Macrothink Institute™

International Journal of Linguistics
ISSN 1948-5425
2023, Vol. 15, No. 2

Cultural Competence in L2 Pronunciation Acquisition

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Received: April 3, 2023 Accepted: April 21, 2023 Published: April 24, 2023

doi:10.5296/ijl.v15i2.20870 URL: https://doi.org/10.5296/ijl.v15i2.20870

Abstract

This study explored the possible relationship between L2 cultural competence and pronunciation proficiency in seven advanced learners of English as a foreign language (EFL). Three methods were used in this study regarding the participants' learning experience, pronunciation proficiency, and cultural competence. Their learning experience data were collected through unstructured interviews via WhatsApp (i.e., a smartphone application mainly used for text messaging). Pronunciation proficiency was tested using Brooks' (1999) pronunciation test, which assesses the mastery of four main aspects: blending sounds, stress, intonation, and rhythm. Berry's (1980) East Asian Acculturate Measure (EAAM) was used to measure their cultural competence level. The findings showed that the selected participants adapted integrative and assimilation acculturation strategies. The two strategies show high acculturation levels, indicating L2 cultural competence in Fenner's (2000) classification of cultural exposure outcomes. The pronunciation test implied that the participants mastered English sound blending, stress, intonation, and rhythm. Considering that external factors other than acculturation were controlled, the study concluded that their high acculturation predicts their pronunciation proficiency.

Keywords: Acculturation, Cultural competence, EFL, Language learning, Pronunciation proficiency

1. Introduction

Second language (L2) learning after puberty is believed to be constrained by biological age factors, as Lenneberg (1967) proposed in his Critical Period Hypothesis. Lenneberg (1967) believes there is a biological timetable before puberty for language acquisition beyond which learning a language becomes difficult. Scovel (1988) believes that such biological constraint concerns pronunciation the most. The literature suggested that such a barrier for late L2 learners can be overcome with post-maturational factors, especially acculturation (Schumann,

1986). Berry (1990) suggested that *acculturation* is the complete adaptation to the new culture, which allows the person to cope and participate effectively in the new context. Acculturation matches the level of cultural competence in Fenner's (2000) classification of learner outcomes when exposed to L2 culture. *Cultural competence* is a high level of acculturation that results in acceptance and integration within the L2 culture (Nguyen, 2013). Some researchers in the field of second language acquisition (SLA) have investigated the role of cultural exposure in attaining pronunciation proficiency with conflicting results (Alvord & Christiansen, 2012; Jiang, Green, Henly, & Maslen, 2009; Martinsen & Alvord, 2012; Wu, Marek, & Chen, 2013). However, cultural exposure factors have not yet been thoroughly investigated, especially when driven by learners' interests in the target language culture. The role of cultural exposure in language learning has mainly been studied in educational or naturalistic settings (Jiang et al., 2009; Klimczak, 2011; Wang & Chang, 2011). Brown (2014) clarified the distinction between learning English in naturalistic versus non-naturalistic settings. Learning English in a cultural domain where it is spoken natively is the naturalistic learning setting, referred to as English as a second language (ESL). Learning English in one's native language culture is the non-naturalistic learning setting, referred to as English as a foreign language (EFL). This study defines the term *pronunciation proficiency* based on Levis' (2005) proposed components of pronunciation proficiency which include mastery of stress, rhythm, intonation, and individual sounds. The current study investigated the possible relationship between L2 cultural competence and pronunciation proficiency attainment in seven advanced EFL learners. Those learners did not learn English in a naturalistic setting; instead, they all started learning English after the age of 12 through exposure to movies, songs, and art; their learning experience stemmed from a personal interest in exploring the L2 culture, which might provide the field of SLA with insights into ways of approaching L2 pronunciation proficiency, primarily, in foreign language contexts. Hence, the study explored whether L2 cultural competence in advanced EFL learners predicts a high pronunciation proficiency.

2. Review of Literature

2.1 Culture in SLA

The role of cognitive and affective factors in fostering or hindering the L2 learning process has been heavily examined by scholars in the field of SLA (Busch, 1982; Robinson & Ellis, 2008). The cultural factor has also received its fair share of investigation (Choudhury, 2014; Jiang et al., 2009), especially since the established connection between culture and language by second language theorists and philosophers such as Vygotsky (1964) and Schumann (1986). Vygotsky (1964) and Schumann (1986) believe that language and culture are intertwined; thus, one can only learn an L2 with familiarity about its culture. The integral part that culture plays in the learning process of each component of L2 has been elaborated on by Choudhury (2014). According to Choudhury (2014), when learning vocabulary, one needs to be familiar with the attributed connotative meanings of the words held in the source culture. In listening comprehension, unfamiliarity with the L2 cultural context leads to difficulty understanding the spoken language. Likewise, he adds that reading comprehension requires prior knowledge of cultural and social allusions and figurative language. Speaking relates to the cultural context as it requires oral proficiency to avoid misunderstandings in producing or

perceiving the language.

Exposing learners to the source culture will result in three levels of learner outcomes based on the type of exposure (Fenner, 2000). The levels are cultural knowledge, cultural awareness, and cultural competence, respectively. Cultural knowledge is pure information about the source culture, which is systematically presented to the learners by someone else (Moran, 2001; Tomlinson, & Masuhara, 2004). Cultural awareness is a step higher than mere knowledge of the source culture, and it comprises "sensitivity to the impact of culturally induced behavior on language use and communication" (Tomalin & Stempleski, 2013, p. 5). While cultural knowledge results from an external partner in the learning process, cultural awareness is built through the learners' personal experience (Tomlinson & Masuhara, 2004). When learners acquire knowledge about the source culture and build an awareness of the role of culture in language use and communication, they reach the highest level of Fenner's (2000) learner outcomes, which is cultural competence (Nguyen, 2013). Cultural competence is "an awareness of cultural diversity and an ability to recognize and accept differences and manage them successfully" (Barraja-Rohan, 1999, p. 143). Thus, cultural competence represents the highest level of acculturation towards the source culture, which is a core requirement to achieve the desired level of linguistic competency as, according to Schumann (1986), "the degree to which a learner acculturates to the TL group will control the degree to which he acquires the second language" (p. 384). In Berry's (1980) model of acculturation strategies, one can either adapt to the target culture or maintain her/his own culture. However, between the two extremes, one can adapt an integrative strategy where she/he values both cultures or abandon the two cultures altogether. For second language learning, Schumann (1986) recommended that the integrative strategy is the ideal strategy to achieve proficiency level and maintain one's identity.

2.2 The Role of Culture in Pronunciation Acquisition

Researchers have examined the L2 cultural exposure role in attaining pronunciation proficiency in the target language context. In a study conducted by Jiang et al. (2009), they explored the role of acculturation in improving pronunciation proficiency in adult Chinese learners of English as a second language. The study included 49 male and female university students in the US. The participants started their university programs at the age of 18, and at the time of the study, they were 22; thus, they spent five years in the US. Their acculturation level was tested using the Stephenson Multigroup Acculturation Scale, which indicates either an inclination toward the target culture or maintenance of one's own culture. Pronunciation proficiency was tested using an L2 reading task and evaluated against Stanford Foreign Language Oral Skills Evaluation Matrix. The findings suggested that the participants were immersed in their culture despite individual differences. Immersion in the American culture among individuals accounted for 6% of their pronunciation proficiency, which indicates its insignificant contribution. The study concluded that immersion in the target culture does not correlate with pronunciation proficiency, especially among male participants.

Martinsen and Alvord (2012) investigated the relationship between cultural sensitivity and pronunciation attainment among English speakers learning Spanish as a second language.

There were 38 participants in the study, and all of them were administered a six-week Spanish language program in Argentina. The participants were asked to complete the Inventory of Cross-Cultural Sensitivity (ICCS) before and after the program. They were asked to take an oral proficiency test requiring them to speak for three minutes using prompt questions. The findings revealed that the average result of pronunciation proficiency after the program was not statistically significant. However, individual reports showed an improvement in the participants' scores. In reference to the Inventory of Cross-Cultural Sensitivity (ICCS), the study found a positive correlation between high cultural sensitivity prior to the program and pronunciation proficiency. The researchers believed that the length of the program and the participants' acculturation level were insufficient for them to develop high pronunciation proficiency. Martinsen and Alvord (2012) recommended further research to investigate the relationship between culture and pronunciation among individuals with a high level of acculturation, cultural competence.

Alvord and Christiansen (2012) studied the influence of certain factors, such as cultural integration, motivational intensity, and music instruction, on the acquisition of /b/, /d/, and /g/ sounds in Spanish in late second language learners. A group of 34 males who had just returned from a two-year Spanish course in Spanish-speaking countries participated in the study. The participants were asked to read words that included the target sounds. Their performance was recorded with a digital device and analyzed later using Pratt (i.e., a software program used for speech analysis). Each participant was then asked to fill out a questionnaire to identify the role of external factors that have influenced their acquisition of the target sounds. It was found that cultural integration was the highest indicator of their pronunciation achievement. The finding suggested that the culturally integrated participants achieved better pronunciation proficiency. One interesting finding in this study regarding pronunciation learning is that instructions and conversations with non-native speakers in the second language were indicators of the participants' poor pronunciation. Alvord and Christiansen (2012) attributed poor pronunciation performance to wrong models that learners seek to imitate or learn from while learning.

The target language context is favored by researchers when examining the relationship between culture and pronunciation proficiency (Smemoe & Haslam, 2012). Nonetheless, some studies examined the cultural competence role in a foreign language context, where the language is learned in one's home country, with a central focus on the educational setting. One such study was done by Wu et al. (2013), who aimed to examine the role of technology-based learning in raising learners' cultural awareness and, henceforth, their pronunciation proficiency. The study targeted English university students in Taiwan taking a required English advanced conversation course. The researcher designed the course curriculum to consist of weekly video conferences with an American teacher. The video conferences were culturally based and explored the differences and similarities between the students and American cultures. A pre-and post-test was conducted to evaluate the students' pronunciation proficiency. The test consisted of open questions to prompt the students to speak for a long time. To assess cultural awareness, students were asked to reflect on the weekly discussion through written essays. The reflective essays were analyzed through

critical text analysis, where instances of cultural recognition were solicited and evaluated. The findings revealed that students' oral proficiency improved significantly. The analysis of the reflective essays showed that they had developed an awareness and knowledge of essential aspects of American culture. The study showed that culture has a role in improving the students' overall oral proficiency, even though it was aimed at lower levels of acculturation, awareness, and knowledge.

2.3 Factors

Smemoe and Haslam (2012) identified three factors that can influence pronunciation learning in L2: learning strategies, learning context, and aptitude. First, Pronunciation learning strategies are deliberate actions developed by learners to acquire knowledge (Rubin, 1975). Many researchers proposed different L2 learning strategies developed by learners; the most well-known strategies were proposed by Oxford (1996). Oxford (1996) classified L2 learning strategies into six groups: memory, cognitive, compensation, metacognitive, affective, and social. Building on the work of Oxford (1996), Peterson (2000) proposed some tactics for pronunciation learning strategies elicited from the journals of 11 learners of Spanish as a second language. Peterson (2000) proposed that learners use strategies ranging from memory strategies to learn the sounds of the target language, usually through making up songs, to strategies to imitate their ways of pronunciation. Smemoe and Haslam (2012) stated that it is commonly believed that only successful language learners utilize pronunciation learning strategies, but this is not always true as both successful and unsuccessful language learners use a range of strategies in the process of L2 learning, as found by Anderson (1991). The difference, as stated long ago by Naiman, Frohlich, Stern, and Todesco (1978), is that "good language learners develop techniques and strategies appropriate to their individual needs" (p. 22). While no study in the literature has directly investigated culture as a pronunciation learning strategy, Szyszka's (2015) findings on the techniques used by 28 English language trainers to master L2 pronunciation are relevant to this context. Szyszka (2015) found that proficient users value active listening strategies and immersion in the L2 culture through movies and songs. Some reported memorizing songs and imitating movie actors' lines to improve pronunciation.

Second, it is believed that foreign language context and target language context provide an unequal chance for learners to improve their pronunciation proficiency that mainly lies on how much exposure the learners have to native speakers in foreign versus target language context. Rubin (1975) believes that the target language context is favorable; when learners face difficulties in communication, they are pushed to proceed in the L2 learning process to survive. Smemoe and Haslam (2012) stated that no study has directly investigated the difference between the two contexts; the reviewed studies, however, showed no difference regarding the role of culture in pronunciation attainment in both contexts (Martinsen, & Alvord, 2012; Wu et al., 2013).

The third factor that needs attention in this discussion is the role of aptitude. Carroll (1981) defined aptitude as the talent(s) that some learners possess which enables them to learn the L2 language system, such talent(s) is independent of intelligence. A study by Smemoe and

Haslam (2012) found no direct correlation between pronunciation proficiency and high level of aptitude among 186 EFL and ESL learners. Nevertheless, this factor is not well-researched in the literature.

Other related factors found in the literature are motivation and gender. Jiang et al. (2009) argue that acculturation alone does not predict success in L2 learning; instead, "the essence of successful L2 acquisition is to identify with, and get involved in, the target culture socially and affectively." (p. 482). Thus, in addition to acculturation, one must be motivated to learn about the language and its culture. This is evident in the reviewed studies, especially in the educational setting. The students were not genuinely motivated to learn about the culture, resulting in average attainment of both acculturation levels and pronunciation results (Jiang et al., 2009; Martinsen & Alvord, 2012). Lastly, the literature suggested that the relationship between acculturation and pronunciation proficiency can be affected by gender (Alvord & Christiansen, 2012; Jiang et al., 2009). This is in favor of females, who are believed to have more accuracy in pronunciation than males (Suter, 1976). In general, some factors can reinforce or hinder L2 pronunciation learning, even with some level of acculturation.

3. Method

3.1 Selection of Cases

The study requires selecting participants who started learning English in a foreign language context after puberty and attained a high level of acculturation. The selection process is on a snowball sampling method; some cases were initially selected, and they were asked to recommend further cases with similar characteristics. The researcher interviewed each recommended case informally via WhatsApp (i.e., a smartphone application mainly used for text messaging) to learn more about their learning experiences and characteristics. WhatsApp was used for the interviews because Saudis commonly use it. Also, the interviews were conducted to examine the participants' learning experiences and check their eligibility. Therefore, it makes no difference if the interviews were face-to-face or online. Such data were then summarized and presented in the results section as part of their learning experience.

Seven male and female individuals participated in this study: Batool, Saad, Lamya, Hamad, Abyat, Yasar, and Haitham (the use of the participants' first names is based on their preference and approval). Their ages ranged between 17 and 24. They are all native speakers of Arabic and foreign language learners of English. They were mostly educated in public schools in Riyadh city in Saudi Arabia. Their education did not center around the English language; instead, English was introduced as an additional subject. The participants had either never traveled abroad or had traveled abroad only for a short period but not to study English.

3.2 Instrument

English pronunciation test (EPT). The researcher adopted Brooks' (1999) pronunciation test to examine the participants' pronunciation proficiency. The test requires the participants to read aloud a variety of indicator categories. Each indicator category is meant to test a specific

segmental or suprasegmental feature. Part A is constructed to test blends and vowel shifts, part B to test mastery of word stress, parts C and D to test intonation in different places of the sentences, and part E to test mastery of English rhythm (see Appendix A for a copy of the test). The indicator for vowel shifts also referred to as vowel blends, is, as operationalized by Brooks (1999), a verb inflection or assimilation. Kreidler (1989) operationalized the indicator word stress as accenting certain syllables and words; Brook further included accenting sentences and phrases. Kim and Margolis (1999) operationalized two types of intonation indicators: the rise of the pitch at the end of a question and the rise or fall of the pitch at the end of exclamatory sentences. Rhythm is used by Kim and Margolis (1999) as an indicator of good pronunciation and includes the previously mentioned indicators. Brooks (1999) used Celce-Murcia, Brinton, and Goodwin's (1996) definition of rhythm as "the regular patterned beat of stressed and unstressed syllables and pauses" (p. 152). The test has a script key to evaluate these features, which the researcher can assess the participants' performances based on (see Appendix B for the script key). However, the participants' performances were evaluated by an external member whose proficiency in the English Language is considered native-like because the researcher is a second language learner and might not be tentative about errors in pronunciation. The EPT can test specific features or assess pronunciation proficiency based on discrete items globally. In their *book English Pronunciation for International Students*, Kim and Margolis (1999) rationalized using reading style in EPT; Dale and Poms (1994) suggested that native speakers tend to speak more accurately in reading style than in other forms of conversations that tend to be spontaneous. Hence, reading aloud may be the best method to reflect learners' pronunciation proficiency.

The East Asian Acculturation Measure (EAAM). Berry's (1980) acculturation measurement was adopted in this study. The measurement tests two converse strategies: maintaining one's own culture and adapting the target language's culture. The four acculturation strategies Berry (1980) proposed are illustrated in Barry (2001): assimilation, integration, separation, and marginalization. Assimilation means "giving up on one's cultural identity and moving into the larger society" (p. 194). Integration is "the maintenance of a group's cultural integrity while simultaneously becoming an integral part of the larger society" (p. 194). Separation and marginalization are negative aspects of involvement in one's culture or the targeted culture: in particular, separation is "the maintenance of ethnic identity and traditions and a simultaneous absence of relations with the larger society" (p. 194). Marginalization happens "when individuals have no cultural or psychological contact with their traditional culture or the larger society" (p. 194). Agreement with the given statements in the measurement indicates a different level of acculturation as proposed by Berry (1980); participants who show a level of agreement with statements (1-8) adapt the strategy of assimilation, (9-13) integration, (14-19) separation, and (20-26) marginalization (see Appendix C for a copy of the measurement). Although the measurement was mainly designed to test immigrants, the measurement has been modified and used by researchers to measure degrees of Western inclination in foreign language learning contexts (e.g., Cara, 2010; Jiang et al., 2009). Berry's (1980) measurement was adapted and modified for the present study to suit its purpose and participants. Three items were deleted because they require direct interaction with native English speakers.

3.3 Data Collection Procedure

The data for this study were collected using the following methods: unstructured interview via WhatsApp, a pronunciation test, and an acculturation measurement. First, the participants were asked questions such as, "When did you start learning the English language?" and "Did any of your family members help you learn English?". Based on each participant's answers, follow-up questions were asked. Second, a copy of Brooks' (1999) pronunciation test was sent to each participant to record themselves reading at a moderate speed. Third, an online form of Berry's (1980) EAAM was sent to the participants in which they had to indicate their levels of agreement with 26 statements.

4. Results

The collected data about the participants' learning experience, acculturation strategy, and pronunciation proficiency are presented separately in the following sections.

4.1 Learning Experience

The seven participants: Abyat, Haitham, Yaseer, Batool, Saad, Lamya, and Hamad, detailed their English learning experiences during the interview. Each participant has a unique experience, but all have used acculturation to learn English. Below is a detailed summary of each participant's learning experience with the English language.

Abyat started learning the English language at the age of 12. Earlier, she used to watch movies for entertainment. When she started to learn the language, she realized that she possessed a range of vocabulary due to her earlier interest in English movies. However, she believes her language proficiency back then was insufficient to form simple sentences. Hence, she started to pay attention to the structure of spoken sentences by English actors in movies and used to converse with native English speakers. Abyat believes that such an approach has an effective role in developing her language. By the time of the study, she was 20 years old and in her first university year, where she was placed in C-track English courses (i.e., advanced level).

Haitham started learning the English language around the age of 14. He believes that other than the grammar of the language he learned from textbooks, his learning was based on online computer games. Haitham used to converse with native speakers while playing games. He, however, does not believe that this was the reason behind his proficiency in the language; he thinks that it was something gifted that enabled him to grasp foreign language sounds quickly. Haitham was 20 years old at the time of the study and achieved band seven in the IELTS exam.

Yaseer started learning the English language at the age of 13. Like Haitham, his learning was mainly based on online computer games. Yaseer stated that he used to use only chat which did not help him to be engaged in conversations; later, he incorporated voice chat. He believes that voice chat helped him identify different accents and articulation of sounds. Yaseer identified one problem with this learning strategy: it does not help develop formal grammatical structures, as native speakers in computer games use informal language. Yasser

was 17 years old at the time of the study and in his third year of secondary school. His English language teachers and classmates are fascinated by his high language skills; in fact, he was nominated by one of his classmates to take part in this study.

Batool started learning the English language at the age of 16 through extensive exposure to songs, movies, and television series. While the other participants were schooled in public schools from a young age, Batool was the only one who was educated in a private school when she was young. Nonetheless, her private school was not English-centered, such that she could not differentiate between the letters [S] and [C] until she reached the first grade of intermediate school. Batool reported that her self-learning by age 16 was active and provided two examples of her learning process. When she listens to an English song, she writes the lyrics, translates the new words into Arabic, and then listens again until the song is learned by heart. The second example is that once a movie is released, she watches it without an Arabic subtitle then she watches the movie again with an Arabic subtitle to compare her understanding with the translated version. Batool was 24 years old at the time of the study, and she believes that learning songs was the main effective learning method.

For Saad, his formal exposure to the English language began at 12, as English as a subject was not introduced in public education until the sixth grade at that time. His interest in learning English was motivated by his belief that speaking a foreign language is 'cool.' Around the time he was introduced to the English language in school, he started to learn about English beyond the school setting with his twin brother. They learned English mainly through online games (e.g., PlayStation) and movies. He believed that with the help of his brother, they both attained English proficiency. At the time of the study, he was 19 and in his first year of college, where he was placed in C-track English courses.

Lamya was 20 years old at the time of the study and reported that she started learning English at 12. Lamya reported that she used to play English CD games with her older brother. Later, she started to expose herself to movies and songs, which she believes helped her to attain a higher level of English proficiency.

Hamad was 18 years old at the time of the study and started learning the language at 12, mainly through movies and songs. He emphasized that he watched and listened to movies and songs to learn. However, within the learning process, Hamad reported that he entered the flow stage in which he enjoys the scenes and lyrics. This unconscious learning helped him achieve a high proficiency level in English. Although Hamad is still in high school, his teachers and classmates are impressed by his language, and some believe that he has studied abroad or attended an international school. Like Yaseer, Hamad was also nominated by one of his classmates to participate in the study.

The findings in this section suggest that the selected participants were aware of their learning process at one stage or another. Their awareness helped them to adopt different techniques to address the areas where they were weakest. In addition, their learning was accompanied by a passion that has eased second language learning difficulties. In the following section, a closer look into their chosen acculturation strategy as a learning method is identified.

4.2 Acculturation Strategy

Table 1 shows the participants' levels of acculturation based on their responses to the statements in Berry's (1980) acculturation measurement with the following categories: agree and strongly agree. Items 1 through 8 indicate an adaptation of the assimilation strategy, 9 through 13 the integration strategy, 14 through 19 the separation strategy, and 20 through 26 the marginalization strategy.

Table 1. Acculturation level of the five participants

	Assi. %	Integ. %	Sep. %	Marg. %
Abyat	12.5	60	33.33	0
Haitham	75	60	33.33	28.57
Yaseer	12.5	80	66.66	14.28
Batool	25	80	16.66	28.57
Saad	0	60	50	0
Lamya	25	60	50	14.28
Hamad	12.5	80	33.33	42.85

Abyat, Yasser, Batool, Saad, Lamya, and Hamad scored highest in the integration strategy, between 60% and 80%. This means that the participants are immersed in the target language culture through movies, songs, and conversing with native speakers via online games, yet, they value their own culture and have some attachment towards it. Haitham, however, scored the highest in the assimilation strategy, 75%. This means that, unlike the other participants, he shows more inclination towards the target language culture than towards his own culture. The two acculturation strategies adapted by the participants, assimilation and integration, indicate their cultural competence (i.e., American/British). The other two acculturation strategies, separation and marginalization, indicate lower to no competence and inclination towards either or both cultures, native and L2. It is noteworthy that Yaseer's separation score was higher than the other participants, 66.66%. This can be because he does not have native English friends, and he prefers gatherings where the dominant language is Arabic and not English, as it makes him feel more relaxed; this realization has been made based on his answers in the separation strategy category. Similarly, Saad and Lamya scored relatively high in the separation strategy, 50%. Their answers showed that they do not have English native speakers as close friends as well, which might explain their relatively high scores in this part.

4.3 Pronunciation Proficiency

Table 2 shows the scores for each participant according to Brooks' (1999) pronunciation test. The test was divided into five parts: A) blends and vowel shifts (28 marks), B) words, sentences, and phrases stress (12 marks), C) sentence-ending intonation (6 marks), and D) rhythm (28 marks).

Table 2. Pronunciation test results

	Part A	Part B	Part C	Part D	Total
No. of items	(28)	(12)	(6)	(28)	(68)
Abyat	17	9	6	27	53
Haitham	17	11	6	25	59
Yaseer	13	9	5	28	55
Batool	19	9	6	27	55
Saad	19	10	6	27	56
Lamya	20	10	6	27	57
Hamad	17	9	6	27	53

The participant's scores were high in all aspects of the pronunciation test, including sound blend, stress, intonation, and rhythm. In part A (sound blend), however, despite some minor differences among participants, there were instances of not blending sounds in rapid speech. For example, the participants said, "kind of cute" instead of "kinduh cute," "transferring them" instead of "transfurrun'um," and "could you" instead of "cuhjuh", while not blending sound has no effect on their proficiency, blending sound is a feature of English pronunciation. Lamya, Batool, and Saad scored the highest in this part; they displayed mastery of sound blending, such as "she bahduh ball" instead of "she bought a ball" and "I needuh nickel" instead of "I need a nickel."

In part B (stress), all the participants scored above average. They showed mastery of stress placed in the same word when derived differently, such as "photographer" and "photography." They also performed well in different forms of sentence stress, such as "Where do you live?" in which 'where' and 'live' are clearly emphasized.

Part C (intonation) indicates the participants' high mastery of intonation patterns, as they scored six out of six, except for Yaseer. The only problem was not having the correct intonation for the sentence: "Jane asked, "Now"?".

Part D, which is concerned with rhythm, has also shown the participant's mastery of this suprasegmental feature. The participants' minor errors or mistakes were in replacing weak

stress with strong stress or vice versa.

Overall, the participants showed high pronunciation proficiency based on Brooks' (1999) test for pronunciation proficiency, which comprises mastery of sound blending in moderate to rapid speech, stress, intonation, and rhythm.

5. Discussion

The participants' learning experience results support Szyszka (2015) and Peterson's (2000) claims that conscious learning is effective and commonly used by advanced learners. Yaseer's flexibility in adapting techniques that best fit his needs along the way of learning the English language, such as changing from text to voice chat to fill his unintelligibility of spoken English, is in line with Naiman et al. (1978) belief that "good language learners develop techniques and strategies appropriate to their individual needs" (p. 22). The participants' awareness of their needs makes them stand out from unsuccessful learners who might use strategies ineffectively. According to their results in Berry's (1980) acculturation measurement, the participants adopt the integrative and assimilation strategies. The two strategies represent the highest levels of acculturation, called cultural competence, in Fenner's (2000) levels of cultural exposure outcomes. Specifically, only one participant, Haitham, adapted the assimilation strategy, and the rest used the integration strategy.

In reference to the research question: Does cultural competence in self-taught learners of English as a foreign language predict a high pronunciation proficiency level? Schumann (1986) believes that integration is the best strategy to achieve proficiency in the target language while maintaining one's identity. Assimilation, however, is a higher level of acculturation and is expected to predict better results in terms of language acquisition; as he stated that "the degree to which a learner acculturates to the TL group will control the degree to which he acquires the second language" (Schumann, 1986, p. 384). The participants' overall scores on the pronunciation test were high; the highest score was 59, and the lowest was 53 out of 68. Their errors in stress, intonation, and rhythm features might not indicate their actual performance but rather accidental mistakes. In addition, in sound blending, not blending sounds may be due to their preferences rather than a lack of competence. While all the participants achieved high pronunciation proficiency, Haitham, who showed adaption of the highest level of acculturation, assimilation, has as well achieved the highest in the pronunciation proficiency test. This indicates a positive relationship between high levels of acculturation and pronunciation attainment, which aligns with the findings of Alvord and Christiansen (2012) and Wu et al. (2013). The literature on the relationship between cultural competence and pronunciation proficiency attainment suggested that external factors can mediate such a relationship. The learning context in the current study is EFL, and it was shown that it did not hinder them from achieving a high level of proficiency.

Similarly, Smemoe and Haslam (2012) found that the foreign context of their study did not hinder their participants' learning process. The motivational factor seemed to play a crucial role in overcoming the obstacles of a foreign language learning context. The aptitude factor was not the concern of this study, as the study was done after an extended learning period that lasted for years. However, one of the participants mentioned that he witnessed that he is

gifted with the ability to grasp foreign language items quickly. Such ability is best explained by the concept of learning aptitude suggested by Carroll (1981). Thus, learning aptitude may indeed have a role in facilitating the learning process. Likewise, gender was not a factor in this study due to the limited number of participants, but the study's findings are against Suter's (1976) belief that females are better at pronunciation than males. The differences between the participants were mainly due to their level of acculturation and possibly learning aptitude. Hence, based on the findings of this current study, cultural competence can predict a high proficiency level in pronunciation regardless of the context of learning (i.e., foreign or second language contexts). Although there is no scientific evidence of this other than the participant's testimony, learning aptitude can play a role in the relationship between cultural competence and pronunciation proficiency.

6. Conclusions

The study explored the role of a high level of acculturation known as cultural competence in attaining pronunciation proficiency in self-taught EFL late learners. Previous studies have explored the role of lower levels of acculturation, known as cultural knowledge and awareness. Cultural competence, however, received little attention from researchers; this is mainly because cultural competence is a gradual and slow process that cannot be achieved during a short period (Jiang et al., 2009). Thus, the study targeted cases that have already developed cultural competence towards the target culture and examined its role in achieving high L2 pronunciation proficiency. The findings suggested that the selected cases adapted integrative and assimilation acculturation strategies to varying extents. They showed great mastery of English stress, intonation, and rhythm, but with some inconsistencies and inaccuracies in vowel blends/shifts. Overall, their cultural competence predicted mastery of the segmental and supra-segmental features of pronunciation proficiency. The findings of this study suggest that cultural competence is reached after a long period of exposure. Once it is reached, learners are more prone to successfully acquire the target language, which is in line with Schumann's (1986) discussion in this regard. Henceforth, in foreign language teaching and learning, learners need to go through the lower levels of acculturation: knowledge and awareness to reach the highest level of acculturation (cultural competence) that will help them attain high pronunciation proficiency.

7. Limitations

This study has a limited number of participants due to the limited cases that met the required criteria. Further studies with a larger number of participants and longitudinal studies are recommended to have more generalized results and refined outcomes.

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Appendices

Appendix A: (Brooks' (1999) Pronunciation Test)

Part A:

(To be read at a moderate speed, as if in conversation with someone.)

1. I'm driving to Seoul.
2. I'm transferring them.
3. I can do that.
4. Can I go now?
5. You know?
6. Do you know?
7. Can you help me?
8. I need a nickel.
9. She bought a ball.
10. He drank a beer.
11. You want whiskey or beer?
12. Wait for me.
13. Wait for a minute.
14. I like salt and pepper.
15. I like boys and girls.
16. He's a friend and a neighbor.
17. You and I?
18. Pour milk into a bowl.
19. That's kind of cute.
20. It's to the left.
21. I want to be free.
22. Could you go?
23. Won't you wait?
24. Don't you agree?
25. Would you please step aside?
26. Did you do it?
27. Are you O.K.?
28. Winters are cold here.

Part B:

1. The photographs were shown in a photography contest.
2. The public did not attend because the publicity was not good.
3. The minority group considered it a minor event.

Part C:

1. Come and look
2. Who saw them?
3. The bus is late.
4. I think so.
5. Can't you hear me?
6. Where do you live?

Part D:

Peter said to Jane, "Let's go to New York." Jane asked, "To New York?" Peter said, "Yes, why not? Let's go today." Jane asked, "Today?" Peter said, "Let's go now!" Right this moment. Jane asked, "Now?!" Peter said, "Yes, let's go!"

Part E:

Jack and Jill went up the hill.
To fetch a pail of water.
Jack fell down and broke his crown,
And Jill came tumbling after.

Appendix B: (Script Key)

Part A: Blends and Vowel Shifts

1. I'm drivun' tuh Seoul. (The g in driving is ellipsed, the i shifts to u in ing and in to, becoming tuh.)
2. I'm transferrun'um to the vase. (The ing in transferring becomes un, and them shifts to um.)
3. I kun do that. (Can shifts to kun in a vowel shift).
4. KunI go now? (Blending of can plus I as in the vowel shift in the above example.)
5. Yuh know? (You becomes yuh through a vowel shift to uh.)
6. Duyuh know? (Do blends with you, and the vowel o shifts to uh.)
7. Kunyuh help me? (Can you links up in sound and the vowel o shifts to uh.)
8. I needuh nickel. (Need plus a links in sound and the vowel a shifts to uh.)
9. She bahduh ball. (Bought a undergoes a t to d sound change and links or blends with a as uh.)
10. He drankuh beer. (The linking or blending in sound of drank with a and the vowel a shifts to uh.)
11. Yuh want, wiskey ur beer? (You shifts to yuh and or undergoes a shift to ur)
12. Wait fur me. (For transforms in sound to fur.)
13. Wait furuh minute. (Same as above example, except that fur links up with a as uh.)
14. I like salt und pepper. (A vowel shift in and converts it to und in sound.)
15. I like boyzund girls. (Boys has a z ending, which blends with the and, which undergoes the sound change to und.)
16. He's a friend anduh neighbor. (And a blends in sound with a vowel shift in the a to uh.)
17. You undie? (And I experiences a blending in sound, and a vowel shift in the a in and to und.)
18. Pour milk unto a bowl. (Into shifts its vowel i to a un as in unto.)
19. That's kinduh cute. (Kind blends with of to produce kinduh, with the vowel shift paradigm to uh.)
20. It's tuh the left side. (to shifts to tuh as the vowel in rapid speech changes from o to uh.)
21. I wannuhbe free. (want to be blends in sound; the t is ellipsed and replaced with n as in nuh, the o in to becoming the uh.)
22. Cuhjuh go? (Could blends with you to form cuhjuh. The j replaces the d in could and the y in you. Thus, the ou takes on an uh sound.)
23. Whonjuh wait? (Won't you links in sound, and the you becomes juh as in the above example.)
24. Donjuh agree? (Don't you blends in sound. You, normally yuh, changes to juh.)
25. Wuhjuh please step aside? (Would you links up in sound as in the above examples.)
26. Dijuh do it? (Did you blends in sound, as in the above examples.)
27. Uryuh O.K.? (Are you in rapid speech blends in sound and the a in are changes to ur.)
28. Winters are cold here.

Part B: Word Stress

Primary-secondary: photographs - photography (FOH duh graf - fuh TOG ruh fee)

Primary-secondary: public - publicity (PUB LIK - pu BLIS uh dee)

Primary-secondary: minor - minority (MIE nuhr - mi NOR id dee)

Part C: Sentence and/or Phrasal Stress

Sentence-Ending Intonation

1. Come and look
2. Who saw them?

3. The bus is late.
4. I think so.
5. Can't you hear me?
6. Where do you live?

Part D: The sentence-ending stress falls on the following words:
Question: To New York? Today? Now?
Exclamation: Why not? Let's go now! Let's go!

Part E: Rhythm:

O w O w O w O
Jack and Jill went up the hill
W O w O w O w
To fetch a pail of water
O w O w O w O
Jack fell down and broke his crown
W O w O w O w
And Jill came tumbling after.
Note: O = strong stress; w = weak stress.

International Journal of Linguistics
ISSN 1948-5425
2023, Vol. 15, No. 2

Appendix C: (Berry's (1980) Acculturation Measurement)

Items	Disagree				Agree
	1	2	3	4	5
1. I write better in English than in my native language.					
2. When I am in my house, I typically speak English.					
3. If I were asked to write a poetry, I would prefer to write it in English.					
4. I get along better with English speakers (native/second language learners) than with Arabic speakers.					
5. I feel like English speakers understand me better than Arabic speakers.					
6. I find it easier to communicate my feelings in English than in Arabic.					
7. I feel more comfortable socializing in English than in Arabic.					
8. Most of my friends are English speakers.					
9. I tell jokes both in English and in Arabic.					
10. I think in English as well as I do in Arabic.					
11. I have both English and Arabic friends.					
12. I feel that both my English and Arabic friends value me.					
13. I feel comfortable with English speakers as well as with Arabic speakers.					
14. Most of the music I listen to is in Arabic.					
15. My closest friends are Arabic speakers, not English speakers.					

16. I prefer social gatherings where the dominant language is Arabic.
17. I feel that Arabic speakers treat me as equal more than English speakers.
18. I feel more relaxed when I am around Arabic speakers than when I am with English speakers.
19. Arabs should not date English people (native speakers).
20. Generally, I find it difficult to socialize with anybody (Arabic and English speakers).
21. I sometimes feel that neither speakers like me.
22. There are times when I think no one understands me.
23. I sometimes find it hard to communicate with other people.
24. I sometimes find it hard to make friends.
25. I sometimes find that both Arabic and English speakers do not understand me.
26. I find that I do not feel comfortable when I am with other people.