ISSN 0214-0489

SPANISH TEENAGER'S PRONUNCIATION OF ENGLISH AS A SECOND LANGUAGE

LA PRONUNCIACIÓN DEL INGLÉS COMO SEGUNDA LENGUA EN ADOLESCENTES ESPAÑOLES

Celia Veiga-Pérez
Universidad de Vigo, España

Proceso editorial
Recibido: 27/11/2017
Aceptado: 1/12/2017
Publicado: 5/12/2017
Contacto
Celia Veiga-Pérez
cveigaperez@gmail.com

CÓMO CITAR ESTE TRABAJO | HOW TO CITE THIS PAPER

Veiga-Pérez, C. (2017). Spanish Teenager's Pronunciation of English as a Second Language. *Revista de Educación de la Universidad de Granada, 24:* 273-292.

SPANISH TEENAGER'S PRONUNCIATION OF ENGLISH AS A SECOND LANGUAGE

Abstract

Native Spanish speakers tend to show difficulties when pronouncing English phonemes (Alcaraz & Moody, 1984). Most of these difficulties are due to cross-linguistic influence, but there is also a debate on whether age is a crucial factor (Muñoz 2010; Bongaers, Planken & Schils 1995). The aim of my study is to explore the difficulty experienced by Spanish speakers in the acquisition of the pronunciation of English as a second language, attending to linguistic and extralinguistic factors. The methodology is two-fold. First, I will examine the difficulty in differentiating four sets of sounds: the vowel phonemes /æ/-/ʌ/ and /ɪ/-/iː/, and the consonant phonemes /s/-/z/ and /d/-/ð/. Second, I will compare the acquisition of the selected phonemes in speaking tasks versus listening tasks. The subjects in my study are 20 Spanish-native speakers with a mean age of 15.2 years-old and who have been studying English for 12 years. The students are in their fourth year of high school (A2 level), located in the urban city of Vigo (Spain). The data are based on four skill tasks (two listening, two speaking) and a biographical survey. The results suggest that most of the inaccuracies observed between the pairs of phonemes examined are due to the influence of the students' first language. The position of the phoneme in the word also seems to have an effect on the students' production and perception. Another conditioning factor seems to be the (little) time devoted to teaching pronunciation skills in the classroom. This leads me to the general conclusion that more pronunciation exercises are needed and that these are likely to yield better production and perception skills.

Keywords: English Pronunciation; Spanish native speakers; Teenagers; Second Language Acquisition.

SPANISH TEENAGER'S LA PRONUNCIACIÓN DEL INGLÉS COMO SEGUNDA LENGUA EN ADOLESCENTES ESPAÑOLES

Resumen

Los hablantes españoles tienden a mostrar dificultades al pronunciar fonemas ingleses (Alcaraz & Moody 1984). La mayoría de dichas dificultades se basan en una influencia inter-lingüística, pero también existe debate sobre si la edad es un factor crucial (Muñoz 2010; Bongaers, Planken & Schils 1995). El objetivo de este estudio es analizar las dificultades que experimentan los hablantes de español a la hora de pronunciar el inglés como segunda lengua, prestando atención a factores lingüísticos y extralingüísticos. La metodología adopta dos perspectivas. Por una parte, me centraré en las posibles dificultades para diferenciar cuatro pares de sonidos: los fonemas vocálicos /æ/-/ʌ/ e /ɪ/-/iː/, y los fonemas consonánticos /s/-/z/ and /d/-/ð/. Por otra parte, contrastaré la adquisición de dichos sonidos en tareas de habla y de escucha. Los/as participantes en este estudio son 20 hablantes con lengua nativa español y con una media de edad de 15.2 años, quienes han estudiado inglés durante 12 años. El estudiantado está en su cuarto año de Educación Secundaria (nivel A2), en un colegio del área urbana de Vigo. Los datos se recogerán en cuatro actividades (dos de escucha y dos de habla) y una encuesta biográfica. Los resultados parecen indicar que la mayor parte de errores producidos al distinguir los fonemas se dan a

causa de la influencia de la primera lengua. La posición del fonema dentro de la palabra también parece tener relevancia. Otro factor condicionante parece ser el (poco) tiempo que se dedica en clase enseñando pronunciación. Esto me lleva a la conclusión general de que hacen falta más ejercicios de pronunciación en el aula y de que esta práctica ayudaría al alumnado a mejorar su habilidad de producción.

Palabras clave: Pronunciación de la lengua inglesa; Hablantes nativos de lengua española; Adolescentes; Adquisición de la Segunda Lengua.

PRONUNCIATION DIFFICULTIES FOR SPANISH SPEAKERS

Spanish speakers tend to show difficulties in the pronunciation of English, and it has often been claimed that these are partly related to cross-linguistic influence from their native language, L1 Spanish (Alcaraz & Moody, 1984). Firstly, the relationship between the writing and the reading systems in both languages is different: English is less phonological than Spanish, as there are 26 graphemes to represent 45 phonemes, while Spanish shows a greater correspondence between graphemes and phonemes (27 graphemes to represent 24 phonemes). Secondly, the number of phonemes is much greater in English than in Spanish; for example, in English there are 12 vocalic phonemes, while in Spanish there are only 5, and not all of those 5 are present in English. The same applies to consonants and diphthongs. There is thus a need for students to become familiar with all the different sounds which can be found in the English phonetic system in order to achieve a native-like pronunciation – it is unlikely that learners will acquire a good pronunciation without previous knowledge of these differences. Alcaraz & Moody (1984) explain that after the childhood period of acquisition the message that the listener receives is filtered by the brain, and if the sound is unknown the brain seeks another which is similar and which has already been assimilated. According to these scholars, the phonemes which are absent in Spanish speech will lead to problems, especially in distinguishing minimal pairs. Not pronouncing a phoneme exactly as it is in English will be an issue only if that mispronunciation results in a different phoneme. For example, the phoneme /z/, usually represented with the grapheme <s>, is difficult for a Spanish speaker because <s> in the Spanish system is usually voiceless; thus, if a Spanish speaker pronounces *eyes* as /ais/, s/he is actually pronouncing *ice*, which results in a different lexical item. The present study will focus on the pairs of phonemes which, according to Alcaraz & Moody (1984), bring more difficulties to Spanish speakers, namely the vocalic sounds /ɪ/–/iː/ and /æ/–/ʌ/; and the pairs of consonantal sounds /s/–/z/ and /d/–/ð/.

Regarding vocalic sounds, the phoneme /ɪ/ is an anterior, semi-closed, short vowel. In comparison with the Spanish /i/, the Spanish sound is closer and tenser, but the English /ɪ/ is similar to the production of the Spanish /i/ when it appears in an unstressed position (e.g. *último*). The phoneme /iː/ is an anterior, closed, long vowel. Spanish sounds similar when the stressed /i/ is accompanied by dental or palatal consonants (e.g. *castillo*). In the case of short and long sounds, Spanish speakers tend to pronounce these two vowels in the same way, marking the difference by simply giving a larger quantity to the long item, because in Spanish there is no difference in meaning between long and short – the Spanish speaker would not distinguish (a priori) the words *lick* (/ɪ/) and *leak* (/iː/). As regards the phoneme /æ/, it is an anterior, half-way semi-open and open, short vowel. In Spanish there is no similar vocalic sound. The phoneme /ʌ/ is a central, semi-open, short vowel. This phoneme is the most similar sound to the Spanish /a/, although the English vowel is shorter and more central than the Spanish vowel.

As for the selected consonant sounds, the consonantal differences between English and Spanish are also noticeable. The difficulties here lie between voiced and voiceless phonemes and with pairs of phonemes which are unfamiliar to Spanish speakers. In the pair /s/–/z/, the phoneme /s/ is an alveolar, fricative, voiceless consonant. This phoneme exists in Spanish, but in English it is tenser. The phoneme /z/ is an alveolar, fricative, voiced consonant. This phoneme does not exist in Spanish as an independent phoneme; nevertheless, it is present as an allophone when the /s/ precedes a voiced consonant (as in *mismo*). This pair of phonemes brings many difficulties to Spanish speakers, who would pronounce them both as the voiceless /s/, and this confusion could lead to misunderstandings. It is necessary to differentiate these phonemes, as they represent the plural, genitive and third person singular morphemes. For their part, in the pair /d/–/ð/, the phoneme /d/ is usually understood as the equivalent sound to Spanish *d*, but it is not, because English /d/ is alveolar and not dental – it is an alveolar, plosive, voiced consonant. The phoneme /ð/ is a dental, fricative, voiced consonant. This is closer to Spanish /d/ in the point of articulation. In the case of /d/ and /ð/, there seems to be a tendency to pronounce both phonemes in the same way, as a Spanish dental /d/, because both phonemes are allophones of Spanish /d/; thus, a Spanish speaker would pronounce the words *day* and *they* as /dei/.

After this introductory section, this paper is structured into three main parts. The next section discusses the (potential) effect of the age factor on L2 learners and to what extent adults can acquire the L2 pronunciation. This is followed by an overview of the multi-competence framework, which states that the pronunciation of the L2 does not need to be native-like. The remaining of the paper is devoted to the em-

pirical study, including the description of the methodology and participants under scrutiny, the presentation of the analysis, and the discussion of the main results. Conclusions are also drawn at the end.

THE EFFECTS OF AGE ON THE ACQUISITION OF L2 PRONUNCIATION

Age has been one of the most repeatedly investigated factors in Second Language Acquisition, in particular whether age plays a substantial influence on the acquisition of an L2 and the competence acquired in different skills, e.g. listening, reading, vocabulary, etc.. According to the Critical Period Hypothesis (henceforth CPH), there exists a period in life between ages 2 and 12 (puberty) after which language acquisition may be imperfect or incomplete (Lenneberg, 1967). Nowadays, it is believed that both an adult learner and a child are equally able to acquire some skills of a language. Although this has been demonstrated in previous studies (Krashen, Long & Scarcella, 1979; Oller & Nagato, 1974; Singleton, 1981), the general assumption is still that the younger a person starts learning a language, the better. However, Singleton & Lengyel (1995) prefer the equation 'The younger = the better in the long run', as it has been confirmed that adults outperform children at the beginning of the acquisition process, but are outperformed by children only later in the learning process.

There is a differentiation in the acquisition of the language skills. Although there is evidence of the capacity of adult learners to acquire high levels on grammar, syntax, and lexicon, it appears not to be the case with pronunciation, given that, according to Scovel (1969), acquiring grammar, syntax or lexicon does not require neuromotor involvement. This author assumes that there is only a 'critical period' as far as pronunciation is concerned, and that an adult learner cannot be accentless. The results of several studies conducted on immigrants with a different age of arrival to the country of their L2 seem to support Scovel's claim (see Asher & García, 1969; Oyama, 1976). Nonetheless, as Muñoz (2010) explains, these results can only apply to natural environment acquisition.

The acquisition of an L2 in an instructional environment appears to be in the shadow, although the studies by Muñoz (2010) and Bongaerts, Planken & Schils (1995) can shed some light on the matter. Muñoz set out the so-called 'Barcelona Age Factor Project', which rates the different levels of acquisition of children with different age of onset over several years. Children were examined with regard to their production and perception skills. The results showed that after 4 years of instruction there was no significant difference between the performance of the younger versus

the older learners. Muñoz (2010) concludes that the instructional learning setting is not similar to the naturalistic setting, and therefore the findings from these two settings should not be used to make generalisations. Muñoz's research proves that the long-term advantage of young starters, and their implicit learning capacities, are not found in the instructional setting, and this might be due to the fact that the instructed learners do not have access to the same quantity, or quality, of input to which immersed learners do have access in the L2 community. This lack of exposure would prevent children from benefiting from their superiority at implicit learning, as "implicit learning works slowly and requires many years of massive input and interaction, which only a total immersion program can provide" (Muñoz, 2010: 8-9).

Bongaerts, Planken & Schils (1995) studied "nativeness" in the pronunciation of English with several Dutch speakers. There were two groups of native speakers of Dutch who had to record themselves in four production tests. One of these groups consisted of 10 university students who were selected for the study because of their proficiency in spoken English. The subjects would be graded in a 1-to-5 scale (1 'very strong foreign accent', 5 'no foreign accent at all'). The mean grade for this group was 4.31. Thus, Bongaerts, Planken & Schils (1995) concluded that it is not impossible for a late learner of a second language to achieve a native-like accent. It is important to explain that the subjects of group 1 were students who received almost all their courses in the target language and who received explicit instruction on pronunciation.

Some conclusions can be drawn from the studies discussed so far. Firstly, in natural learning settings, younger learners have advantages in the long term when it comes to acquiring a native-like accent (Singleton & Lengyel, 1995). Secondly, in an instructional setting this advantage is not taken advantage of because of the (low) quantity, and sometimes (poor) quality, of the input (Muñoz, 2010). And thirdly, it is not impossible for an instructional learner (early or late) to achieve a proficient pronunciation in the target language, but the amount of input needs to be increased, and notions on pronunciation must be learned, as adults tend not to 'hear' the differences in pronunciation between two languages (Bongaerts, Planken & Schils, 1995).

PRONUNCIATION IN THE MULTI-COMPETENCE FRAMEWORK

The current trend in the multi-competence framework advocates that L2 users are not monolinguals of L2, and, therefore, still have the proper characteristics of the accent of the L1. The term *multi-competence* was coined by Cook (1991: 113) as ''the knowledge of two or more languages in one mind''. This framework shows that

much attention is drawn to the influence of L1, but not to the fact that the L2 also affects the speaker's L1 (Cook, 1995).

One of the premises in the multi-competence framework is that L2 users and native speakers are not, and will never be, similar, in the belief that they have different minds. The L2 user's knowledge of their L2 and L1 is not identical to the knowledge of a monolingual, as each language has an effect on the other. Taking into account Cook's definition of a native speaker as "a monolingual person who still speaks the language they learnt in childhood" (1999: 185), it would be hard to maintain the idea that the ultimate attainment of an L2 user should be to show native-like pronunciation.

Despite the above, most research considers an L2 user a failure if the user has not acquired native-like skills in the L2. The main marker of this 'failure' (and that which is easier to recognise) is pronunciation. The general view is that if an L2 user does not sound native-like, the user is not fully competent in the L2. But why should this be the case? Cook (1995) puts forward a different perspective, arguing that if bilinguals are not as native monolinguals, they do not have to sound native-like; they should sound as what they are: effective bilinguals. He advocates that accent is the least important aspect of proficiency in an L2, and that nothing is lost if an L2 user 'fails' in the attempt of acquiring a native-like accent. The pronunciation of an L2 user just needs to be accurate enough in order to avoid misunderstandings.

The main view nowadays is that the goal of an L2 learner should rather be to sound as native as possible, yet it has been proved that multilinguals are different individuals than natives (Cook, 1995). Cook & Singleton (2014) explain that L2 learners need to be assessed against successful L2 users, not against native speakers. There is thus a need to reconsider to what extent native-like pronunciation is necessary when judging someone's skills on their second language, and to set more realistic goals for L2 learners.

THE STUDY

This is a cross-sectional study conducted with 20 students who are native speakers of Spanish as L1 and who are studying English as an L2. As already explained in the introductory section, Spanish students of English tend to have difficulties producing and perceiving certain vocalic and consonant phonemes of the English language. Based on new empirical data, I will try to answer the following questions:

- Do Spanish students of English as an L2 tend to show difficulties in understanding and pronouncing the pairs of vowels /æ/–/ʌ/ and /ɪ/–/iː/?

- Do Spanish students of English as an L2 tend to show difficulties in understanding and pronouncing the pairs of consonants /s/–/z/ and /d/–/ð/?
- Do Spanish students of English as an L2 tend to show more difficulties in the receptive skill of listening or in the productive skill of speaking?

Subjects

The 20 subjects in the study are distributed as 12 female and 8 male. Their mean age is 15.2 years-old, and they have been studying English for 12 years, from the time when they were three years old. At the time of collecting the data for my research, the students were taking their fourth year of High School (A2 level) in a school located in the urban area of Vigo, north-west of Spain.

Materials

The data were compiled based on four tasks and a biographic survey. The survey provides us with necessary background on the participants' extralinguistic information and language history (gender, age, number of years studying English). The four tasks are divided into two skills: listening and speaking. All tasks are included in the Appendix of this paper.

Listening tasks

Task 1 is a minimal pair activity, which focuses on the vocalic phonemes /æ/–/ʌ/ and /ɪ/–/iː/. There are 12 minimal pairs (three for each phoneme), and students were asked to choose which word they could hear. The minimal pairs were randomly presented in order to avoid biasing their answers. Task 2 is also a minimal pair activity, which focuses on the consonant phonemes /s/–/z/ and /d/–/ð/. As in Task 1, there are 12 minimal pairs (3 for each phoneme), and they were randomly presented. The recordings were taken from exercises reported in Baker (2006).

Speaking tasks

Task 3 is a speaking activity which focuses on the same vocalic phonemes examined in Task 1, namely /æ/–/ʌ/ and /ɪ/–/iː/. There are 12 words (three words for each phoneme), and students were asked to utter them. Task 4 is also a speaking activity which focuses on the same consonant phonemes analysed in Task 2, /s/–/z/ and /d/–/ð/. As in Task 3, students were presented with 12 words (three for each phoneme) and were asked to utter them. In Tasks 3 and 4 the selected words were

randomly presented to the students, too, in order to avoid having three words of the same phoneme in a row.

Procedure

A pilot study was carried out with three subjects to ensure that the tasks were suitable. After that, the data were collected over two days, with a week apart from the first and the second date. Both speaking and listening tests were performed in the time slot of the class on the 'English' module. On the first day students were explained the instructions of the study, they were asked to fulfil the background survey and to carry out the listening test. This lasted 10 minutes.

The second stage involved the speaking test. On the first day there was only time for six students to be recorded before the English class was finished. The other 14 students carried out the speaking test on the following week. Each student, either day, was taken individually to a separate room. For the speaking tasks, students were given 24 cards with one word in each, so that each word was selected to guide the student to produce a certain phoneme. They were asked to read the cards one by one, slowly, to give me time to write comments between one word and the next, and to be able to obtain a clear recording. Students were recorded with a laptop, and each test lasted less than 5 minutes per student.

Data results

This section is devoted to the results of each task in turn. Tables 1 to 4 show the data from Tasks 1 to 4, respectively, that is: listening for vowels, listening for consonants, speaking for vowels, and speaking for consonants. Percentages are given by the side of raw figures in parentheses.

Listening tasks

Table 1 shows a high percentage of accuracy in identifying the vowel sound /æ/: 75% of target-like /æ/ in *cap*, and as many as 95% in both *ban* and *hat*. The sound /ʌ/ also presents high percentages, as between 85% and 90% of the students identified the sound adequately in *bug/uncle* and *truck*, respectively. However, lower percentages are found regarding the sound /ɪ/, just within the 50%-60% range; for instance, only 50% of the students perceived the item *chicks* with a short sound. In contrast, students performed better regarding the long counterpart /iː/, with 80%-85% of the participants identifying the three target-like items accurately.

Table 1. Results for Task 1: Listening, vowel phonemes (percentages and raw figures).

Phoneme	Item	Target-like	Non-target-like
/æ/	cap	75% (15)	25% (5)
	ban	95% (19)	5% (1)
	hat	95% (19)	5% (1)
/ʌ/	bug	85% (17)	15% (3)
	truck	90% (18)	10% (2)
	uncle	85% (17)	15% (3)
/ɪ/	lick	60% (12)	40% (8)
	chicks	50% (10)	50% (10)
	pill	55% (11)	45% (9)
/iː/	sheep	80% (16)	20% (4)
	bean	85% (17)	15% (3)
	leave	85% (17)	15% (3)

As can be observed in Table 2, the results differ widely from phoneme to phoneme, and also across lexical items within the same set of phonemes. Students reached higher percentages of accuracy with regard to /s/, including a 100% target-like score in the item *C*, and 70% in *bus* and *sip*. For the counterpart /z/, the highest score is 95% in *zoo*, in contrast to the low scores in *prize* (40%) and *peas* (35%). Regarding the pair /d/ and /ð/, the highest accuracy is 80% in *die* /d/ and *thank* /ð/, compared to the lower scores in *they* (65%) and *either* (45%) for the sound /ð/, and the even lower scores in *dare* (40%) and *doze* (35%) for the phoneme /d/.

Table 2. Results for Task 2: Listening, consonant phonemes (percentages and raw figures).

Phoneme	Item	Target-like	Non-target-like
/d/	dare	40% (8)	60% (12)
	doze	35% (7)	65% (13)
	die	80% (16)	20% (4)
/ð/	than	80% (16)	20% (4)
	they	65% (13)	35% (7)
	either	45% (9)	55% (11)
/s/	C	100% (20)	--
	bus	70% (14)	30% (6)
	sip	70% (14)	30% (6)
/z/	zoo	95% (19)	5% (1)
	prize	40% (8)	60% (12)
	peas	35% (7)	65% (13)

Speaking tasks

Table 3 clearly shows low percentages with regard to the three items containing the phoneme /æ/: no student produced *lamp* accurately, only two succeeded in *animal* and only four in *man*. The sound /ʌ/ shows a slightly better performance with 45%-50% of the students producing the target-like /ʌ/ in *cupboard* and *come*, but all of them failed to pronounce it accurately in *love*. With regard to the phoneme /ɪ/, students present a very low score of the target-like sound in *begin* (15%), while they perform better in *finish* (60%) and *crisps* (40%). For the counterpart /iː/, only 45% of the students pronounced *meet* accurately, but the items *please* and *believe* were produced accurately by 60%-65% of the participants.

Table 3. Results for Task 3: Speaking, vowel phonemes (percentages and raw figures).

Phoneme	Item	Target-like	Non-target-like
/æ/	animal	10% (2)	90% (18)
	man	20% (4)	80% (16)
	lamp	--	100% (20)
/ʌ/	love	--	100% (20)
	cupboard	45% (9)	55% (11)
	come	50% (10)	50% (10)
/ɪ/	begin	15% (3)	85% (17)
	finish	60% (12)	40% (8)
	crisps	40% (8)	60% (12)
/iː/	meet	45% (9)	55% (11)
	believe	65% (13)	35% (7)
	please	60% (12)	40% (8)

In a similar manner to Table 2, the results in Table 4 show wide variation across phonemes and items. Parallel to the listening task, the highest percentages of accuracy are found with regard to the phoneme /s/, in which all of the students pronounced the three items accurately. In contrast, for the /z/ counterpart, while 80% of the students produced *zone* with the target-like sound, the score in *busy* is reduced to 40%, and none of the participants performed well in *eyes*. For the pair /d/ and /ð/, the latter sound presents very high scores of the target-like phoneme: 100% in *mother*, 95% in *weather* and 85% in *other*. The participants' accuracy is much lower for the phoneme /d/, with 70% in *diary*, but as low as 40%–45% in *delicious* and *diamond*

Table 4. Results for Task 4: Speaking, consonant phonemes (percentages and raw figures).

Phoneme	Item	Target-like	Non-target-like
/d/	delicious	40% (8)	60% (12)
	diary	70% (14)	30% (6)
	diamond	45% (9)	55% (11)
/ð/	other	85% (17)	15% (3)
	weather	95% (19)	5% (1)
	mother	100% (20)	--
/s/	ice	100% (20)	--
	system	100% (20)	--
	suit	100% (20)	--
/z/	eyes	--	100% (20)
	zone	80% (16)	20% (4)
	busy	40% (8)	60% (12)

DISCUSSION

In this section, the results described above for the four tasks are discussed and the three research questions posed in the introductory section are addressed in turn.

The first research question aimed at investigating whether Spanish students of English as an L2 would show difficulties in understanding and pronouncing the selected pairs of vowels. For the pair /æ/–/ʌ/, students seemed to show little difficulty in comprehension (listening tasks), but they appeared to have more trouble in production (speaking tasks). The latter could be accounted for in relation to cross-linguistic influence from their L1, Spanish, as in Spanish those two English phonemes do not exist and there is only the phoneme /a/. This is precisely the phoneme which stu-

dents produced generally (Table 3). Yet, in some cases students showed awareness that /a/ was not the adequate phoneme. For example, for the item *man* only 20% of the students uttered the target-like /æ/, while others pronounced /e/, which to me suggests that they knew that /a/ was not the accurate answer. In other cases, students seemed to be unable to produce the relevant phonemes, as in *love* (/ʌ/, 0%) and *lamp* (/æ/, 0%). For the pair /ɪ/–/iː/, students tended to identify better the latter phoneme /iː/ than the former short sound /ɪ/ (Table 1). Yet, they appeared to find it difficult to differentiate them when it comes to production (Table 3). This may be due again to the influence of their L1. For example, in the item *begin*, the relationship spelling-pronunciation played an important part, as most of the students pronounced it with a sound /e/, following the Spanish rule of one grapheme–one phoneme <e> /e/.

These data so far seem to support the conclusions drawn by Alcaraz & Moody (1984), who claimed that the two pairs of vocalic phonemes here under study would bring difficulties for the Spanish native speaker of English: after childhood the message that the listener receives is filtered by the brain, and if a sound is unknown (as in the case of the sounds studied here), the brain seeks another sound which is similar and that has already been assimilated.

Our second research question focused on whether Spanish students of English as an L2 would show difficulties in understanding and pronouncing the two pairs of consonants selected. It appears to be difficult for the students to differentiate between the pair /s/–/z/. In their production, it was more common for them to pronounce /s/ instead of /z/. In this case, the position of the phoneme seems to be relevant when understanding and producing this pair of consonants. Students seemed to perform worse when perceiving and producing the /z/ in final position, as in *eyes* (0%), *prize* (40%) and *peas* (35%); they performed better, however, when the /z/ occurred in initial position, as in *zoo* (95%) and *zone* (80%) (Table 2). Alcaraz & Moody's (1984) claim that the phonemes which are not present in the Spanish system would lead to difficulties, especially in distinguishing minimal pairs, is therefore supported by the data obtained in the present study.

Regarding the pair /d/–/ð/, students would have been expected to produce both phonemes as a Spanish /d/ because of the influence of their L1, but the results did not confirm this entirely. On the one hand, the difficulties observed with the phoneme /d/ may indeed be due to L1 influence: in Spanish the phoneme /d/ is dental, thus students tend to produce the English /d/ in the same point of articulation. On the other hand, bearing this in mind, students would have been expected to produce the phoneme /ð/ in the same way, but they seemed to perform better with this particular sound (Table 4). These findings seem to counter-argue Alcaraz & Moody

(1984): students did differentiate between /d/ and /ð/, despite not producing the former sound accurately. That said, we should be cautious and consider that the resulting data here may be exceptional because there is evidence that the phoneme /ð/ was given explicit attention in the classroom (personal communication with the teacher). It thus follows that students would naturally be more aware of its existence and of how to produce it accurately. In other words, the instructional input for this particular phoneme differs from the other phonemes examined.

Lastly, the third research question addressed potential differences between the performance in the receptive listening skill compared to the productive speaking skill. Overall, students have shown better results in the former than in the latter test, with a mean of 17 of 24 items correctly identified in the listening activities, and a mean of 12.75 (of 24) items accurately uttered in the speaking activities. According to the CPH, young learners of English pronounce better than older learners. These students have been studying English for 12 years, from the age of three. We could then assume that, at this point in their education, they should have a good pronunciation of English as an L2. Yet, this seems not to be the case. As noted by the team in the 'Barcelona Age Factor Project' (Muñoz, 2010), an early acquisition has not necessarily helped the students here examined in their pronunciation. Parallel to this, we should recall the multi-competence premise that an L2 user is not like two monolinguals, but rather an L2 user has two different sets of phonemes in mind, and it is natural for cross-linguistic influence to intervene. Cook (1995) advocates that there is no need for students to acquire a native-like pronunciation, but rather a good enough pronunciation which would not lead to misunderstandings; in other words, multilinguals need to sound as effective bilinguals.

CONCLUSIONS

The present study aimed at analysing the difficulties shown by Spanish speakers in the acquisition of the pronunciation of English as L2. The results drawn from a data sample of 20 students indicate that most of the difficulties shown by Spanish speakers when differentiating between certain pairs of phonemes are due to an influence of the L1; for instance, the pair of vocalic phonemes /ɪ/–/iː/ in perception and production, and the pair /æ/–/ʌ/ in production. It seems that the position of the phoneme also affected the students' abilities, as shown with the consonantal phonemes /s/–/z/. In addition, it has been observed that students tend to obtain better results in receptive skills than in productive skills.

This case study has addressed the issue of the (adequate) quantity and quality of input that these subjects in particular have received during their 12 years of education

in English language. It was observed that they did not seem to have benefited from an early age of onset in order to acquire a better pronunciation. If the CPH would hold true for these students, those who started their L2 studies at the age of three should have given evidence of a better knowledge of the phonological system of English than they actually did. The fact that they did not relates to the claim that the type of learning setting is a very important and influential factor in the acquisition of a language. That said, the L2 users under study were not imperfect monolinguals: rather than an incorrect L2 pronunciation they showed an L1 accent due to cross-linguistic influence and due to the fact that two phonetic systems coexist in their minds, as the multi-competence framework claims – the L1 system and the L2 system.

Some teaching implications can be derived. The students under scrutiny showed better results in the perception tests than in the production tests. Yet, there was an exception regarding the phoneme /ð/, which was better produced than perceived. This indicates that an L2 learner might be able to produce a phoneme which is not perceived accurately – the implication is therefore that listening exercises should not be overlooked. Besides, if we recall the fact that the students' production of the phoneme /ð/ was not problematic, arguably because their teacher had devoted time to it explicitly, we could advocate that including more pronunciation exercises is likely to lead to better production skills. The time usually dedicated to pronunciation in class may not be enough for students to produce English phonemes adequately. This conclusion is in line with the study by Bongaerts, Planken & Schils (1995), which explained that incrementing the amount of input and providing instruction in pronunciation helped learners to achieve a more native-like pronunciation.

There is a need for more research as well on whether students acquired a good pronunciation when they were younger and they lost it when they reached puberty, or whether they did not acquire a good level in the first place. That may be due, according to Muñoz (2010), to the fact that the quality and quantity of the input in an instructional setting is not sufficient for the children to benefit from their superiority at implicit learning compared to adult learners (see also Asher & García, 1969; Oyama, 1976). Nevertheless, the underlying principle in the multi-competence framework is that an L2 speaker and a native speaker are different, they perceive the language in a different way, and, for this reason, the multilingual speaker does not have to be, nor sound, like a native speaker. An alternative approach might be to aim for students to understand and perceive accurately, but to let them produce L2 speech preserving their L1 accent.

All in all, further studies will need to be conducted in different contexts, in order to compare different age groups and levels, with a larger sample of students, and with alternative exercises addressing perception and production.

REFERENCES

Alcaraz, E., & Moody, B. (1984). *Fonética inglesa para españoles*. Alcoy: Marfil.

Asher, J. J., & García, R. (1982). The optimal age to learn a foreign language. In Krashen, S., Long, M., & Scarcella, R. (eds.), *Child-adult differences in second Language Acquisition* (pp. 3-12). Rowley: Newbury House.

Baker, A. (2006). *Ship or sheep? An intermediate pronunciation course* [CD A, C & D]. London: Cambridge University Press.

Bongaerts, T., Planken, B., & Schils, E. (1995). Can late learners attain a native accent in a foreign language? A test of the Critical Period Hypothesis. In Singleton, D., & Lengyel, Z. (eds) *The Age Factor In Second Language Acquisition* (pp. 30-50). Clevedon: Multilingual Matters.

Cook, V. J. (1991). The poverty-of-the-stimulus argument and multi-competence. *Second Language Research, 7* (*2*), 101-117.

Cook, V. J. (1995). Multicompetence and Effects on Age. In Singleton, D., & Lengyel, Z. (eds) *The age factor in Second Language Acquisition* (pp. 51-66). Clevedon: Multilingual Matters.

Cook, V. J. (1999). Going beyond the native speaker in language teaching. *TESOL Quarterly, 33* (*2*), 185-209.

Cook, V. J. (2002). Background to the L2 user. In Cook, V. J. (ed.) *Portraits of the L2 user* (pp. 1-28). Clevedon: Multilingual Matters.

Cook, V. J. & Singleton, D. (2014). *Key topics in Second Language Acquisition.* Bristol: Multilingual Matters.

Krashen, S., Long, M., & Scarcella, R. (1979). Age, rate and eventual attainment in second language acquisition. In Krashen, S., Long, M., & Scarcella, R. (eds.), *Child-adult differences in Second Language Acquisition* (pp. 161-172). Rowley, Mass.: Newbury House.

Lenneberg, E. (1967). *Biological foundations of language.* New York: Wiley.

Muñoz, C. (2010). On how age affects foreign language learning. *Advances in Research on Language Acquisition and Teaching.* http://www.enl.auth.gr/gala/14th/Papers/Invited%20Speakers/Munoz.pdf (accessed November 2014).

Oller, J., & Nagato, N. (1974). The long-term effect of FLES: An experiment. *Modern Language Journal, 58*, 15-19.

Oyama, S. (1982). A sensitive period for the acquisition of nonnative phonological system. In Krashen, S., Long, M., & Scarcella, R. (eds.), *Child-adult differences in Second Language Acquisition* (pp. 52-63). Rowley, Mass.: Newbury House.

Scovel, T. (1969). *A time to speak. A psycholinguistic inquiry into the Critical Period for human speech.* Rowley, MA: Newbury House.

Singleton, D. (1981). *Age as a factor in Second Language Acquisition: A review of some recent research.* Dublin: Trinity College.

Singleton, D., & Lengyel, Z. (1995). *The age factor in Second Language Acquisition.* Clevedon: Multilingual Matters.

APPENDICES

Appendix 1. Background test

- Age:

- Gender:

- Years of studying English:

Appendix 2. Listening tasks

1. Circle the word you hear:

1. Leak	Lick
2. Cap	Cup
3. Sheep	Ship
4. Bag	Bug
5. Bean	Bin
6. Bun	Ban
7. Track	Truck
8. Chicks	Cheeks
9. Uncle	Ankle
10. Peel	Pill
11. Hut	Hat
12. Leave	Live

2. Circle the word you hear:

1. Dare	There
2. C	Z
3. Dan	Than
4. Zoo	Sue
5. Day	They
6. Buzz	Bus
7. Those	Doze
8. Prize	Price
9. Zip	Sip
10. Either	Ida
11. Piece	Peas
12. Thy	Die

Appendix 3. Speaking Tasks

Begin	Ice
Love	Other
Meet	Eyes
Animal	Diary
Finish	System
Cupboard	Delicious
Believe	Weather
Man	Zone
Crisps	Diamond
Come	Suit
Please	Mother
Lamp	Busy