, it was necessary to establish a familiar accent and, at least, one unfamiliar accent. That is, an accent that listeners were familiar with and were used to listening to and an accent that listeners did not know and they had never or rarely listened to. Establishing a familiar accent was easy as most English learners in Spain receive input and materials that use General British (GB) (Cledera, 2009). However, establishing an unfamiliar accent was not that easy because there were many accents to choose from. Ideally, it would have been more representative to use more than one unfamiliar accent but it was impossible due to time and resource limitations. Finally, Glasgow Standard English (GSE) was chosen because it was a very local native accent that was considered to be difficult to understand even among native speakers and also according to personal experience. In fact, some films recorded in GSE, such as 'My name is Joe' (K. Loch, 1998) or 'Neds' (P. Mullan, 2010) had to be subtitled, so some native speakers, such as Americans or Southern British, could understand them. Finally, there was a native speaker of this accent that could record the materials.

Therefore, once the general pronunciation features have been described, the specific features of the accents used in this study that could impede comprehension must be analysed. However, before comparing the distinctive features between General British (GB) and Glasgow Standard English (GSE), it is important to clarify that accents are not static nor respond to physical boundaries. Thus, accents evolve with time, speakers also try to adapt the language to the situation and there are no two speakers that speak in exactly the same way. Moreover, in reality there is not a succession of distinct accents. In fact, pronunciation changes gradually from one area to another. This is known as accent continuum. However, experts tend to cluster similar features from an area, which at the same time differ from features in other areas, to be able to analyse them (Hughes, Trudgill & Watt, 2005, p. 3-9).

In the case of the English language, there is also another factor, a part from geography, that determines accent; social context. Thus, people that live in the same area speak in different accents depending on their level of education or their social status. For instance, working-class people speak in a different way to middle-class. However, once again, there is a linguistic continuum between accents, where speakers move up and down this continuum depending on each situation (Stuart-Smith, 1999, pp. 203-204).

Comparing General British (GB) and Glasgow Standard English (GSE) accents, it can be stated that there are numerous differences. Regarding segmental articulation, the vowel systems of Scottish English accents is extremely different from English accents in England (Hughes, Trudgill & Watt, 2005, p. 101). In fact, they have fewer vowels and diphthongs. That is, to great extent due to 'Scottish Vowel Length Rule', which claims that vowels are usually short unless preceding /r/, a voiced fricative, or a boundary (Stuart-Smith, 1999, pp. 206-207). Moreover, monophthongs tend to be pure, in other words, there is no diphthongization (Hughes, Trudgill & Watt, 2005, p. 102). However, after analysing, in this study, a number of words in and finding 25 different vowel contrasts, only 16% of them (/e, æ/, /ʌ, ɒ/, /e, eɪ/, /e, ɪ/) could be identified in Brown's 'functional load' table. All of them in the most important rows.

There are also differences among consonants. One of the most notorious features of Glasgow Standard English (GSE) is rhoticity, that is, the preservation of post-vocalic /r/. This /r/ may be realised as a tap [ɾ], and occasionally, as a trill [r] (Hughes, Trudgill & Watt, 2005, p. 102; Stuart-Smith, 1999, pp. 205; Cruttenden, 2014, p. 89). Another distinctive feature is non-initial /t/, which is often realised as a glottal stop [ʔ] (Hughes, Trudgill & Watt, 2005, p. 102; Stuart-Smith, 1999, pp. 208; Cruttenden, 2014,

p. 89). In the case of /l/, it tends to be a dark /l/ (Stuart-Smith, 1999, pp. 210; Cruttenden, 2014, p. 89). GSE speakers also can articulate /f/ instead of /θ/ and /v/ instead of /ð/. These contrasts can be found in Brown's 'functional load' list but they are not classified as important in terms of impeding communication. As it happens with /t/, there may be a loss of intervocalic /v/ and of /θ/ at the end of a word. Finally, there is an incorporation of two additional phonemes /x/ and /w/ (Stuart-Smith, 1999, pp. 209).

GSE intonation also differs greatly from GB intonation. GSE tends to mark stress on syllables using a fall (Hughes, Trudgill & Watt, 2005, p. 104). In terms of utterance intonation, a final rising intonation pattern is the most frequent tone on declaratives (Cruttenden, 2014, p. 289).

Finally, although there are not many studies on voice quality, it can be stated that it is a distinctive feature of the accents in the area of Glasgow. Speakers usually exhibit a phonetically slack pronunciation, jaw protrusion and harsh phonation (Stuart-Smith, 1999, pp. 211).

2.3. Accent, Intelligibility, Comprehensibility

After comparing General British (GB) and Glasgow Standard English (GSE), it has become clear that both accents have great differences at all pronunciation levels, some of which can be classified as important according to Brown in terms of impeding understanding. However, is it enough to justify difficulties on understanding an unfamiliar accent? In fact, a strong accent does not necessarily involve full unintelligibility (Munro & Derwing, 1995; Flede, Takagi & Mann, 1995; Munro, Flege & MacKay, 1996, cited in Derwing & Munro, 1997, p. 2).

As a result, it becomes necessary to explore the relationship among accent, intelligibility and comprehensibility. According to Nelson (1992, p. 63 cited in Derwing & Munro, 1997), intelligibility can be definite as "the apprehension of the message in the sense intended by the speaker" (p. 2). Comprehensibility is definite by Derwing & Munro (1997) as "speakers' perception of intelligibility. The judgments on a rating scale of how difficult or easy an utterance is to understand" (p. 2). In fact, these judgements can become easily influenced by prejudices. Kang and Rubin (2009) conducted a study about linguistic stereotyping. They recorded an American English native speaker giving a lecture about galaxies. A group of native listeners were led to believe he was a prestigious native lecturer while another group of native listeners were led to believe he was a stigmatized foreign non-native lecturer. The results showed a decrement in listening comprehension among the listeners who thought the lecturer was a foreigner.

To establish the relationship among these three dimensions Derwing & Munro carried out a study in 1997. Forty-eight speakers of all ages, from an intermediate to a high intermediate level of English and with Cantonese, Japanese Polish or Spanish as first language were recorded telling a story presented with a series of cartoons. Two recordings were made of each story with different utterances. Twenty-six native listeners, aged 18-48 and undergraduate, had to transcribe the utterances and make a scaled judgement of accentedness, in which 1 meant 'no accent' and 9 meant 'strong accent'. Listeners listened to the utterances again but in a different order and judged comprehensibility using a scale, in which 1 meant 'easy' and 9 meant 'difficult'. They also had to identify the accent and comment on what feature made some people more difficult to understand. Finally, listeners filled in a questionnaire about familiarity with other languages.

Results showed that the three dimensions, accent, intelligibility and comprehensibility, were related but not equivalent. In fact, although some features of accent were highly salient, they did not necessarily interfere with intelligibility (p. 11). However, some fully intelligible accented speeches required additional effort or processing (p. 12). This additional effort is perceived by a number of listeners as that heavily accented speech is delivered at a faster rate than less accented speech, even though, in reality, both speeches are delivered at the same rate. The study also concluded that there was a correlation between familiarity and intelligibility. Thus, familiarity with a particular language facilitates comprehension (p. 14-15).

2.4. Research on comprehension

Research in the field of pronunciation is fairly recent. In fact, Morley (1991, cited in Grant, 2014, p. 4) wrote a watershed piece and cited less than ten empirical studies. According to Grant (2014, p. 4), research on pronunciation has not taken off until the 21st century and, even during this period, Deng et al. (2009, cited in Grant, 2014, p. 4) claim that only a very small proportion of the articles that appear in leading scholarly journals are pronunciation-related.

This lack of literature might be due to the fact that in the late seventies the traditional pronunciation instruction, based on the goal of achieving a native-like speech, became obsolete, due to the switch to communicative language teaching and emphasis on communication effectiveness rather than native-like proficiency (Grant, 2014, p. 4-5). For almost twenty years pronunciation was almost totally neglected, as it was thought that learners would pick it by exposure (Morley, 1991 cited in Derwing & Munro, 1997, p. 2).

Most of the recent studies (e. g. Derwing & Munro, 1997; Munro & Derwing, 2006; Kang & Rubin, 2009; Kang, Moran & Thomson 2018; Munro & Derwing, 1995; Ockey & French, 2016) focus on foreign accentedness and its intelligibility. According to Kang, Moran and Thomson (2018), there are around 505 million non-native English speakers. That is, English speakers, native and non-native, are exposed to a number of accents in their everyday interactions. In fact, the majority of the interactions in English occur among non-native speakers (Jenkins, 2000, cited in Grant, 2014, p. 12). Therefore, voices have arisen asking for the inclusion of a more realistic representation of the English speaking contexts in high stakes tests, such as the TOEFL iBT. However, this incorporation has proved more controversial than expected as it is impossible to include all accents, which could be unfavourable for test takers who are not familiar with the accents used (Ockey & French, 2016, p. 693-694).

According to Kang, Moran and Thomson (2018, p. 7), there are different factors that influence listener's comprehension. Different studies claim a shared L1 benefit. Bent and Bradlow (2003, cited in Kang, Moran & Thomson, 2018, p. 6) coined the term 'Interlanguage Speech Intelligibility Benefit' (ISIB). Listeners may better understand English speakers with the same L1 as them because of shared acoustic-phonetic features. However, Kang, Moran and Thomson (2018) found little evidence of this advantage among highly comprehensible speakers.

Actually, strength of accent is another factor. The strength of accent is defined by Ockey and French (2016) as "the degree to which it [an accent] is judged to be different than the local variety, and how it is perceived to impact the comprehension of users of the local variety" (p. 695). In their study, 21,726 TOEFL iBT test takers listened to a monologic lecture produced by different English native speakers (1 American English speaker, 4 British English speakers and 4 Australian English speakers) with different degrees of strength of accent, and had to answer six comprehension questions. Results showed that strength of accent is negatively correlated with test scores.

Comprehension can also be affected by the English proficiency level of listeners and their knowledge of the topic. Harding (2011, cited in Kang, Moran & Thomson, 2018, p. 10) states that low proficiency listeners rely on phonological features to a greater extent than high proficiency listeners. As a result, they tend to rate accented speakers as less comprehensible. Regarding conversation topics, Grant (2014, p. 11) exemplifies that she is more able to understand her non-native students due to her exposure as a teacher than her husband until the topic of the conversation shifts to the field of expertise that her husband and her students share.

Last but not least, familiarity of the target accent has been largely researched to affect comprehension. Several studies (e. g. Adank, Evans, Stuart-Smith & Scotti, 2009; Kang, Moran & Thomson, 2018; Munro & Derwing, 1995; Ockey & French, 2016) found that participants' scores were lower when the accent was unfamiliar to the listeners. For instance, Munro and Derwing (1995) conducted a study in which 20 native speakers of English had to determine if a series of short sentences, uttered by either native or non-native speakers, were true or false. Results showed that native speakers made more mistakes with sentences uttered by non-native speakers due to their unfamiliarity with the accent. Moreover, results showed that those sentences took longer to verify. This last finding is in line with other studies (Adank, Evans, Stuart-Smith & Scotti, 2009; Adank & McQueen, 2009; Floccia, Goslin, Girard & Konopczynski, 2006).

However, processing time can be addressed through exposure. According to Clarke and Garrett (2004, cited in Adank & McQueen, 2007, p. 1), initial processing delay becomes smaller after exposing listeners to 2 to 4 sentences uttered in the unfamiliar accent. Nonetheless, Adank & McQueen (2007) did not find any effect of short-term exposure. Floccia, Goslin, Girard and Konopczynski (2006) found that much more exposure was needed to adapt to an unfamiliar accent. The reason may be found in the number of speakers used in each experiment; whereas Clarke and Garrett used only one speaker, Floccia et al. used multiple speakers. Finally, Adank, Evans, Stuart-Smith and Scotti (2009) found that long-term exposure reduced processing time. In their study, a group of listeners from Glasgow, who were familiar with Glaswegian English and Southern Standard English – due to the media -, and a group of listeners from Southern England, who were only familiar with Southern Standard English, were asked to verify some true and false sentences. Results showed that speakers from Southern England made more mistakes and needed more time to process sentences uttered in Glaswegian English while listeners from Glasgow obtained similar scores with both accents.

Gaining familiarity with different accents or speakers and improving learner's sound perception has also proven to be possible using High Variability Phonetic Training (HVPT). Through exposure to different contrasts, adult learners have been able to improve their perception and/or production. This is what Thomson (2019) found by analysing 32 different studies carried out using this technology.

As it could have been deduced by Adank, Evans, Stuart-Smith and Scotti (2009) study, all these theories can be applied to native accents. According to Floccia, Goslin, Girard and Konopczynski (2006), "mechanisms underlying regional accent processing would simply be attenuated versions of those activated during foreign accent processing"

(p. 1277). That is, accents can be ranked on a perceptual scale according to their acoustic distance. Foreign accents would be placed on the opposed end to native speech whereas native accents would be placed in between (Clarke & Garrett, 2004, cited in Floccia, Goslin, Girard and Konopczynski, 2006, p. 1277).

Most of the few existing studies (e. g. Adank & McQueen, 2007; Adank, Evans, Stuart-Smith and Scotti, 2009; Floccia, Goslin, Girard and Konopczynski, 2006) that analyse the relationship between native accents and their intelligibility, focus on native listeners. One of the few studies that focused on foreign students of English and their ability to understand native accents was Çekiç's (2009) study, which investigated the role of accent found in ELT materials in relation to academic success. Two groups of 20 EFL students with Turkish L1 from two different elementary classes at Selçuk University Prep-school took a listening pre-test and a post-test in American English and in British English. In between a group of students studied for 30 hours with materials in American English whereas the other group of students studied for 30 hours with the same materials in the British English version. Results showed that the group of students who used the American English materials improved their listening skills to a greater extent.

Although Çekiç study is close to this one regarding listeners, speakers and methodology, no study could be found that specifically addressed the issue of accelerating the comprehension process by the exposure to different varieties of native accents. However, this idea would be in line with the 'Exemplar-based model', which claims that human brain stores different versions of the same uttered word in the same way as a library and tries to establish connections between each new input and the information stored (Goldinge, 1996; Johnson, 1997; Klatt, 1981; Pisoni, 1997, cited in Floccia, Goslin, Girard & Konopczynski, 2006, p. 1276).

This study aims to search for a relationship between the exposure to an unfamiliar accent and the improvement of students' listening skills in a familiar accent. The research questions that guided this study were as follows: (1) To analyse the impact of the exposure to Glasgow Standard English on secondary students' listening skills. (2) To determine whether the improvement in secondary students' listening skills is related to the exposure to Glasgow Standard English. (3) To determine whether the exposure to Glasgow Standard English accelerates secondary students' comprehension process.

3. METHODOLOGY

3.1. General methodology

According to the nature of the investigation, this study needs to work with real data and can be replicated. It also assumes a stable reality. The investigator is not actively involved in the process and assumes an external and objective point of view. All these features match a quantitative methodology (Blaxter, Hughes & Tight, 2008, p. 79). Moreover, the study aims to be a didactics innovation with an intervention in the classroom. According to Ortiz (2019) “las investigaciones que no tienen aplicación posible en el ámbito educativo son estériles y, sensu stricto, no pueden considerarse investigaciones en didáctica de la lengua y la literatura” (p. 156).

In line with the nature and the methodology of the study, the best technique to carry out this investigation is the experimental approach. That is to say, a relationship between a dependent variable, which is the exposure to a certain unfamiliar accent, and an independent variable, which is the improvement of listening skills in a familiar accent, aims to be established. The independent variable is manipulated under controlled and definite conditions (Bowling, 2002, cited in Baxter, Hughes & Tight, 2008, p. 88). However, it must be taken into account that, in a social context, it is impossible to control all the variables and to isolate a single variable (Baxter, Hughes & Tight, 2008, p. 90).

In this technique, two groups are established. The first one, namely the control group, is not exposed to the intervention. The second one, namely the experimental group, is exposed to it (Bowling, 2002, cited in Baxter, Hughes & Tight, 2008, p. 88). In this case, the experimental group (4th of ESO B) is exposed to tests in the unfamiliar Glasgow Standard English, while the control group (4th of ESO A) is exposed to the same tests but in the familiar General British. As it can be observed, the participants in each group are not randomly selected. This means that the study has a quasi-experimental nature (Creswell, 2015, cited in Benitez-Correa et al., 2019, p. 230).

As can be seen in Table 1 below, both groups are exposed to a pre-test in the familiar accent in order to establish their initial levels of comprehension and a post-test in the familiar accent, as well, to identify any variations as a result of the intervention (Ortiz, 2019, p. 150). This is similar to the method used by Cekiç (2009).

Table 1. Design of the study with the English variety for each group in each phase of the study

	Pre-test	Intervention phase (Test 2, 3, 4)	Post-test
Control Group	Familiar accent (GB)	Familiar accent (GB)	Familiar accent (GB)
Experimental Group	Familiar accent (GB)	Unfamiliar accent (GSE)	Familiar accent (GB)

Note: GB = General British, GSE = Glasgow Standard English

3.2. Participants

Listeners were students of 4th of ESO, that is, teenagers between 15 and 16 years old, from the Vescomtat de Cabrera high school in Hostalric (Girona – Catalonia). Group A, with 25 students (14 males and 11 females), was appointed the control group. Group B, with 24 students (7 males and 17 females), was appointed the experimental group. Both groups were chosen because they were composed of the students with a pre-intermediate level. However, it must be admitted that the level of English in each class was heterogeneous, with some students who had already taken the PET the previous year and a few students who did not reach that level. All the students were native Catalan and Spanish speakers and reported normal hearing. Regarding the familiarity with GSE within the experimental group, it could be stated through an informal chat after the experiment, that only one student was familiar with Glasgow accent because her language school teacher was from Glasgow. Two other students reported having spent 4 days in Edinburgh.

3.3. Materials

3.3.1. Recordings

General British (GB) recordings were directly taken from the Cambridge B1 Preliminary English Test (PET), as the speakers in the original recordings already spoke in GB. That means that sound and recording quality had been previously tested and optimised. Concerning Glasgow Standard English recordings for tests 2, 3 and 4, a native Glaswegian speaker was recruited. The speaker was a female in her fifties. She had been an English teacher for more than 25 years and a Cambridge speaking examiner for the last 10 years, which meant that she was familiarised with the PET exam and, what was more important, the speaking rate used in the recordings for the listening section. She had been living in Catalonia for the last 15 years. The speaker recorded herself reading the script and sent the audio files to the author. Then, the files were cleaned from noise and the quality was enhanced with the programme Ableton Live (2021). Finally, the recording was edited, using the original recording for the instructions part and just changing the part of the monologue for the GSE version. Nonetheless, the sound

quality of the GSE recordings differed from the sound quality of the GB recordings, having a lower quality sound.

3.3.2. Tests

Five different listening tests were used to conduct this study; a pre-test, a post-test and three intervention tests. The length of the intervention phase was restricted by the amount of available time during the author's placement period. The tests were exactly the same for each group (control group and experimental group), only the accent changed, because, according to Ockey and French (2016, p. 710), using the same text ensures that other dialectal features, such as vocabulary and grammar, are controlled and cannot impact on the test scores. They were taken from the Cambridge B1 Preliminary English Test (PET) part three because by using published tests, it is ensured that they had been tested and, thus, any errors had been addressed (Ockey & French, 2006, p. 702). Part three of the PET exam is a gap fill exercise. Participants listen to a monologue and have to complete six gaps with a maximum of three words. This part was selected because there was only one speaker, thus, it was easier to record a version in GSE. Moreover, as it was a gap fill exercise students had to write the answer and could not select an answer randomly, like in a multiple choice exercise. Therefore, results would be more accurate. Finally, the topics of the tests are related to daily life. So, listeners are familiar to them and there are no comprehension issues due to a lack of knowledge of the topic.

3.4. Procedure

Participants listened to the five tests in five different sessions. Both groups, the control group (4th of ESO A) and the experimental group (4th of ESO B), listened to the pre-test in the familiar accent (GE). Then, during the intervention phase, the control group listened to tests 2, 3 and 4 in the familiar accent (GE) whereas the experimental group listened to tests 2, 3 and 4 in the unfamiliar accent (GSE). Finally, both groups listened to the post-test in the familiar accent (GE).

3.5. Data collection instruments

Primarily, data was collected from the tests. Listeners' responses were coded manually as correct or incorrect. Listeners received 1 point for each correct response, 0 points for each incorrect response, and 0.5 for partially correct answers, that is, answers that required, for instance, an adjective and a noun that only contained one of the two words. To code a response as correct spelling was not taken into account. Responses were assigned 1 point as long as the word could be deduced. In conclusion, each test could get a maximum score of 6 and a minimum score of 0.

In order to analyse all the scores obtained in the test and compare students, groups, and their progress, a grid of raw data was created. Each student was assigned to a code to guarantee their anonymity. Then, next to the code the following data was added. First of all, it was necessary to identify if the student belonged to the control group or the experimental group. Therefore, the codes '1' for the control group and '2' for the experimental group were used. Secondly, each score obtained in the five tests, was also included. Finally, there was a section after each test score, named 'observations', to add any relevant information to the study or incidences that may have occurred during the tests, which could have affected the results.

3.6. Data analysis

To answer the questions that this study has formulated, the scores obtained in the two different groups, the control group and the experimental group, have to be compared. In addition, the evolution of each group also has to be analysed.

The *t*-test is the most commonly used test to determine and quantify association or independence between a quantitative variable and a categorical variable within two groups of data. This test is usually performed with sample sizes (*n*) bigger than 30 (Rubio & Berlanga, 2012). It can still be used with smaller *n* but the test can lose effectiveness. However, a series of conditions must be met; a normal distribution of the quantitative variable and a homogeneity of variance (Pardo & Ruiz, 2002; Rubio & Berlanga, 2012). In that case, non-parametric tests have to be carried out. According to that, the data obtained in this study were analysed as follows:

First of all, the scores obtained in each test by each student were transformed into a percentage, in order to being able to compare the results easily and apply the different statistic tests. Then, it was necessary to calculate the mean (*M*) of the pre-test, tests 2, 3 and 4, and the post-test for each group.

Secondly, the hypotheses were formulated. H_0 represented the hypothesis that there was no relation between the two variables; the exposure to unfamiliar GSE and the improvement of students' listening skills. H_1 represented the hypothesis that a certain degree of relation between the two variables existed.

To verify the distribution of the samples a Shapiro-Wilk test can be performed and the homogeneity of variance can be verified by performing a Fisher's exact test. In this case, there was no need to perform the Fisher's exact test, as the Shapiro-Wilk test already showed that the distribution of the quantitative variable was not normal. As a result, a parametric test, such as the *t*-test, could not be performed. Instead two non-

parametric tests were run. To compare the control group and the experimental group a Mann-Whitney U test, between subjects, was applied. The Wilcoxon test, within subjects, was performed in order to analyse the evolution of each group (Pardo & Ruiz, 2002). All these tests were carried out in Excel and with a level of statistical significance of $p \leq 0.05$, because this is the standard value in most of the studies in the area of social and human science (Rubio & Berlanga, 2012, p. 84).

4. RESULTS

This section aims to analyse and compare the listening scores obtained by the students in the different tests. First of all, a descriptive statistics was applied to the data to obtain a preliminary analysis. Then, some statistical tests were run in order to determine whether the differences observed were statistically significant.

Regarding group samples, seven students in the control group were excluded from the study, as they did not perform all the tests. In the experimental group, five students were also excluded for the same reason. As a result, the control group had a sample size of $n = 18$ and the experimental group had a sample size of $n = 19$.

4.1. Descriptive statistics

To analyse and compare the listening scores obtained by the students in the different tests, within a group and between groups, descriptive statistics is very useful. That is, calculating the mean for each test and group must be calculated. Transforming the means into a percentage is also helpful in terms of comparing different values. Figure 1 shows the evolution of these means for each group.

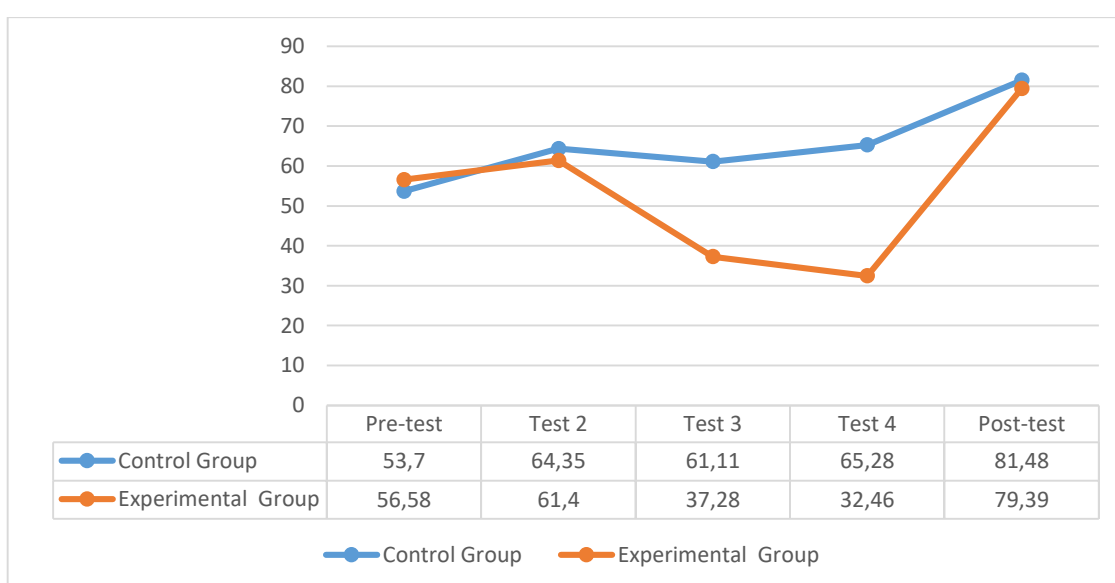


Figure 1. Comparison between groups of the evolution of the means obtained in each test of this study.

According to Figure 1, the control group obtained a slightly lower score (2.88 points) in the pre-test than the experimental group, which means that both groups were the same initially and, consequently, comparable. However, the control group experienced a steady increase during the intervention phase of this study. That is, the mean of test 2 ($M = 64.35$) was 10.65 points above the mean of the pre-test ($M = 53.70$). In turn, the mean of test 3 ($M = 61.11$) was slightly below the mean of test 2 ($M = 64.35$) by 3.24 points, but it was still above the mean of the pre-test ($M = 53.70$). Finally, the mean of test 4 ($M = 65.28$) was above the mean of test 3 ($M = 61.11$) by 4.17 points and above the mean of test 2 ($M = 61.35$) by 0.93 points. By contrast, the experimental group experienced a regression during the intervention phase. Except for test 2, where the mean ($M = 61.40$) was slightly above the mean of the pre-test ($M = 56.58$) by 4.82 points, the means of the rest of the tests in the intervention phase were well below the two means previously mentioned. The mean of test 3 ($M = 37.28$) was 24.12 points below the mean of test 2 ($M = 61.40$) and 19.30 points below the mean of the pre-test ($M = 56.58$). At the same time, the mean of test 4 ($M = 32.46$) was 28.64 points below the mean of test 2 ($M = 61.40$) and 24.12 points below the mean of the pre-test ($M = 56.58$). After the intervention phase and although both groups experienced an increase in comparison with the pre-test, the control group obtained a slightly higher score (2.09 points) in the post-test than the experimental group. Again, this difference can be regarded as negligible. Thus, it can be stated that both groups improved to the same extent.

4.2. Test of normality

Although some differences between the two groups and within groups in the test means have been found through the descriptive statistics, it is not clear whether these differences are statistically significant. Therefore, some statistical tests must be run. There are parametric and non-parametric tests. To know which ones must be applied to this data, a normality test must be performed first.

As it can be observed in Table 2, the Shapiro-Wilk test of normality at $\alpha = .05$ indicated that, except for the pre-test in the control group ($W_c = 0.94$ and $W_t = 0.897$), the rest of the data collections did not follow a normal distribution, as the W calculated was lower than the requested W ($W_c < W_t$), according to Shapiro-Wilk's tables. As a result, a parametric test could not be run and non-parametric tests had to be performed instead.

Table 2. Results of the test of normality (Shapiro-Wilk) applied to the data obtained in the pre-test and post-test of both groups

	N	M	W _c	W _t
Pre-test control group	18	53.70	0.94	0.897
Post-test control group	18	81.48	0.843	0.897
Pre-test experimental group	19	56.58	0.887	0.901
Post-test experimental group	19	79.39	0.756	0.901

Note: *p<.05

4.3. Statistical analysis within groups

Comparing the means of the pre-test and the post-test for each group, Figure 1 clearly showed that both groups (the control group in 27.78 points and the experimental group in 22.81 points) experienced an increase in their means throughout the intervention of this study. In order to determine whether this difference was statistically significant, a non-parametric Wilcoxon test was run for each group. According to the results obtained (see Table 3), both groups showed a statistically significant improvement, as at $\alpha = .05$ the T calculated was lower than the critical value ($T < V_c$), $28.50 < 40$ and $4 < 46$.

Table 3. Comparison of listening skills development within groups (Wilcoxon Test)

	N	T+	T-	T	V _c
Control Group	18	28.50	57	28.50	40
Experimental Group	19	4	87	4	46

Note: *p<.05

4.4. Statistical analysis between groups

Comparing the two groups, the Mann-Whitney U tests (see table 4) showed that, although the mean of the experimental group was slightly above the mean of the control group in the pre-test, this difference was not statistically significant, as at $\alpha = .05$ the Z calculated was lower than the critical point ($Z_c < Z_\alpha$), $-0.152 < 1.96$. Regarding the post-test, although the mean of the control group was slightly above the mean of the experimental group, again there was not enough evidence that the difference of the students' listening scores was statistically significant, as at $\alpha = .05$ the Z calculated was lower than the critical point ($Z_c < Z_\alpha$), $-0.213 < 1.96$.

Table 4. Comparison of listening skills between groups (Mann-Whitney U test)

	U ₁	U ₂	U	Z _c	Z _α
Pre-tests	177	166	166	-0.152	1.96
Post-tests	178	164	164	-0.213	1.96

Note: *p<.05

5. DISCUSSION

This study aimed to analyse the impact of the exposure to the unfamiliar GSE and to determine whether this exposure improved and accelerated secondary students' listening skills. Results showed that there was a statistically significant improvement in listening comprehension for both groups. However, the difference between groups was not found to be statistically significant.

5.1. Impact of the exposure to the unfamiliar GSE

According to Figure 1 and the descriptive analysis in the results sections, it can be said that the experimental group experienced a regression during the intervention phase. Both groups were comparable initially, so initial differences between groups in listening comprehension cannot account for the drop in scores in the experimental group. Hence, the exposure to the unfamiliar GSE had an impact on students' listening skills. These results in the experimental group suggest that speaker's accent can effect listening comprehension (Ockey & French, 2016, p. 3). In fact, they coincide with the theory of familiarity. On the one hand, it can be concluded that there is a correlation between familiarity and intelligibility (Gass & Varonis, 1984, cited in Derwing & Munro, 1997, p. 14). According to different researchers (e. g. Kang, Moran & Thomson, 2018; Ockey & French, 2016), the more exposure to an accent, the more accurate the comprehension. None of the students, except for one student who reported that her English teacher was from Glasgow and two students who reported having spent four days in Scotland, had had no contact with that specific accent. Therefore, it was a newly and completely unfamiliar accent to them. As a result, the students' performance in this group, throughout the intervention phase, was lower than the students' performance in the control group (Munro & Derwing, 1995; Adank, Evans, Stuart-Smith & Scotti, 2009).

Nonetheless, the nature of the test, using a monologue and a gap fill exercise, does not clarify whether the decrease in the students' performance was due to a lack of comprehension or the need of more time to process the input. The same happened in Munro & Derwing (1995) study, where a speech without pauses was used as stimulus. Mistakes could not be attributed to a comprehension problem or to a lack of time. According to different authors (Munro & Derwing, 1995; Adank, Evans, Stuart-Smith & Scotti, 2009; Adank & McQueen, 2009; Floccia, Goslin, Girard & Konopczynski, 2006), not only do listeners make more mistakes but the information takes longer to process, when listening to an unfamiliar accent. In order to verify the exact cause of this low performance, a test with a nonsense sentence task, because correctly transcribing implies understanding all the phonological variables, or a test with a verifying sentence

task, because time processing can be measured, would be more appropriate (Kang, Thomson & Moran, 2018).

In any case, whether the cause of the poor performance was unintelligibility or processing time, exposure to an unfamiliar accent is positively correlated to comprehension and negatively correlated to processing time (Ockey & French, 2016). In fact, according to Clarke & Garrett, 2004, cited in Adank & McQueen, 2007, p. 1), adaptation to a new accent only needs an exposure of 2 to 4 sentences uttered in this new accent. However, the means of the experimental group in test 3 (M = 37.28) and test 4 (32.46) showed no signs of recovery. That is, no effect of short-term exposure was found. This finding is in line with the study of Adank & McQueen (2007). According to Floccia, Goslin, Girard & Konopczynski (2006, p. 1289), initial processing cost is more significant in longer sentences and continuous speech. They estimated that 32 sentences were needed at least. Nonetheless, this adaptation to Glasgow Standard English did not occur in this study because the monologues had an average of 25 sentences.

The reason for this lack of adaptation could be attributed to multiple factors and, therefore, more research would be needed in the field. It could be the result of one or some limitations to this study.

5.2. Listening skills improvement due to the exposure to the unfamiliar GSE

The scores obtained by the experimental group in the post-test showed that the intervention had had a positive effect on the listening skills of the students. The mean in the post-test (M = 79.39) was 22.81 point above the mean obtained in the pre-test (M = 56.58). Moreover, the non-parametric Wilcoxon test showed a statistically significant improvement. Hence, the exposure to GSE had a positive effect on students' listening skills. However, the control group also experienced a statistically significant improvement, as the mean in the post-test (M = 81.48) was 27.78 points above the mean obtained in the pre-test (M = 53.70). This suggests that the improvement of the students' listening skills was not due to the intervention because the control group was only exposed to GB and improved their listening skills in the same way.

5.3. Acceleration of the listening skills improvement due to the exposure to the unfamiliar GSE

First of all, it can be stated that both groups started this experiment with similar listening skills. Their means (control group $M = 53.70$ and experimental group $M = 56.58$) only differed in 2.88 points, which was found not to be statistically significant.

Comparing the evolution of the listening comprehension of the experimental group to that of the control group throughout the study, it can be stated that, although the students of the experimental group increased their performance, there was a greater increase within the students of the control group. The mean of the post-test of the control group ($M = 81.48$) was 27.78 points above the mean of the pre-test ($M = 53.70$), whereas the mean of the post-test of the experimental group ($M = 79.39$) was only 22.81 points above the mean of the pre-test ($M = 56.58$). However, the results of the Mann-Whitney U test, to determine the significance of this difference, showed that there were no evidence of a statistically significant difference in students' listening skills at the end of the intervention. That is, although the exposure to unfamiliar GSE improved students' listening skills, it did not accelerate secondary students' comprehension process and both groups ended with a similar listening level. Nonetheless, it can be stated that this exposure slightly decelerated this process, as students in the control group experienced a slightly greater improvement of their listening skills. That is, no evidence of the 'Exemplar-based model' was found. It also could not be demonstrated Thomson's (2011) theory that says that "exposing learners to high variability input will allow them to begin recognizing the difference between meaningful phonetic cues associated with particular sound categories, and cues that are irrelevant to category identity" (p. 749).

5.4. Limitations of the study

This study was carefully designed by using high stakes tests that had been previously tested and by using exactly the same tests for both groups to isolate the accent variable. However, there were some limitations due to the amount of time and resources available.

First of all, it must be taken into account that the students' level of English within each group differed greatly. Some students obtained 0 or 1 point of 6 possible points whereas other students, who had taken the B1 Preliminary English Test (PET) the previous school year, obtained 5 or 6 points. This can be seen as a limitation to this study, as more homogeneous groups are a more desirable condition in order to analyse the effects of accentedness speech, because results can vary depending on listeners' proficiency level. According to Kang, Moran and Thomson (2018, p. 7), lower proficiency listeners depend on phonological features to a greater extent in order to achieve

comprehension. As a result, more similar studies should be carried out with listeners with different proficiency levels.

Ideally sample sizes should be larger and tests should be performed in more locations in order to obtain more reliable results that could be representative. All the participants in this study were teenagers aged 15-16 from the same school. More studies should be carried out with different ages, as results can differ. Finally, participants did not take part in this study willingly. So, some students may not have answered the questions according to their listening skills. This may have altered the results of some tests and, consequently, the means.

In terms of the recordings, it must be admitted that there were some technical limitations in recording the GSE tests. Although the sound was filtered, the quality was still poorer than the quality of the original recording. That may have had a negative effect on the experimental group. It is also very difficult to determine whether listeners are becoming familiar to an accent using only one speaker. Listeners can get used to the speaker and not transfer this familiarity to other speakers of the same unfamiliar accent. The degree of accent of the speaker can also effect comprehension (Kang, Moran & Thomson, 2018, p. 6-7) and is negatively correlated to test scores (Ockey & French, 2016). However, it must be taken into account that the Glaswegian speaker used in this test had been EFL teacher for many years, which means that she may have adapted her accent to make it easier for her students to understand her. Therefore, it is highly unlikely that she held a high degree of accent, but no verifications could be made before recording the tests

Meanwhile, it has to be kept in mind that the exposure to the unfamiliar accent, with only three interventions, may not have been enough to improve accuracy and processing time (Floccia, Goslin, Girard & Konopczynski, 2006, p. 1289). Using only one accent variety may not also have been enough to accelerate the general comprehension process of the English language.

Finally, it must be born in mind that this study was performed under test conditions that differ from a real context. In fact, only phonology was analysed. As a result, findings may not apply to natural conditions, where other characteristics of conversational speech play an important role and can also difficulty and interfere with the comprehension of the message.

6. CONCLUSION

This study is a humble contribution to a still emerging research field in pronunciation, and especially to accent comprehension. The aim of the study was to determine whether the exposure to an unfamiliar accent, particularly Glasgow Standard English, improved students' listening skills and accelerated the process. The intervention put into practice in this study with an unfamiliar accent has proven to be effective in improving participants' listening skills but not to a greater extent than a familiar General British. In fact, the incorporation of an unfamiliar accent has shown no proof of accelerating this progress.

Moreover, in line with other studies on regional accents that contradict Clarke and Garrett's (2004, cited in Adank & McQueen, 2007, p. 1) findings, no short-term exposure effect was found, as participants did not improve their listening skills with the unfamiliar accent throughout the intervention. According to Clarke and Garrett (2004, cited in Adank & McQueen, 2007, p. 1), 2 to 4 sentences would be enough to reduce initial processing delay. However, Floccia, Goslin, Girard and Konopczynski (2006, p. 1289) found that 32 sentences were needed at least.

It must be said, though, that most studies in this field focus on non-native accents, as an answer to high stakes test needs. Another big portion of the studies focus on native speakers' comprehension. There is still much research to be done in the field of regional accents and their comprehension by EFL learners.

In conclusion, the mechanisms of transferring listeners' comprehension abilities from one accent to another and the exposure needed to get used to an unfamiliar accent in order to enhance comprehension and reduce processing time are yet to be understood. Therefore, much more research is needed in this field. In order to study the effects of the exposure to unfamiliar accents, studies with different lengths of exposures and using different testing formats, such as nonsense sentences or true and false verification sentences, can be carried out. Moreover, it is necessary to implement studies with more unfamiliar native and non-native accents involved, to study the effects of incorporating a variety of accents to the general listening comprehension skills and determine whether incorporating a variety of accents improves students' listening skills to a greater extent. Finally, these studies should use more than one speaker with the same accent to analyse whether there is an adaptation to the accent or to the speaker.

The findings in this field could be beneficial for all those EFL teachers interested in enhancing their students' listening skills. There are multiple native and non-native English accents and most of the interactions in English are held between non-native speakers. Therefore, future English speakers will need to comprehend a number of

accents. Due to the amount of accents, it is impossible to include all of them in the EFL course. As a result, research on this field could shed light on what accents should be incorporated in the EFL course for students to comprehend the greatest number of accents. These findings could completely change the way listening comprehension is taught.

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