Corrective Feedback in L2 Pronunciation: The Learner Lens

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CORRECTIVE FEEDBACK IN L2 PRONUNCIATION:
THE LEARNER LENS

by

ELIF SARIBAS
B.A. Yildiz Technical University, 2017

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the Department of Modern Languages and Literatures
in the College of Arts and Humanities
at the University of Central Florida
Orlando, Florida

Spring Term
2021
ABSTRACT

This study investigated learner perceptions of correction in L2 (second language) pronunciation. Research indicates that L2 learners have a strong preference toward corrective feedback provided by the teacher and also favor peer feedback (Kaivanpanah et al., 2012). In addition, external feedback is shown to contribute to the development of internal feedback, or self-correction (Huang & Jia, 2016). Learners were also found to carry positive opinions towards explicit error correction, with culture and proficiency level influencing those opinions (Yang, 2016). The current study used a qualitative approach to investigate learner perceptions toward correction in L2 pronunciation and examine real-life correction instances through the learner lens. The study used secondary data consisting of video recordings of focus-group interviews and classroom interactions. The focus-group interactions were analyzed thematically, and Lyster and Ranta’s (1997) framework was used to analyze classroom interactions. The analyses of both data sets and researcher field notes were further crossed to respond to the research question of how learners perceive correction in L2 pronunciation. It is hoped that this multidimensional look at corrective feedback in L2 pronunciation will not only educate teachers regarding the impact correction has in ESOL (English for Speakers of Other Languages) classrooms but also raise awareness in L2 learners as to the role such feedback can have on their pronunciation learning.
ACKNOWLEDGMENTS

First and foremost, I am deeply grateful to my advisor, Dr. Marcella Farina, for her invaluable advice, continuous support, and patience during the study. I also would like to express my sincere gratitude to my thesis committee, Drs. Vitanova and Mihai, for the feedback they provided. Lastly, I extend my sincere thanks to my friends and family for believing in me and supporting me throughout this journey.
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<table>
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<th>ABBREVIATION</th>
<th>FULL FORM</th>
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<tbody>
<tr>
<td>COLORS</td>
<td>Center of Language, Outreach, Research and Study</td>
</tr>
<tr>
<td>EFL</td>
<td>English as a Foreign Language</td>
</tr>
<tr>
<td>ESL</td>
<td>English as a Second Language</td>
</tr>
<tr>
<td>ESOL</td>
<td>English for Speakers of Other Language</td>
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<tr>
<td>L1</td>
<td>First Language</td>
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<tr>
<td>L2</td>
<td>Second Language</td>
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<tr>
<td>TESOL</td>
<td>Teaching English to Speakers of Other Languages</td>
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CHAPTER ONE: INTRODUCTION

Ellis (2017) claims that corrective feedback is an area in language research that interests both researchers and teachers because teachers are concerned about the effectiveness of the amount and the form of feedback they offer, whereas researchers want to know its effects on acquisition. He also suggests that teachers and researchers differ in their beliefs about corrective feedback in that teachers are interested on how it affects the motivation of the learners, while researchers are most interested in knowing whether or not it contributes to acquisition. Lyster et al. (2013) suggest that corrective feedback plays a critical role in the language classroom because it allows teachers to contribute to learner skill development in the target language through scaffolding. Over time with changes in language teaching methodologies, the focus of corrective feedback has changed its direction from being a concept developed around the teacher to an interaction centralized on the learner (Kaivanpanah et al., 2012).

According to Pawlak et al. (2015), students also hold a critical role in the language learning process since language classrooms are shaped by learner perceptions formed through past experiences and expectations in addition to the views held by the teachers. However, the authors note that learner beliefs on pronunciation instruction have not received much attention from researchers. There have been studies conducted on learner beliefs about pronunciation instruction that touched upon the aspect of corrective feedback (Alghazo, 2015; Pawlak, 2013), but the studies focused on the learner aspect of pronunciation instruction have been predominantly limited to the impact of corrective feedback on phonological acquisition (Dlaska & Krekeler, 2013; Ellis et al., 2001; Lee & Lyster, 2016; Lyster et al., 2013; Pawlak, 2013; Saito & Lyster, 2011; Sheen, 2004).
Rationale

In spite of the literature focused on self-monitoring and self-correction as a critical phenomenon in phonological skill development (Miller, 2001), learner perceptions and experiences on the subject of self-correction have not been given the consideration warranted in second language research (Huang & Jia, 2016). In addition, there is a lack of scientific inquiry of the perceptions of learners regarding self-correction skills, teacher- and peer-correction, and the preferred form of correction as well as a vivid account of the lived experiences of L2 pronunciation learners.

Classroom observations have been used to observe the effect of the corrective feedback on acquisition (Sheen, 2006; Sung & Tsai, 2014; Lee, 2016). However, they have not been used to explore learner perceptions about self-correction and corrective feedback for pronunciation utilized in the language learning classroom. In addition, a gap exists in the language research that adopts a detailed approach of learner perceptions that explores both personal perspectives and classroom behavior. The present research study aims to capture learner beliefs and experiences of the phenomenon by analyzing a combination of classroom observation and focus-group interview data.

Research Question

The purpose of this study was to explore the perceptions of second language learners regarding correction in L2 pronunciation so as to understand the beliefs, preferences, and attitudes of the learner. Since the role of learner perceptions and beliefs is critical and has an undeniable impact on the structure and nature of the language classroom, the need to delve into the views of the learners regarding error correction, an indispensable part of language learning, is also paramount (Pawlak et al., 2015). This research study sought to shed light on the concept of
self-correction by investigating learner understanding of self-correction and its relationship to received correction in L2 phonological acquisition. In addition, this study attempted to explore learner perceptions and experiences of different forms of correction in pronunciation. To this end, the current study explored the following research question: How do learners perceive the concept of correction in L2 pronunciation?

Using a qualitative approach, this study analyzed two sub-sets of secondary data gathered by a repository of language data. The data consisted of structured focus-group interviews centered upon self-correction and corrective feedback in pronunciation and classroom interactions in an English pronunciation course. In an attempt to address the research question, secondary data was analyzed in four stages. First, the preliminary data analysis was conducted for both data sets. Then, thematic analysis data analysis of the focus-group interviews took place. This was followed by the analysis of classroom interactions based on instances of corrective feedback. Finally, the themes and sub-themes that emerged from focus-group analysis and the findings of classroom observations were juxtaposed and examined for patterns relevant to the research question of learner perception of L2 corrective feedback.

Operationalized Key Words

This section defines and explains five key words operationalized in the study starting with terms related to what is meant by learner beliefs and perceptions and continuing with key words regarding correction in second language pronunciation.

The first significant cluster of terms relevant to this study consists of learner perception and learner beliefs. Learner perception refers to learners’ self-reported views, beliefs, and experiences which can be observed through behavior, verbal statements, written reports, and surveys. Even though these perceptions have been suggested to be static according to the
normative approach (Horwitz, 1987), this study considers learner perceptions to be dynamic and context-dependent knowledge held by learners that can be affective and cognitive in nature (Barcelos, 2003; Ellis, 2008). Utilized in this study as a part of learner perceptions, learner beliefs are “general assumptions that students hold about themselves as learners, about factors influencing language learning, and about the nature of language learning and teaching” (Victori & Lockhart, 1995, p. 224).

Another important group of terms critical for this study relates to the notion of correction. Correction is defined as the reaction that comes from the teacher that modifies, points out, or asks the student to alter learner the utterance (Chaudron, 1977). This definition is suggested to be inclusive since it refers to both implicit and explicit corrections. Furthermore, correction can arise from teachers, peers, the self, and others. For the purposes of this study, correction is distinguished as internal versus external points of origin. Correction with internal origin arises from the self and, thus, is defined as self-correction, which refers to observable evidence of the self-monitoring process (Kormos, 1999). In this study, self-correction, often also referred to as self-repair, is described as the adjustments the speaker makes in previously constructed utterances (Zeng, 2019). The second type of correction to define is that which arises from external origins, identified as correction by others in this study. The main characteristic of correction by others in the present study is the fact that it is “initiated by any party other than the speaker,” such as peers and teacher (Schegloff et al., 1977, p. 364).

This study aimed to contribute to the body of existing literature by analyzing corrective feedback in second language pronunciation through the learner perspective and embarked on offering second language teachers another means to better understanding learner perceptions when it came to pronunciation correction in second language teaching and learning.
CHAPTER TWO: REVIEW OF THE LITERATURE

Critical to this study are the aspects of corrective feedback in pronunciation directly associated to the learner. This can be examined from two dimensions of the learner: learner perceptions and effects of corrective feedback. In this review of literature, the first aspect of learner perceptions focuses on learner perspectives regarding peer feedback and its comparison to teacher feedback. This is followed by a summary of background research on perceptions in the area of self-correction. Finally, learner perspectives regarding the form of corrective feedback are discussed. The second section of this literature review focuses on the effects of correction on learner uptake and acquisition the second language pronunciation learning process.

Aspects of Corrective Feedback

Learner perceptions and beliefs are the views held by the learners regarding themselves, their learning processes, the nature of learning, and factors that contribute to or impede the language-learning process (Victori & Lockhart, 1995). Perceptions can be both metacognitive and affective, and they are dynamic and context-dependent in their nature, which indicates they can change depending on the language-learning experience, the personality of the learner, and the background of the learner (Ellis, 2008). Since beliefs held by the learners have an impact on the classroom decisions and effectiveness of the instruction, the need to understand learner perceptions have become ever more important (Pawlak et al., 2015). Studies conducted on learner perceptions and preferences regarding the source of correction, form of correction, and impact of correction on learning are relevant to the research question of the present study.
Sources of Feedback

The source of corrective feedback is critical in L2 pronunciation teaching and learning since not only can correction in the language classroom originate from external and internal sources, such as the teacher and peers compared to oneself, but students may also hold different beliefs regarding the source of the correction (Oladejo, 1993). Thus, reviewing the empiricism regarding the sources of feedback is directly relevant to understanding perceptions regarding different sources of feedback and how they relate to the learner’s lived experience.

External Sources

One source of feedback in the language classroom can stem from peers. Tian and Li (2019) investigated the perceptions of EFL (English as a Foreign Language) learners regarding receiving, offering, and observing peer corrective feedback. The study was conducted with 69 Chinese students in a university located in Beijing. The researchers formed three groups in which the learners evaluated in oral and written forms their peers’ writing. Each participant had the chance to receive, offer, and observe corrective feedback, and a questionnaire and a follow-up interview were administered at the end of the lesson. The results revealed that the majority of the students enjoyed offering both written and oral feedback to their peers and that providing written feedback seemingly more preferable. When it came to the role of the receiver of the oral feedback, participants enjoyed receiving both written and oral feedback, but the results for receiving oral feedback had a slightly higher mean than those for written. Of all three roles studied, the observer role was preferred. Moreover, participants had a strong preference for offering positive feedback over negative feedback, and the authors stated that this might be explained by the participants’ expressed desire to cooperate with and encourage their peers. As providing negative and positive feedback, findings showed a significantly higher preference of
providing positive comments orally. This was supported by participant concern that peers did not feel bad and that relationships would not be affected by negative feedback. Although the language skill in question was writing rather than speaking, the findings speak to the source of corrective feedback in a broader sense as an important component.

However, other studies have focused specifically on second language phonological acquisition and learner perceptions regarding the source of corrective feedback for pronunciation gains. For example, the findings of a study conducted by Katayama (2007) on 249 adult learners of Japanese indicated that the majority of the learners were in favor of receiving oral corrective feedback from their teacher. When the learners were asked to state their opinions about peer correction, the students’ opinions were not as strongly positive as those for correction provided by the teacher. According to the author, the reason behind the preference for teacher correction over peer correction was the concern regarding the accuracy of the feedback. An earlier study by Oladejo (1993) sought to determine learner preferences of source of corrective feedback in several language areas and focused specifically on pronunciation as a part of the study. In the study, advanced ESL learners were asked to choose their preferred source of correction in pronunciation. Findings revealed that 57.6% of the 500 participants believed pronunciation errors should be corrected by the teacher and that 23% of the learners preferred to correct their own errors, while 19% preferred to be corrected by their classmates.

In contrast, a study conducted on 200 Iranian EFL learners and 25 teachers showed different learner opinions with regard to peer feedback (Kaivanpanah et al., 2012) in that learners showed a general support for peer feedback and believed that their peers were competent enough to provide accurate corrective feedback. The learners in the study also stated that receiving feedback from peers did not make them feel humiliated. As for the comparison of the learner
preferences regarding peer and teacher feedback, the same study showed similar results with Katayama’s study (2007) in that participants considered teacher feedback as superior to peer feedback (Kaivanpanah et al., 2012).

All in all, studies have shown that learners are receptive to both positive and negative feedback when receiving it, but they prefer positive when offering it (Tian & Li, 2019). Despite learner preference for teacher correction over peer correction, learners also possess positive feelings attributed to peer feedback (Kaivanpanah et al., 2012; Katayama, 2007) and that the majority of learners are in favor of teacher correction over other sources (Oladejo, 1993).

**Internal Sources**

Reviewing the empirical evidence of learner perceptions regarding the role of self-correction is critical to this study due to its scope. The importance of self-monitoring in pronunciation was recognized by Stevick, Morley, and Robinett (1975). They introduced the concept of making students aware of their own pronunciation by observing and regulating their own speech. In fact, according to Morley (1975), the self-monitoring process starts by paying attention to actions of self and the correction provided by the teacher and the peers. Morley (1975) believed that pronunciation instruction should allow the students to self-monitor and correct their own errors. Miller (2001) also emphasized the importance of self-monitoring in allowing the learners to build independence, adding that teachers can help students build autonomy in monitoring and correcting their own pronunciation by using classroom and homework tasks that require learners to use recordings of themselves. Miller (2001) also suggested that asking learners to monitor only the targeted features focuses their attention on specific elements and helps them develop self-monitoring skills.
According to Miller (2001), self-monitoring is an essential skill to build into pronunciation instruction. She stated that, at some point, learners need to achieve autonomy and gain the ability to monitor and correct their own pronunciation errors. She also suggested that learners be given cues that include metalinguistic guidance about their errors so that they can discover and correct their own errors and added that peer correction can be encouraged at instances where the learner is unable to correct her/his own errors. She also emphasized the importance of giving the student the time and space to self-monitor and self-correct.

Huang and Jia (2016) also conducted a study to compare the beliefs of teachers and learners had regarding corrective feedback on pronunciation. Their results showed that both students and teachers were found to believe that the pronunciation feedback provided by teacher has a positive impact on student ability to self-correct (Huang & Jia, 2016). With regard to perceptions of the learners regarding the type of correction, research shows that learners tend to prefer prompts that lead to self-correction rather than being offered the correction (Delamorandiere, 2016).

In another study, Dlaska and Krekeler (2008) investigated the accuracy of the pronunciation self-assessment of 46 advanced learners of German of different first languages. In the data collection phase, participants were asked to first read a list of German words and listen to a recording of a native speaker reading the same words and then to listen to the speaking of each word and repeat it while being audio recorded. After that, the participants were asked to listen to the recording and state if their pronunciation was the same with that of the native speaker. Two raters were employed to listen to the recordings and evaluate the similarities between the native speaker and the German-learner utterances. Findings revealed that 81% of the ratings indicating accurate learner pronunciation were in agreement between the learner self-
assessment and the rater assessment. However, when it came to assessing their own pronunciation as inaccurate, learners were able to identify only 44% of their own incorrect pronunciation. In 10% of all ratings, the learners also evaluated their own pronunciation as inaccurate when it was, in fact, correct according to the raters. The researchers identified the factors affecting the issues of self-assessment in phonology as L1(first language) phonology transfer, previous pronunciation learning experience, the impact of other sounds, sounds that were challenging to rate, and psychosocial and individual differences.

Self-efficacy, perceptions on one’s own capabilities required to complete an action (Bandura, 1997), has also been studied as a component of learner perception regarding pronunciation learning. Sardegna et al. (2017) sought to investigate the self-efficacy beliefs and perceptions of pronunciation of 704 adolescent EFL learners in Korea. They used two inventories to determine the pronunciation strategies used by the learners and the self-efficacy beliefs and pronunciation attitudes of the learners. The results indicated that learners who had high self-efficacy beliefs were more willing to use pronunciation strategies, such as reading aloud, trying to follow pronunciation rules, and relying on intuition to find the correct form. These strategies were also found relevant to the desire to improve pronunciation.

In brief, self-correction is the evidence of the self-monitoring skill that can be enhanced through correction provided by outside sources and awareness-raising activities (Miller, 2011). Findings of the studies conducted by Huang and Jia (2016) and Delamorandiere (2016) indicate that learners perceive self-correction as a useful skill and effectively find strategies that allow its development. Even though learners are not always accurate in the evaluation of their own pronunciation errors, as suggested by Dlaska and Krekeler (2008), how they perceive themselves
can contribute to the use of pronunciation-learning strategies and lead to an increased ability to self-monitor and self-correct (Sardegna et al., 2017).

**Nature of Corrective Feedback**

When it comes to corrective feedback, several components contribute to the phenomenon. One important characteristic is the temporal aspect, specifically the timing and the frequency of the corrective feedback (Ellis, 2009; Lyster et al., 2013). The type of corrective feedback is another critical element relevant to the discussion of correction in L2 (second language) pronunciation teaching and learning (Lyster & Ranta, 1997). In addition, corrective feedback from the learner lens constitutes a fundamental viewpoint and can inform educators and learners alike as to the language factors, such as proficiency level and culture, that can be impactful. A close look at these varied factors helps to establish the very nature of corrective feedback in L2 pronunciation.

**Temporal Aspects**

Learner preferences in relation to the temporal aspects of corrective feedback in L2 pronunciation manifest in terms of the timing and frequency of the correction. Based on Ellis’s (2009) categorization of immediate versus delayed feedback, Alghazo’s (2015) study examined the beliefs of 71 advanced English language learners about pronunciation and revealed that the majority of participants preferred immediate feedback over delayed feedback (Alghazo, 2015). Kaivanpanah et al. (2012) also compared learner and teacher beliefs regarding immediate feedback for pronunciation errors, but the results indicated that the learners had more positive attitudes towards immediate feedback than did teachers. Likewise, Huang and Jia’s (2016) study found that, while the learners believed that offering corrective feedback after the lesson was
valuable for student’s self-respect, there was a stronger positive attitude towards the statement suggesting that feedback offered in-class promotes the acquisition of correct pronunciations (Huang & Jia, 2016).

Pawlak et al. (2015) also investigated learner beliefs regarding corrective feedback in L2 pronunciation. Their study used a Likert survey and follow-up interviews to examine the beliefs of 110 advanced-level, Polish EFL learners regarding pronunciation and found that 60% of the participants wanted their pronunciation errors to be corrected by the teacher as soon as they made them, while 50% of participants wanted the teacher to wait until the task was completed to provide the error correction. In fact, results regarding the item “I believe the teacher should only correct errors which interrupt communication” showed only 20% participates agreement (Pawlak et al., 2015, pp. 14). Another finding of this study showed that 86% of the participants wanted their pronunciation errors to be corrected by the teacher, and 80% of the participants preferred it when the teacher explained pronunciation features. The authors concluded that, even though the participants demonstrated a preference for pronunciation correction, they appeared to have differing views when it came to the timing of the correction.

Different findings have been found when other language aspects were included in determining learner preferences for the frequency of pronunciation correction. For instance, Oladejo (1993) examined the beliefs of 500 ESL learners in Singapore regarding error correction. When the learners were asked to rate the degree of attention that should be given to error correction, 20.8% percent of them suggested that pronunciation should be given high attention in error correction, while 58.8% believed that some attention should be given to pronunciation. Furthermore, 18% of the participants chose the “little attention” option, while 2.8% suggested that pronunciation errors should receive no attention in correction. With respect
to the preferred frequency of error correction, 38% of the learners stated that pronunciation errors should always be corrected, 52% suggested that it should be occasionally corrected, while only 8% chose the “rarely” and 1% the “never” options.

**Correction Types**

In addition to temporal aspects of corrective feedback, empirical findings exist on learner perceptions regarding the type of feedback. One such example is Yang (2016), who conducted a study of 156 adult Chinese as a second language learners and the use of Chinese tones. Yang analyzed participant beliefs regarding the form of oral corrective feedback on phonological, lexical, grammatical, and pragmatic errors in relation to cultural background and proficiency level. Another study used a questionnaire to determine if participants preferred explicit correction, recasts, elicitation, metalinguistic feedback, clarification requests, and repetition, based on the types of oral corrective feedback determined by Lyster and Ranta (1997). The results indicated that the oral corrective feedback types found most effective among learners were explicit error correction and metalinguistic feedback, followed by recasts and clarification requests. Elicitation and repetition were the least effective types according to the learners. Similarly, Zhao (2015) investigated the perceptions of oral corrective feedback in pronunciation of Chinese as a second language learners, and the results showed that the preferred form of corrective feedback was explicit correction, followed by metalinguistic feedback and recasts. Learners also believed encouragement for self-correction was not necessary and redundant when it came to pronunciation errors. As for EFL learner preferences, findings from Huang and Jia’s (2016) study of English language learners in Beijing revealed similar results in that recasts were the preferred form of error correction followed by explicit error corrections and prompts. These results differ from those of Katayama’s (2007) study of Japanese learners of English in which
most preferred form of oral correction was encouragement for self-correction followed by metalinguistic feedback, recasting, and explicit correction (Katayama, 2007).

However, studies have shown that learner perceptions may differ from those of teachers when it comes to preferred forms of pronunciation correction. According to the findings of Oladejo’s (1993), the most preferred form of error correction by the learner-participants (54.4%) was when the error was supported by cues and given to encourage self-correction. The second most preferred form (42%) was the error accompanied by the correct answer. This was followed by the explanation of errors using examples, which 35% of participants rated as the most preferred form of error correction. Oladejo (1993) concluded that teacher perceptions about error correction, which are in favor of modeling the correct forms (Fanselow, 1977), may not always be in line with learner expectations.

Factors Affecting Learner Preferences

Additionally, research studies have investigated language-related factors influencing learner preferences when it comes to correction in pronunciation. Yang’s (2016) study took a broad approach and focused on the relationship between cultural background, proficiency level, and the learner opinions regarding the use of clarification requests in phonological corrective feedback. Results suggested that students from non-Asian countries found clarification requests more effective compared to learners from Asian countries. The researcher also examined the role language level played in learner perceptions regarding corrective feedback and found that intermediate-level learners rated clarification requests more positively compared to beginning-level learners (Yang, 2016). Kaivanpanah et al. (2012) also investigated the relationship between proficiency levels and preferred oral correction methods of Iranian EFL learners, and findings
indicated that more advanced learners had a stronger preference for elicitation and encouragement for self-correction compared to intermediate and elementary learners.

Several studies have examined proficiency level in particular with regard to corrective feedback in pronunciation. For example, Delamorandiere (2016) compared the perceptions of intermediate and advanced ESL (English as a Second Language) learners in Canada with regard to the inclusion of elicitation in the correction, and both intermediate and advanced learners showed a strong preference towards encouragement for elicitation accompanied by modeling. Conversely, Sung and Tsai (2014) encountered different findings when they compared the beliefs of advanced and beginning learners of Chinese language in the United States regarding oral corrective feedback for pronunciation errors. Their results suggested that recasts were the most preferred method in both groups. However, while advanced learners showed a preference for only-explicit error correction and metalinguistic feedback, some beginning learners found elicitation and repetition more helpful. These findings point out that learner preferences for the type of corrective feedback may differ depending on proficiency level and cultural background.

In summary, studies showed that most learners prefer pronunciation errors to be corrected immediately by the teacher (Alghazo, 2015; Pawlak et al., 2015). The most prevailing learner preference is for explicit correction when it comes to pronunciation error, with a secondary preference for encouragement towards self-correction (Katayama, 2007; Zhao, 2015). Temporal factors suggest that learners have a tendency to prefer immediate feedback over delayed feedback in pronunciation lessons, but there seem to be different views about the desired frequency of corrective feedback on pronunciation (Alghazo, 2015; Pawlak et al., 2015). Lastly, findings of studies conducted with students from varied backgrounds indicate that the preferred type of correction is often mediated by factors of culture and proficiency level (Kaivanpanah et
al., 2012; Yang, 2016). In short, the nature of corrective feedback is another critical area to consider in addition to the source when conjuring the overall notion of correction in L2 pronunciation.

Impact of Corrective Feedback

Due to the fact that this study focused on learner perspective of correction in L2 pronunciation, the effects corrective feedback has on L2 pronunciation learning are of great significance. These effects include acquisition, uptake, motivation, anxiety levels, and willingness to communicate (Fadilah, 2018; Lee, 2016; Saito & Lyster, 2011; Sheen, 2006). Most relevant to this study are the two perspectives of uptake and acquisition.

Uptake is defined by Lyster and Ranta (1997) as the immediate utterance produced by the learner, a reaction to the teacher’s attempt to provide a correction based on the language form previously uttered by the learner. According to Ellis et al. (2001), successful uptake is accompanied by an indication of understanding the correct feature or the demonstration of the correct structure. Ellis et al. (2001) also suggest that despite being a demonstration of understanding, successful uptake does not necessarily manifest into acquisition since learners need to be able to use the target feature correctly in an autonomous manner without prompting in order for acquisition to take place. Thus, while uptake is an indication of student understanding based on corrective feedback (Lyster and Ranta, 1997), acquisition of a certain skill is displayed through the learner’s independent ability to demonstrate the skill (Ellis et al., 2001).

Effects on Uptake

Research studies investigating the impact of corrective feedback on pronunciation uptake are significant to this study because uptake is the initial reaction given to corrective feedback by
the learner (Ellis et al., 2001). Uptake in pronunciation can be demonstrated by improved comprehensibility and reduction of the pronunciation error at word and sound levels (Ahangari, 2014; Dlaska & Krekeler, 2013).

Several studies compared the effect that corrective feedback on learner uptake in grammar, vocabulary, and pronunciation. Firstly, Ellis et al. (2001) juxtaposed the effects of correction on learner uptake in two English-language classes in New Zealand by identifying and coding correction and focus-on-form instances. In their study, the teacher aimed to correct student utterances using explicit correction, prompting, recasts, clarification requests, repetition, and elicitation. In addition, uptake episodes were categorized as recognizing the error, application of the feedback, and the inability to demonstrate self-correction. Study results indicated that the rate of successful uptake initiated by teacher correction was higher for pronunciation (86.4%) than for vocabulary (79%) and grammar (69%) even though the number of correction instances for pronunciation were less than half those of the other two areas. These results support the findings of Sheen’s (2006) study which targeted the relationship between recasts and learner uptake. While recasts were less frequently used, accounting for 21% of the 233 total recasts in pronunciation errors compared to grammar (52%) and vocabulary errors (28%), the percentage of learner uptake stemming from pronunciation recasts was 91.8%, which was significantly higher than for grammar and vocabulary areas, 70% and 77% respectively.

Examining specifically corrective feedback in pronunciation, Lee (2016) investigated the effects of oral pronunciation feedback on the immediate pronunciation uptake of 60 advanced ESL learners. Pre- and post-surveys as well as classroom observations of 5 different classes led by 5 different teachers were included in the study with the aim of determining the type of
corrective feedback and learner reactions to them. Data analysis of the classroom observations suggested that recasting was the most commonly used correction technique in the classroom followed by metalinguistic feedback and clarification requests. These three forms of correction were found to have high repair rates (>80%), with explicit correction accompanied by metalinguistic explanation as the highest repair rate (90%); this was followed by recasts (86%) and clarification requests (84.5%). Explicit correction, elicitation, non-linguistic signaling, and repetition were determined to be the least commonly used correction types. Explicit correction was found to have the highest repair rate (97%) among those followed by non-linguistic signaling (88.9%) and elicitation (87%), while repetition of the error had the lowest repair rate (55%).

Within the notion of uptake is also degree of comprehensibility. Dlaska and Krekeler (2013) investigated the immediate effects of corrective feedback on the improvement of comprehensibility of 169 learners of German. The researchers created two different groups and offered a different mode of corrective feedback to each group. The “listening-only” group read a piece of text, recorded themselves, listened twice to their own recording and the recording with the correct pronunciation, and re-recorded themselves re-reading the same text. The “individualized-corrective-feedback” group was provided corrective feedback in addition to the recordings with correct pronunciations. After listening to the recordings, the learners took part in brief feedback sessions in which the teacher referenced areas for improvement related to individual sounds, word stress, speed, and intonation. This was followed by the learner reading and recording the same text. After that, speech samples from each group were gathered, and experienced raters compared the level of comprehensibility in each sample by giving a 0 if both recordings had a similar degree of comprehensibility and a 1 if one speech sample was easier to
understand than the other. The results indicated significant improvement in pronunciation for the group that was provided both corrective feedback and the audio-recording with correct pronunciation. The authors concluded that individual corrective feedback has a clear advantage over implicit feedback when it comes to the short-term effects of pronunciation feedback on comprehensibility.

In essence, research has shown that levels of learner uptake are higher in comparison to other aspects of language despite language-teacher inclination to correct pronunciation errors less frequently (Ellis et al., 2001). Research has also been conducted on the relationship between pronunciation uptake and form of correction. Explicit correction combined with metalinguistic feedback was found to result in the highest number of learner-uptake instances (Lee, 2016). Another important finding within the literature was that the provision of corrective feedback was associated with higher levels of uptake in contrast to offering the correct pronunciation only.

**Effects on Acquisition**

The notion of acquisition in relationship to corrective feedback is different from uptake since acquisition corresponds to the ability of the learner to demonstrate the language ability independently versus the initial reaction to correction associated with uptake (Ellis, 2011). Thus, studies involving procedures that allow the participant to complete a task independently are associated with phonological acquisition. Evidence of the effects of correction on acquisition encompasses areas of the presence of corrective feedback and its sources as well as its implicit and explicit nature.

Empirical evidence of the relationship between the presence of corrective feedback and pronunciation acquisition points to Saito and Lyster’s (2011) research, which examined the effects of form-focused pronunciation instruction with and without corrective feedback on the
correct production of the /ɹ/ by Japanese EFL learners. Participants received four hours of instruction in three different groups. The first group, the control group, received meaning-focused instruction while the second group was provided with form-focused instruction focusing on 38 target words. The third group was provided with corrective feedback, specifically recasts, in addition to form-focused instruction. Data was gathered from three tests: a pre-test, a post-test, and a third test containing different words from the target words used in the form-focused instruction. The analysis of the test results suggested a significant improvement in the pronunciation of /ɹ/ for the group that received corrective feedback in the form of form-focused instruction and recasts compared to the other two study groups (meaning-focused instruction only versus form-focused instruction followed by meaning-focused instruction). A subsequent study by Saito & Lyster (2012) on the acquisition of Japanese vowel sounds also indicated a positive impact of focused recasts on the production of accurate vowel sounds in second language speech production \( (p = 0.14) \).

Similarly, Lee and Lyster (2016) compared the effects of correction on L2 the perception of /ɪ/ and /i/ by two groups of Korean EFL learners. Both groups received form-focused pronunciation instruction for three days, but only one group was provided corrective feedback when they failed to identify the correct minimal pair. The group that was provided corrective feedback outperformed the instruction-only group in both immediate and two-week-delayed post-tests.

Whereas the majority of the research in pronunciation acquisition has centered on teacher correction, Ahangari (2014) aimed to compare the effects of self-, peer-, and teacher-correction on pronunciation improvement via a study on 45 EFL participants in Iran. The researcher used the same treatment procedure for all three groups but provided different correction opportunities
for each group. First, the participants were assigned a pretest in which they were asked to tell a story using picture cues, and during the treatment period, the participants performed narrative tasks. While the self-correction group received written feedback by the teacher that included the errors produced by the participant and were expected to find the pronunciation errors and to self-correct, the second group was responsible for finding errors in their peers’ utterances and providing corrections. For the last group, the teacher provided oral corrections as the participant performed the task. Three months later, a post-test was administered, and findings showed that the “self-correction” group outperformed both the “peer-correction” and teacher-correction” groups, and the “peer-correction” group performed better than the “teacher-correction” group (Ahangari, 2014).

Another measure of the effect of corrective feedback form on acquisition was employed by Pawlak (2013), who conducted an experimental study on 36 EFL speakers to compare the effects of implicit and explicit correction on pronunciation. He created three groups in total: the implicit-correction group, the explicit-correction group, and the control group. While the control group received no intervention, the implicit and the explicit groups received a treatment whereby they took part in a task to use 90 potentially problematic words. Only the pronunciation errors related to these words were corrected. While the implicit group was provided recasts and clarification requests, the explicit group correction consisted of direct error correction, elicitation, and metalinguistic feedback. The findings indicated that there was no significant difference between the pre-test pronunciation accuracy of the three groups, but both the experimental (implicit-correction and explicit-correction) groups obtained higher scores on the post-test as compared to the control group. Moreover, the explicit-correction group was found to
outperform the implicit-correction group with a statistically significant difference in the post-test ($p < 0.05$).

To sum up, corrective feedback has a positive impact on pronunciation acquisition (Saito & Lyster, 2012). In addition, the most effective source of correction with respect to acquisition was found to be self-correction (Ahangari, 2014). As for the relation between form of corrective feedback and pronunciation acquisition, explicit correction is indicated to be more effective than implicit correction.

**Measuring Corrective Feedback**

Methods for measuring learner perceptions of correction in L2 pronunciation is of significance to this study because the study instrument sets to elicit participant data regarding the source and the form of correction. Documented studies range in instrument design from measuring learner preferences for form and source to ascertaining learner attitudes and feelings about the importance of pronunciation correction. Although these instruments are most often Likert-based, some also elicit multiple-choice data. Current literature also contains studies including treatment procedures, interviews, and classroom observations.

The broader perspective of learner preference in instrumentation can be observed through studies like that of Katayama (2007), who developed a questionnaire to determine learner perceptions toward oral corrective feedback. The instrument consisted of 5-point Likert-scale items ranging from “strongly disagree” to “strongly agree”, from “never” to “always”, and from “no good” to “very good”. The first section asked learners to rate their degree of agreement with statements regarding peer correction and the scope of the correction (all the errors, only errors that interfere with communication, etc.), while the second section asked learners to rate their preferred frequency of correction for grammar, pronunciation, discourse organization, and
authentic language structures (Katayama, 2007, p. 304). In the last section of the instrument that included specific forms of correction, the participants were expected to rate, on a scale between “good” and “no good”, the usefulness of each correction type on pronunciation and grammar errors (p.304). The items in this section specifically related to pronunciation errors and provided examples of implicit correction, explicit correction, recasts, and metalinguistic feedback.

Another instrument that focused on feedback for language skills in addition to pronunciation was developed by Kaivanpanah et al. (2012). A 5-point Likert-scale questionnaire containing 36 items was designed to determine EFL learners’ preferences for interactional feedback provided for grammar, vocabulary, and pronunciation errors. This part of the instrument included items related to peer correction, teacher correction, target of the correction, recasts, elicitation, metalinguistic feedback, explicit correction, prompting for self-correction, delayed vs. immediate feedback, and self-correction. In addition, the questionnaire included items about the form of the feedback used, asking the learners to rate their preferences for the inclusion of the error in the feedback and the intonation used in feedback. This questionnaire also elicited affective perspectives via statements, such as, “When the classmates correct the errors, one does not feel humiliated” (Kaivanpanah et al., 2012, p. 20). In addition to the questionnaire, the researchers conducted semi-structured interviews on 10 teachers with the aim of investigating their beliefs about different types of corrective feedback.

Also along the emotive lines, Zhao’s (2015) study approached the issue from a different perspective and developed an instrument targeting learner feelings associated with different types of feedback. The Likert-scale instrument contained items regarding attitudes towards oral corrective feedback, feelings associated with the frequency of the feedback and elicitation of self-correction, preferences for implicit versus explicit feedback, and beliefs about the effect
preferred feedback types have on learning and performance. The questionnaire also included a section where specific feedback types were provided along with examples; participants were to rate their preferences in terms of pronunciation, grammar, and vocabulary errors (Zhao, 2015). Interviews were also used in the study in order to provide a more in-depth understanding of learner preferences.

With regards to pronunciation in particular, instruments that target specifically pronunciation pedagogy have also been designed. Alghazo (2015) developed an instrument to assess adult EFL learner beliefs about pronunciation instruction. The questionnaire asked learners which pronunciation concepts they wish to learn, including those only affecting communication versus all aspects of pronunciation. The instrument also included an item asking whether learners prefer to receive instruction before they practice the target structure as well as an item asking learners to choose their preference between delayed and immediate feedback on pronunciation. Another item of the questionnaire asked participants to choose if they prefer to receive pronunciation instruction from a native or a non-native teacher. The instrument included other multiple-choice items that asked the preferred language of instruction, preferences for the instructor’s first language, and the preferred timing of pronunciation instruction and the practice opportunity. Some items in the questionnaire were open-ended and aimed to investigate the reason behind the participants’ choices.

Similarly, Delamorandiere (2016) designed an instrument that contained ten, 5-point, Likert-scale items ranging from “strongly agree” to “strongly disagree” to examine the preferences of learners in pronunciation correction. The items related to preferences about being corrected on pronunciation in lessons focusing on pronunciation versus those targeting other skill areas, encouragement for self-correction, being interrupted for correction, and the frequency of
the correction. In addition to the questionnaire, the researcher conducted classroom observations on ESL beginner, intermediate, and advanced ESL learners in Canada based on the Lyster and Ranta’s (1997) analytic model. Structured interviews were also conducted on the instructors at the end of the study.

Rogers (2017) used a more specific approach of determining learner preferences for pronunciation feedback. His study included an oral task and corrective feedback provided either by the peers or the teacher. In addition to a post-test task that was used to measure phonological acquisition, a post-test questionnaire was administered with the purpose of determining Vietnamese learners’ attitudes towards peer and teacher feedback. The instrument asked participants to select either “feedback from the teacher” or “feedback from the classmate” in response to the feedback type they found most useful and the one they found most comfortable to receive. In addition to this multiple-choice section, two clusters of Likert-type statements were also employed in the questionnaire. The first cluster consisted of items asking participants to rate the level of helpfulness of the feedback type, accuracy of the feedback, and difficulty of the task after receiving corrective feedback as well as the amount of stress experienced during each task. The second cluster consisted of items addressing the importance of having accurate pronunciation in English, speaking with a native-like accent, and the importance of pronouncing final-word consonants. The final item of the instrument was a yes/no question that asked whether or not participants wished to conserve their Vietnamese accents.

A slightly different approach to instrument design was employed by Huang and Jia (2016), who developed an instrument to compare the perceptions of learners and teachers with regard to corrective feedback in pronunciation teaching and learning. A questionnaire was designed based on an interview conducted with a group of learners. Their Likert-scale instrument
consisted of 28 items related to the form of correction including recasts, prompts, and explicit correction, immediate versus delayed feedback, correction and all errors versus repeated errors, and the impact corrective feedback on self-correction and transfer errors.

Another method that has been used to measure learner perceptions of corrective feedback is classroom observations. Lyster and Ranta (1997) developed a framework to investigate learner corrective feedback and learner uptake in the second language classroom. The framework contained six types of corrective feedback: explicit correction, recasts, clarification requests, metalinguistic feedback, elicitation, and repetition. The error types were identified as phonological, grammatical, lexical, and use of L1. Instances of uptake determined by Lyster and Ranta (1997) were classified as “repair” and “needs repair” (p. 44). Instances of repair were considered as reformulations of error and were categorized as repetition, incorporation, self-repair and peer repair. For the “needs repair” category, the authors used six different instances: acknowledgment of the error with no repair, repetition of the same error after corrective feedback, producing a different error as a replacement of the initial error, off-target uptake, hesitation, and partial error. In addition to the categorization of corrective feedback and uptake instances, Lyster and Ranta (1997) included moments of positive reinforcement provided by the teachers as a reaction to correct utterances of the students. Transcriptions of correction instances were also included in the study.

To summarize, the majority of instruments measuring learner perceptions of correction utilize Likert-scale items and interviews. While there are studies that target correction with different language skills at the same time (Kaivanpanah et al., 2012; Katayama, 2007), research focusing on correction in L2 pronunciation specifically, including the source, timing, and type of correction, are also present in the literature.
In conclusion, empirical findings suggest that learners have a tendency toward positive opinions regarding corrective feedback provided specifically by the teacher (Pawlak et al., 2015 & Katayama, 2007). In addition, preferred forms of error correction by learners were found to be explicit correction (Katayama, 2007; Yang, 2006) and encouragement recasts (Huang & Jia, 2016). Evidence suggests that self-correction is more effective than other sources of feedback on pronunciation (Ahangari, 2014). What’s more, corrective feedback provided on pronunciation was found to have a higher uptake rate than when provided with other aspects of language (Sheen, 2006). The current literature also claims a scientific inquiry that utilizes multiple forms of data is needed in the area of learner perceptions in L2 pronunciation (Pawlak et al., 2015). This will provide a more detailed, multi-dimensional picture of the lived experiences from the learner lens.

Therefore, the basis for the current study is posited in research relevant to the source and nature of corrective feedback in pronunciation teaching and learning. In addition, the literature has fueled the study design as it relates to measuring learner perceptions of corrective feedback in pronunciation. Also paramount to this discussion are the effects of corrective feedback on pronunciation learning; that is its effect on uptake and acquisition in pronunciation.
CHAPTER THREE: METHODOLOGY

This study used a qualitative approach to explore perceptions and experiences in L2 pronunciation correction from the learner perspective by means of video recordings of focus-group interviews and classroom interactions as well as researcher observations. The population of the study consisted of adult ESL and EFL learners with varied backgrounds and enrolled in a six-week, L2 pronunciation course in a large, public university located in the southeast United States. This section presents the study design, the population, the role of the researcher, each of the secondary data sets, and the procedures applied in analyzing the data and responding to the research question.

Study Design

A qualitative approach was employed in the present study with the purpose of investigating the research area in an in-depth manner. The data was analyzed to obtain a detailed understanding of the participants’ perceptions, beliefs, and experiences regarding the research topic.

Secondary data was obtained from the Center of Language Outreach, Research, and Study (COLORS) Repository housed at a public, post-secondary institution in the southeast United States. The COLORS Repository collects both quantitative and qualitative artifacts of ESOL classroom interactions and provided the researcher with two qualitative data sets. The process of obtaining the Repository data used in this research project involved multiple stages, starting with requesting use of the data from the university’s Institutional Review Board (IRB). Once approval was secured (Appendix A), the researcher submitted a completed COLORS Repository Request Form (Appendix B) soliciting for the data for the study and signed a
Repository Data Sharing Agreement (Appendix C) agreeing to data use conditions of the Repository. Subsequently, the COLORS Repository provided the researcher with video recordings of focus-group interviews and classroom interactions. The focus-group interview data was analyzed thematically and sorted into dominant themes with associated meanings, while for the second data set, classroom interactions, Lyster & Ranta’s (1997) coding system was used to analyze the corrective feedback episodes. In addition to the secondary data set, the researchers own observations and accompanying field notes were compiled and contributed to the data analysis of the present study. Finally, all the findings were converged and interpreted to address the study research question: How do learners perceive the concept of correction in L2 pronunciation?

*Population*

The population within the data collected by the Repository represented adult learners with varied backgrounds. The countries the participants resided in as well as their first languages were varied, meaning both EFL and ESL learners were among the participants. The data set provided also included age range and gender. All of the participants self-disclosed for having normal hearing, were over the age of 18, and had provided consent for inclusion in the Repository’s database. The COLORS Repository states that the participants reflected by the data seta issued had been purposively selected for inclusion in the English pronunciation course at the host institution.

Since this qualitative design included an active role on the part of the researcher in terms of observation, analysis, and interpretation, it is important to also reflect on relevant information regarding this individual. The researcher of the present study, a student currently pursuing a master’s degree in TESOL (Teaching English to Speakers of Other Languages), is also an ESOL
speaker herself. Since the data of this study consists of secondary data gathered by the Repository, the researcher did not play a role in the data collection phase.

Data Sets

The two secondary data sets of this study consisted of data gathered and provided by the Repository. Data sets were comprised of video recordings of both focus-group interviews and classroom interactions and released to the researcher in the form of mp4 files. In addition, the Repository provided the researcher with background information of the participants, specifically their first language, age range, and gender. The data set was released by the Repository via a password-protected file in the host institution’s secure cloud system. A third component of the data consisted of the researcher observations and field notes.

Focus-Group Interviews

One of the two qualitative data sub-sets provided by the Repository was focus-group interviews. The data set consisted of four focus-group video recordings as seen in Table 1. The topic of the first two recordings focused on correction in L2 pronunciation, both internal- and external-originating feedback, and were labeled as FG1a and FG1b, respectively. The topic of the third and fourth recordings targeted L2 pronunciation awareness and the role of imitation in L2 pronunciation, referred to as FG2a and FG2b, respectively. Each focus-group recording included 2-4 learners and was facilitated by a TESOL graduate student who followed a strict protocol, which included a script (Appendix B).
Table 1

Focus-Group Interview Details

<table>
<thead>
<tr>
<th>Recordings</th>
<th>Topic</th>
<th># of Participants</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG1a</td>
<td>Awareness &amp; Imitation</td>
<td>3</td>
<td>15:52</td>
</tr>
<tr>
<td>FG1b</td>
<td>Awareness &amp; Imitation</td>
<td>3</td>
<td>14:30</td>
</tr>
<tr>
<td>FG2a</td>
<td>Correction</td>
<td>2</td>
<td>19:09</td>
</tr>
<tr>
<td>FG2b</td>
<td>Correction</td>
<td>4</td>
<td>14:40</td>
</tr>
</tbody>
</table>

Classroom Interactions

The other qualitative data sub-set obtained from the Repository consisted of video recordings of pronunciation classroom exchanges under the guidance of a seasoned TESOL professional specialized in L2 pronunciation. The pronunciation lessons were attended by ten learners and a few TESOL graduate-student observers. The lessons occurred every week within a six-week period and were broadcast synchronously online through video conferencing. The researcher was provided with recordings of four lessons: the first, the third, the fifth, and the sixth, as shown in Table 2.

Table 2

Classroom Interaction Details

<table>
<thead>
<tr>
<th>Lesson</th>
<th># of Participants</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>1:08:40</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>1:42:03</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>1:31:28</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>1:13:18</td>
</tr>
</tbody>
</table>
These classroom interactions consisted of pronunciation instruction focusing on segmental and suprasegmental aspects of American English. Teacher modeling and student elicitation were common techniques used along with recasting and post-production corrective feedback. Furthermore, the interactions were based predominantly on auditory input with visual input relating to physiological aspects rather than orthographic depictions, or text.

The Repository reported that all attendees were required to have full audio and video functionality during the session. The video recordings were produced in “gallery view”, which allowed for all participant images to be visible concurrently. Lastly, the classroom interactions made minimal or no use of chat, white board, and screen-sharing features.

**Data Analysis**

The structure of the study utilized both interview and observational data and followed specific data analysis procedures for each type of data. The researcher used a convergent design to analyze the data. That is, the two data sets data were “analyzed separately, and then merged” (Creswell & Plano Clark, 2011, p. 154).

Video recordings of the focus-group interviews were transcribed and analyzed for dominant themes and associated meanings while those of classroom interactions were analyzed and coded for patterns of corrective feedback, according to Lyster and Ranta’s (1997) framework, and viewed for researcher observations and field notes. Then, findings from the analyses of the qualitative data were juxtaposed to address the research question.

The data analysis process of this study took place in four stages. The first stage involved the preliminary analysis in which the researcher familiarized herself with the data and prepared the data for analysis. Then, the focus-group interview data was analyzed for themes and formulaic meanings, and the classroom interactions were coded and sorted for instances of
corrective feedback, which was merged with researcher field notes. Finally, exploration of patterns in the analyses of the data sets ensued in order to address the research question.

Preliminary Analysis

Preliminary analysis of the focus-group interview and classroom interaction data started by identifying the duration of each recording and ascertaining participant frequency. This was followed by viewing the focus-group recordings, documenting onset counters of occurrences related to correction, and transcribing these episodes. Lastly, onset counters of corrective feedback instances were documented from the recordings of the classroom interactions.

Focus-Group Interviews

Each focus-group interaction focused on a particular topic and followed a specific protocol (Appendix D). The subject of the first focus-group interaction was correction, including self-correction, correction by others, and correction by the teacher. The second focus-group interview covered pronunciation awareness and its relationship with correction. Excerpts found relevant were recorded and manually coded together using a software, NVivo 1.0. Codes were generated depending on the associations of meaning found in the transcriptions in relation to the notion of correction. The recordings were then re-viewed, and other occurrences found relevant to correction in L2 pronunciation were added to the coding process. The researcher then looked for patterns and their associations to formulate and re-formulate the main themes and sub-themes. After this step, the findings were summarized.
Classroom Interactions

The data analysis process of the classroom interactions involved coding the corrective feedback instances based on the framework developed by Lyster and Ranta (1997). Each onset encounter recorded during the preliminary analysis was coded with labels indicating the lesson, participant, description of the error, correction type, and type of repair. The researcher examined errors of both segmental and suprasegmental levels. Errors and repair attempts were compared with each other using both of these aspects.

Each instance of corrective feedback was coded as explicit correction, metalinguistic feedback, recast, elicitation, repetition, and clarification request. Learner uptake was categorized as repair and needs repair. The codes used for moments where repair was achieved were classified as repetition and self-repair. In addition, researcher field notes relating to events that seemed significant were added to the record of the correction instance. Finally, the number of corrective feedback and repair instances were counted for each participant, and participant errors and repair patterns were noted.

This analysis was supplemented by researcher field notes which were specifically structured around each lesson and documented the participant perspective of corrective feedback instances only. The anecdotal observations contained within the field notes reflected various aspects, such as expressions of emotion (both facial and verbal), repair strategies, instances of multiple repetition with and without success, participant questions, and unique pronunciation behaviors.

Composite Analysis

Because this study investigated learner perceptions of correction in L2 pronunciation, the researcher crossed aspects of the analyses from both the interview and the classroom data in an
attempt to expose patterns related to perceptions of correction. This was done by reviewing the findings for patterns between the data sub-sets. Patterns of divergence and convergence within all the findings were reported and associated to the research question.
CHAPTER FOUR: FINDINGS

This chapter explores the themes which emerged from data regarding learner perceptions of correction in pronunciation. The data examined was derived from focus-group interviews and researcher observations of classroom interactions. The total number of participants who attended the focus-group interviews was seven; however, data from only six participants were analyzed for the purpose of this study due to the lack of input provided by one participant during one of the focus-group interview sections. The focus-group interview data originated from two Chinese speakers, three Spanish speakers, and one Bengali speaker. In addition, out of ten participants represented in the classroom interaction data, four were chosen for inclusion in the analysis based on the richness of data available due to consistent attendance. Table 3 depicts the participants, referred to with pseudonyms, their self-disclosed gender and age ranges along with their occurrences within the two data sets.

Table 3

Participant Demographics

<table>
<thead>
<tr>
<th>Participant</th>
<th>L1</th>
<th>Age</th>
<th>Gender</th>
<th>FG</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meiling</td>
<td>Chinese</td>
<td>34-44</td>
<td>F</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gabby</td>
<td>Spanish</td>
<td>34-44</td>
<td>F</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Amar</td>
<td>Bengali</td>
<td>25-24</td>
<td>M</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sandra</td>
<td>Spanish</td>
<td>34-44</td>
<td>F</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Li</td>
<td>Chinese</td>
<td>25-34</td>
<td>F</td>
<td>✓</td>
<td>---</td>
</tr>
<tr>
<td>Maria</td>
<td>Spanish</td>
<td>34-44</td>
<td>F</td>
<td>✓</td>
<td>---</td>
</tr>
</tbody>
</table>

Note. FG=Focus-Group CI=Classroom Interaction
Analyses of the data from the focus-group interviews were used to determine emerging themes in participant views about correction in L2 pronunciation and to explore the relationship between perceptions and real instances of correction in a pronunciation classroom. First, the researcher conducted a thematic analysis on the focus-group interviews. Each utterance related to correction was transcribed. This transcription was then coded using NVivo 1.0, and these codes were then sorted into themes and sub-themes.

Subsequently, the classroom interactions were transcribed, and each correction instance was coded using Lyster and Ranta’s (1997) framework. Patterns within the instances coded fell into four categories of corrective feedback: *explicit correction, metalinguistic feedback, recast,* and *elicitation.* Furthermore, learner uptake was categorized as *repair* and *needs repair,* and moments where repair was achieved were labeled *repetition* and *self-repair.* Coded explicit correction was labeled as *explicit,* and metalinguistic feedback indicated as just *metalinguistic.* Field notes were also taken during the data analysis of the classroom interactions. The findings revealed connections between the themes related to learner perceptions and learners’ performance in real-life corrective feedback instances.

**Focus-Group Interviews**

The focus-group interviews were structured to target two main topics: correction/imitation and awareness in L2 pronunciation. Participants were randomly assigned to one of two sections and exposed to both topics. Thematic analysis of the focus-group data took place in an evolving manner. That is, under the light of the research question and nature of correction, the themes were re-formulated as they emerged and showed relationship and convergence with one another. Rather than looking for pre-determined patterns, the researcher followed the themes as they emerged from the data itself with the goal of answering the research
question, aimed at exploring learner perceptions. NVivo 1.0 was used in coding, analyzing, and organizing the findings.

The initial coding started by identifying codes through relevant utterances. This was followed by formation of the new codes, clustering relevant codes together, and creating main themes and associated sub-themes. Converging codes were formed into a single code, and coded instances were re-examined to determine their relevance with the new coding system. Hierarchy of each code and how each category was relevant within itself was re-examined and restructured after the codes and the data were reviewed again. As a result, two main themes along with their sub-themes were created in NVivo: Attitude and Language-Based Factors.

As shown in Table 4, in the first main theme, Attitudes, participant views towards correction were categorized. The data analysis revealed a prevalence toward three main sub-themes related to pronunciation correction: Desire, Embarrassment, and Frustration. Additional attitudes were found to be associated with desire. Demand and effort were attitudes that arose from desire to be corrected or to self-correct. The second theme, Language-Based Factors, consisted of the instances related to the participant’s ability to self-correct and repair one’s own pronunciation independently and/or aided by corrective feedback. This theme further sorted into five sub-themes: Cognition, Phonological Loop, Fossilization, L1, and Prior Education.
Table 4
Themes and Sub-themes regarding Participant Views

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>Desire</td>
</tr>
<tr>
<td></td>
<td>Embarrassment</td>
</tr>
<tr>
<td></td>
<td>Frustration</td>
</tr>
<tr>
<td>Language-Based Factors</td>
<td>Cognition</td>
</tr>
<tr>
<td></td>
<td>Phonological Loop</td>
</tr>
<tr>
<td></td>
<td>Fossilization</td>
</tr>
<tr>
<td></td>
<td>L1</td>
</tr>
<tr>
<td></td>
<td>Prior Education</td>
</tr>
</tbody>
</table>

*Attitudes*

Attitudes and feelings associated with pronunciation correction were revealed to be one of the main themes in the focus-group data. These were coded instances where a learner stated a particular reaction towards correction in L2 pronunciation. In addition to attitudes towards corrective feedback provided by others, participant perceptions regarding their own ability to correct were also found. The sub-themes relevant to Attitudes were found to be Frustration, Desire, and Embarrassment.

*Desire*

Desire to be corrected and to self-correct was demonstrated by the participants in the focus-group interviews. Amar, a Bengali speaker, talked about his aspiration to improve his self-monitoring and self-correction skills. He expressed that with more pronunciation instruction and daily practice, he could “get to a place” where he realized his own errors. He noted that this
precise awareness of one’s own errors is what he wanted to improve. He described it as his purpose.

The participants also expressed their wish to be corrected by others. In fact, Li explicitly stated the importance that the source of correction is someone with high proficiency in the target language, “Actually I’m also very glad that some native speaker, or some people whose English are very good who correct my pronunciation.” A similar statement was made by Sandra, who emphasized that it should be from a native speaker: “If people is native, for me is good, all people. No problem. If I know that the people that correct me speak good because is native, for me it’s perfect.” Similarly, Gabby stated that when she interacts with native speakers and they do not understand her, she asks them to correct her pronunciation.

One of the participants, Maria, emphasized that the attitude of the person providing the corrective feedback is also key when she said, “But I like being corrected, in a nice way. I welcome that.” She further explained how she wanted to be corrected and said, “Or if I heard some native speaker, I always ask to repeat the word that I don’t know that I want learn to pronounce correctly.” She also described in attempts to be corrected by a non-native speaker who is more proficient in English than she:

I am not working now, but when I used to work, my boss, she was very good, and she used to correct me when I say something when I was wrong, or the pronunciation wasn’t correct, so she helped me a lot to understand, and when I, I still, I’m in touch with her, and when I’m not able to pronounce something, I call her.

In addition to being corrected by others, participants also expressed an interest in self-correcting their pronunciation errors and trying to imitate native speakers. Gabby stated, “Yeah, self-correction, I do it all the time. Every time I know I didn’t pronounce that word well, I try to
do it again.” Meiling also made a comment on her desire to self-correct. “Yeah, I think, the pronunciation. I want to correct it, and I do a lot of practice to correct my pronunciation.” In short, findings in the analysis of focus-group interviews indicated that participants not only welcomed pronunciation correction from others and self-correction but also expected accuracy and sensitivity from the source of the feedback.

Embarrassment

Another attitude towards pronunciation correction which manifested during the focus-group interviews was the second sub-theme of Embarrassment. Interestingly, participants expressed this particular feeling as a reaction to both noticing one’s own error and being corrected by others. Gabby expressed the way she felt after mispronouncing a word by saying, “Yeah, I try to correct myself, and I get very embarrassed with myself. When I say something wrong, ‘Oh my... It wasn’t like that. It was like this.’” On the other hand, other participants expressed this particular feeling as a reaction to being provided corrective feedback. In Meiling’s case, it was her daughter: “Like my daughter, she is 10 years old. Sometimes she told me, ‘Mommy, you say the wrong word. It is pronounced like this. It’s not like that!’ So I am very embarrassed.” She also added that she used to feel more embarrassed when other people corrected her pronunciation prior to moving to the United States and that she feels more comfortable with it now. She suggested that despite the uncomfortable feeling that comes along with being corrected, she appreciates when people correct her pronunciation even though she understands that native speakers are trying to be nice. In summary, the data shows that participants often experience feelings of embarrassment associated with making errors and being corrected by others although they still welcome corrective feedback.
Frustration

Frustration associated with being corrected was a pattern also found within the data. During the first focus-group interviews, Gabby demonstrated frustration towards her husband and her son despite her previous claims of the usefulness of the corrective feedback received:

I can say probably after I have my son, my pronunciation is being better because I constantly imitating the words from him, and he is always telling me, he’s letting me know that a particular word, especially when we are doing homework, how is the right pronunciation. I think my son do it more than my husband. Both of them are on top of me, and I get mad with both of them as well (laughs), but yes, I think having somebody, or my son, which is native language because he was born in here, is important.

Later she returned to the same notion and stated that she feels particularly angry when her husband, a non-native English speaker with better pronunciation skills according to her, corrects her:

My son, he was born here in US, and now I’m doing homework with him every day. Actually, we are learning the vocabulary; he is in 3rd grade, and I am learning as well. He constantly is telling me how to pronounce certain words well, he, which is 9 years old. My husband also speaks fluent English. He is no native. But he speak well. He try to fix some of the words pronouncing well but he don't do it often because he knows sometimes I get mad at him, but not with my son. Yeah, he make me upset a little bit.

On two separate occasions, the participant claimed feelings frustrated towards being corrected by her family members. Her son, who is a native speaker, makes her feel less frustrated than her husband, an ESL speaker. Despite this negative feeling, the participant believes her pronunciation improved, an ESL speaker. Despite this negative feeling, the participant believes her pronunciation improved due to corrective feedback when she states, “I can say probably after I have my son, my pronunciation is being better because I constantly imitating the words from him...”
To conclude, Desire, Embarrassment, and Frustration, the three sub-themes under the main theme of Attitudes, presented themselves as learner attitudes associated with pronunciation correction. Participants demonstrated a strong desire towards receiving correction from others and achieving self-correction. Despite the wish to be corrected and to become aware of one’s errors, the participants expressed feelings of embarrassment and angst towards correction in L2 pronunciation, demonstrating the sensitive and personal nature of pronunciation correction as described by Ustaci and Ok (2014).

*Language-Based Factors*

The second theme foremost in the analysis of focus-group interview data was Language-Based Factors, artifacts directly related to language learning. The theme revealed itself as codes associated with language learning, including the processes involved in self-correction of L2 pronunciation, English learning background, and factors influencing the ability to copy and repair pronunciation, arose. This predominance sorted into five associated sub-themes: Cognition, Phonological Loop, Fossilization, L1, and Prior Education. The sub-theme Cognition encompassed learner beliefs and experiences related to the role of awareness and attention. Secondly, the phenomenon of the phonological loop was another noteworthy pattern which emerged as participants addressed the relationship between listening and imitation and how both contribute to self-correction skills. Fossilization was another sub-theme that emerged and represented learner perceptions that errors are resistant to correction due to time. Perceptions related to the role of first language in L2 pronunciation correction were sorted into another sub-theme entitled L1, and finally, Prior Education was the fifth sub-theme to emerge within the Language-Based Factors theme and contained code relevant to previous English instruction and
the role of the previous teachers. All five of these sub-themes related specifically the language-related matters inherent in second language learning.

**Cognition**

Cognition was the first sub-theme identified within the theme Language-Based Factors. It involves being aware of one’s own errors and refers to one’s ability to tend, or pay attention, to pronunciation errors. The ability to identify correct pronunciation forms in others and in oneself was revealed as a key concern in pronunciation correction. Li expressed her failure in being aware of her own errors by saying, “Actually, before I came here, I know sometimes my pronunciation is not good, but I don’t know the wrong place, where is the wrong place that they are.” This increased awareness was also reported by Meiling:

> So before that I don’t know, I don’t know. I just know that the people don’t understand me. They can’t understand me. The pronunciation is wrong, but I don’t know where is it wrong, so I have the class, the class is very helpful for me to know which word I speak wrong, so that’s good. Before that, I don’t know. I just know my pronunciation is wrong, but where is the wrong place, I don’t know, so in class, I just know, maybe that word, the /i/, the /bɔi...bɔi/, the one, the last one, /i/, the one, the last one. I don’t know. Before that I don’t know why I did the wrong place.

The participants demonstrated a perceived difficulty when it came to self-correcting pronunciation and copying the correct language samples based on corrective feedback. Amar expressed his previous struggle related to self-monitoring and self-identifying his own errors: “I myself find sometimes funny, like you said, kind of odd. So that’s, kind of, takes me ‘So, okay. I’m learning something.’ and I can judge now because I learned probably something now, so it was hard for me before.” For Amar, finding one’s own pronunciation peculiar was a sign of awareness because he associated this phenomenon with judging Amar found it strange to hear his own voice pronounce the sounds according to the model, in other words correctly, and he
recalled it being more difficult for him previous to receiving explicit instruction. Furthermore, Amar discussed his new-found approach towards achieving correct pronunciation through keeping his ears open and becoming more aware of the input when he said, “We are learning something, so, yeah, I want to give some time. At least it should come naturally when I just keep my eyes open and my ear, my eyes and ear open.”

Attention was also found to be a language factor related to cognition. It arose from codes related to mental focus. The data indicated a pattern of instances where participants suggested their attention was driven away from pronunciation due to focus on spelling, grammar, vocabulary and meaning. Li stated, “I think during daily conversation, it is very hard for me to notice my pronunciation is wrong because my focus is catching the ideas, the words, so maybe it is difficult for me to correct the pronunciation for me.” Meiling also stated how hard it was for her to focus on her own pronunciation while speaking:

Americans, they speak something. I try to, but to think about the tone, the pronunciation, and the words, so I think when I speak, when I want to speak something, there are so many things I need to pay attention to. Sometimes I was very embarrassed to speak, so it is urgent situation. I just speak that. Speak out without thinking the patterns, the tones, the pronunciation. I just want to express my idea without thinking about the tones because I think it is very speeding in my brain to correct all of them, all of this, yeah.

Here, Meiling expressed the way her focus shifts away pronunciation and impedes her ability to self-correct due to cognitive load occurring as a result of an emergent need to communicate and concentrate on the meaning rather than the form.

Another participant, Gabby, expressed a different aspect of attention on pronunciation sample in saying, “Yeah, I do it all the time, but I’m fast thinking, and my problem is, when I speak, talk to somebody, I do it fast, and I have to take my time. I think that’s my biggest
problem. I want to do it fast as I think, and that’s the big problem that I have with English.”

Gabby addressed the way her fluency skill might be diverting her attention from focusing on and correcting her pronunciation. To summarize, the participants expressed having trouble noticing and self-correcting pronunciation errors without the presence of corrective feedback. In addition, cognitive load was found to impede self-monitoring and correcting pronunciation errors.

Phonological Loop

Another sub-theme that emerged from the data related to the phonological loop (Baddeley et al., 1998), a component of language cognition whereby auditory input constantly interacts with phonological short and long-term memory and the articulatory system. In other words, the phonological loop is defined as a mechanism in which input and output constantly influence and shape one another. Thus, language excerpts related to the relationship with listening and imitation skills were sorted into the Phonological Loop sub-theme.

With respect to the input aspect of pronunciation self-correction as a part of the phonological loop, participants mentioned efforts on improving their listening and self-monitoring skills. Amar stated, “So, now I believe I got my ear back, you know. (laughs) I had no idea that I had something here (points to ear), that it’s something I can work for, yeah.” Here, he emphasized the role of the ear when it comes to producing correct samples.

Participants also discussed the strategies they use as an indicator of the effort put into self-correction as a part of the phonological loop. The importance of listening to self was emphasized by Li when she discussed her need to record and listen to herself in order to be able to self-correct:
It’s helpful myself to notice it, so I record what I have said through using my telephone and replay the video. Then I can see what I have said, and using this way, I can find that what I’m saying is wrong, and then I correct myself by repeating record my video. I think that’s a very good way to correct, um, self-pronunciation.

Li mentioned how she records herself on video and listens to herself in order to notice and correct her own pronunciation errors. Sandra echoed this same sentiment and discussed her strategy of listening to and repeating the target word multiple times.

Amar verbalized his struggle with imitating the correct language sample provided by the teacher in corrective feedback. He believed it was related to his listening skills and said, “So, I had so many problems on imitating actually. I was really a bad listener from my childhood, I can say, and I can’t even copy.” He identified himself as a bad listener and suggested a correlation between this skill and copying the correct language sample in recasts. Sandra also expressed the importance of listening in copying the correct language samples: “Maybe my problem all the time is that I see them all, and I try to understand, to translate, and no, this course, the best for me is that I only listen maybe without my eyes, bodies, listen and repeat the sounds, the sounds, the sounds.”

The participants also demonstrated a strong emphasis on imitation, an element of the output aspect of the phonological loop. Imitation was perceived to be interconnected with listening by Gabby when she stated that she tries to watch English television shows and finds this useful when she listens carefully and imitates what she hears. In addition, she connected imitation with hearing one’s own errors by referring to the phonological loop, stating, “The more you know, the more you start imitating others, the more aware you want to be about the mistake you are actually making.”
Li also emphasized the phonological loop when she discussed her imitation abilities being limited by her ability to listen to herself and added further the benefit of working on the phonological loop by listening and imitating multiple times. Li verbalized the value of corrective feedback as a part of the phonological loop process:

I think imitation is good for you want to improve your pronunciation, but sometimes it is hard for me to imitate others, so I think I’m copying what other says, but what I copy may be still different from what other says, so maybe because in our daily life for hours copy others, it is not like we are having a class and we have a teacher can say much more times and you can copy much more times, and she can tell whether you are right, so, but anyway, imitation is very great.

In summary, the Phonological Loop as a sub-theme was perceived and expressed by participants as a strong language factor relating to the connection between input and output and its relationship to self-correction. The concept of listening overlapped with imitation abilities within the Phonological Loop sub-theme, and the data indicated that learners perceive that listening and imitation contribute to the ability to self-correct.

Fossilization

Another sub-theme within the notion of language-focused phenomenon was found to be fossilization of pronunciation errors. Participants addressed the Fossilization sub-theme as an inhibitor in self-correction abilities. Gabby said, “Absolutely most of the English words that I know are not pronounced as they should be.” Gabby also expressed the way she perceived the connection between fossilization and self-correction by saying, “We get used to talk one way, and so then they tell you, ‘Hey, you are doing this wrong,’ and it’s difficult to change it.”

In contrast, Meiling appeared to connect fossilization with age: “So because it is in my brain, maybe it is difficult to change, so I try, I try, I want to try to correct my pronunciation, but
I think to, I doubt, it is a little difficult than the younger.” In addition to perceiving age as an indicator of fossilization, Meiling believed the reason behind why her age was making it difficult to self-correct was because of fossilization related to time stating, “The little girl, the little boys, they are better and easier to learn the language I think. We are wrong too much time, too many years, so it’s difficult.” Meiling perceived fossilization, age, and time intertwined with one another, saying, “I write some notes in paper, and then I want to, but I think maybe it needs time to repeat repeat and practice and practice, and it need a lot of time than the younger, the kids, so we need some time to practice, and practice acting.”

To summarize, Fossilization, a sub-theme of Language-Based Factors, presented itself as a phenomenon that affects pronunciation self-correction. The participants verbalized the difficulty of self-correct due to previously repeated error patterns. Furthermore, age, which was suggested to be interconnected with practice time, was perceived to be a factor in fossilization.

**First Language**

Throughout the data, first language was also frequently mentioned as relevant to the discussion of second language learning and correction in pronunciation. Participants often detailed the differences between their native languages and the English language as a reason for their struggles in copying the correct pronunciation samples. Amar said, “Because my native language probably is Bengali, it’s kind of difficult. Yes.” Like Amar, Gabby has also indicated her first language as an inhibitor in pronunciation self-correction: “I don’t know how to do it different. That’s difficult because I guess the Spanish accent I have, and I still have it.” Sandra went a bit further and outlined the segmental differences in detail:
I found the difference in this course is in Spanish only you have five vocals, /a/, /e/, /i/, /o/, /u/, and all that you speak is with that vocals, no more, and now, I understand the difference /ɑ/, /ʌ/, /ɔ/, /ʊ/. It’s difficult.

Similarly, Maria exemplified the effort she puts into pronunciation through the way she needed to think about phonological differences in English and Spanish:

When we speak Spanish, we have, like the sounds of /v/ and the /b/ is the same for us, and the /s/ and the /z/ is the same, so every time we need to talk in English, we have to think before, and we don’t have the /ð/, that sound, so when we see “three” (shows number with hand), or the “tree”, before we talk, we need to think, so we say “three” or the “tree” so the people can understand what we say, or the stop sign, if I say it my way, I would say /stɑb/ and any American people don’t understand what I’m saying, I’m trying to say “stop sign”, so I need to think before saying “stop”.

In addition to her examples of “three” and “tree”, Maria provided another minimal pair issue:

“Right now, like, I have a really hard time pronouncing ‘ball’, like a ball, and ‘bowl’ for the dogs, no one understand me. And to me it’s the same sound, I can’t say it. Really hard.”

These examples represent instances in the data whereby L1, a language factor, was believed by participants to impact self-correction and the ability to repair as a reaction to corrective feedback. Differences between L1 and L2 phonology and its impact on pronunciation self-correction was characterized by the participants in terms of sound segments and minimal pairs.

**Prior Education**

Another language factor that emerged from the data created the Prior Education sub-theme. Gabby, Meiling, and Sandra demonstrated a belief held about instruction provided by past non-native teachers causing fossilization and hindering the self-correction process. The accent of past non-native speakers was perceived to cause difficulties because of incorrect modeling.
instance, Sandra said, “I think that my pronunciation is wrong too because in all my life and in school, maybe my teacher don’t native, and I, so, maybe I repeat wrong for many years.”
Meiling stated a similar experience: “I learned from the little girl to learn the English, but maybe the teaching English matter is different from American, so it is wrong maybe I think. They told me how to pronounce like this, this, and this, but when I came here, I start...It’s wrong.” She also stated that the ESOL classes she took in the past along with formal, explicit pronunciation instruction has helped her become more aware of her pronunciation errors.

Gabby relayed that her prior education placed great importance on grammar and described this as starting backwards, where grammar skills were introduced without listening and pronunciation practice: “The problem is I know how to do the grammar, but I don’t know how to pronounce well. I started backwards, but now that I am taking classes about pronunciation, I am aware of a lot of mistakes.” The participants perceived the modeling offered by past non-native teachers as a hindering factor in pronunciation self-correction. Moreover, they addressed the positive impact of explicit pronunciation instruction on self-monitoring and self-correcting pronunciation errors.

All in all, the five sub-themes of Cognition, Phonological Loop, Fossilization, L1, and Prior Education were the dominant patterns within the Language-Based Factors theme. Cognition was perceived as an important factor as it pointed out the role of awareness and attention plays in self-repair, and the Phonological Loop sub-theme demonstrated the impact of the input-output connection that feeds into self-correct pronunciation. Of the Language-Based factors, Fossilization and L1 were seen as inhibiting the repair process in L2 pronunciation while the Prior Education sub-theme was described in terms of non-native teachers and lack of pronunciation instruction.
Classroom Interactions

Transcription and coding of the correction instances that took place in the classroom were based on Lyster & Ranta’s (1997) categorizations of corrective feedback. Out of ten participants that took part in the classroom interactions, four of them were chosen based on their complete attendance to all four lessons: Meiling, Gabby, Amar, and Sandra. Correction and repair instances of these four participants were analyzed for the current study. Table 5 outlines the breakdown of the total number of coded instances of corrective feedback, repair, and needs repair instances for each participant in four lessons.

Table 5
Number of Corrective Feedback and Repair Instances Per Participant

<table>
<thead>
<tr>
<th>Instances</th>
<th>Meiling</th>
<th>Gabby</th>
<th>Amar</th>
<th>Sandra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrective Feedback</td>
<td>23</td>
<td>21</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Repair</td>
<td>13</td>
<td>14</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Needs Repair</td>
<td>10</td>
<td>7</td>
<td>14</td>
<td>9</td>
</tr>
</tbody>
</table>

First, every corrective feedback instance of these four participants was transcribed. The transcription included the participant, lesson number, onset counters, description of the error, corrective feedback type, and repair type, followed by a full transcription of the dialogue surrounding the instance.

Four codes were used for the types of corrective feedback originating from the instructor: explicit correction, metalinguistic feedback, recast, and elicitation. Explicit correction, labeled *explicit*, was used for moments when the teacher openly indicated that an error was present. Metalinguistic feedback, coded as *metalinguistic*, indicated corrective feedback that contained
metalinguistic information related to phonetics and phonology. The label *recasts* were assigned to correction instances where the teacher provided the correct language sample to the learner and elicited repetition, while the code *elicitation* was applied when the teacher elicited from the learner without teacher modeling.

Furthermore, the codes used for learner uptake, the learner response to the corrective feedback, were labeled as either *repair* or *needs repair*. *Repair* consisted of the complete correction provided by the learner based on the corrective feedback received, and instances were sorted into two types: *repetition*, labeled *repair-repetition* and assigned when a participant was able to successfully imitate the language sample modeled by the teacher in recast, and *self-repair*, used for instances where the learner self-repaired when the teacher did not provide corrective feedback.

The second learner uptake code, *needs repair*, was applied when the learner failed to repair the error after receiving corrective feedback from the instructor. Four types of *needs repair* were further classified in the data: *needs repair-same error*, *needs repair-partial repair*, and *needs repair-different error*. Instances were labeled as *same error* when the learner kept repeating the same erroneous form. *Partial repair* was used to indicate when only some errors targeted in corrective feedback were repaired. The code *different error* was applied when the participant produced a different error rather than repairing it. In addition, instances in which the learner achieved repair with one utterance but was not able to sustain it on an immediate subsequent repetition were noted.

*Meiling*

The analysis of the corrective feedback and repair instances of Meiling, as depicted in Table 6, revealed 23 corrective feedback instances. Thirteen of these instances resulted in repair.
Out of ten instances that needed repair, five resulted in partial repair and five showed repetition of the same error. The combination of explicit correction, metalinguistic feedback, and recasting made up for 15 of the 23 instances. Four recast-only instances were noted along with four instances where recasts were accompanied by explicit correction, as shown in Table 6.

Table 6

Analysis and Repair Instances for Meiling

<table>
<thead>
<tr>
<th>Instance #</th>
<th>Correction Type</th>
<th>Repair</th>
<th>Needs Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>recast, explicit</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>4</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>same error</td>
</tr>
<tr>
<td>5</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>6</td>
<td>recast</td>
<td>partial</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>explicit, recast</td>
<td>partial</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>recast</td>
<td>repetition</td>
<td>same error</td>
</tr>
<tr>
<td>9</td>
<td>recast</td>
<td>partial</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>same error</td>
</tr>
<tr>
<td>11</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>same error</td>
</tr>
<tr>
<td>12</td>
<td>explicit, recast</td>
<td>partial</td>
<td></td>
</tr>
<tr>
<td>13</td>
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<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>14</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>15</td>
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<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>16</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>17</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>18</td>
<td>explicit, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>19</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
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<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>21</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>22</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>23</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
</tbody>
</table>

Three unusual occurrences were marked in Meiling’s correction patterns. In instances 1, and 2, she was able to copy the correct form provided in recast once, but she went back to the
same error she made after the instructor asked her to repeat. Conversely, in Instance 19, Meiling repaired her error, provided her original form again, and was able to capture the correct form in the end.

In Meiling’s case, the data analysis showed no specific relationship between the type of corrective feedback provided and repair that ensued. Instances where partial repair and successful repair on the same error were observed, and the majority of the errors not repaired were related to vowels, /ɨ/, and the interdental phonemes.

However, an interesting phenomenon were present in findings related to the analysis of Meiling. In one of the correction instances in particular, Meiling seemed not to hear the utterance and rather repeated a previous language excerpt in spite of the teacher’s multiple recasts:

Instructor: /kəlɛkt ɪt/
Meiling: /kɔɪɛkt ɪt/
Instructor: /kəlɛkt ɪt/
Meiling: /kəlɛkt ɪt/
Instructor: One more... A light snack
Meiling: Excuse me?
Instructor: A light snack
Meiling: Collect snack
Instructor: Interesting. (comment to herself) A light snack (said more slowly)
Meiling: Collect snack

In summary, the pertinent findings about Meiling’s case reflect the role of L1 and the phonological loop in that her error patterns appear to point to common phonological challenges of Chinese learners since she seemed to struggle with the implementing corrective feedback for select vowels, /ɨ/ and interdental sounds. In addition, an overt instance characterized her apparent inability to objectively hear the instructor’s modeling which, in turn, prevented her from being able to produce the correct language sample.
Gabby

The analysis of Gabby’s data revealed 21 total corrective feedback instances, 15 of these resulting in successful repair. As shown in Table 7, the combination of explicit correction with metalinguistic feedback and recasting made up for 14 corrective feedback instances. Explicit correction and recasting were combined in two instances, and there was one instance noted for the combination of metalinguistic feedback with recasting and one instance for metalinguistic feedback only. Two instances contained three correction types, explicit correction, metalinguistic feedback, and elicitation.
Table 7

Analysis of Correction and Repair Instances for Gabby

<table>
<thead>
<tr>
<th>Instance #</th>
<th>Correction Type</th>
<th>Repair</th>
<th>Needs Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>4</td>
<td>explicit, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>metalinguistic</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>7</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>same error</td>
</tr>
<tr>
<td>11</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>12</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
<tr>
<td>15</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td>same error</td>
</tr>
<tr>
<td>18</td>
<td>explicit, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>elicitation, explicit, recast</td>
<td>self-repair</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>elicitation, explicit, recast</td>
<td>repetition</td>
<td>partial</td>
</tr>
</tbody>
</table>

Four instances with anomalies were noted in Gabby’s data analysis. In instances 10 and 17, Gabby was able to provide the correct pronunciation once, but she was unable to sustain the repair and ended up going back to the wrong form. In instance 1, she went back and forth between the incorrect and the correct forms but was able to repair her error in the end.

The analysis of error transcriptions revealed common pronunciation errors for Spanish speakers, such as ending /z/ and /s/, and Gabby’s tendency to move her cheeks horizontally.
during the production of vowels; these appeared more resistance to repair. Gabby seemed to struggle with the specific word, “thanks”, which was the target error of two correction instances. As seen in the excerpt that follows, Gabby showed signs of frustration with her facial expressions and was able to identify her own error:

Instructor: /θɛŋk/
Gabby: /θænsk/ (shows disappointment)
Instructor: You’re still picking up an “n”. Isn’t that interesting? Everybody hear that? You’re picking up an “n” and then you’re going for “k”. I want the /ŋ ŋ ŋ...θɛŋ...θɛŋ/
Gabby: /θɛŋ/
Instructor: That’s it!
Gabby: /θɛŋ/
Instructor: Okay, now wait. /θɛŋk/ (shows the movement of the tongue with hands)
Gabby: /θɛŋk/
Instructor: Yea, that’s it. Again.
Gabby: /θɛŋ/ (shakes head)
Instructor: uh-uh-uh-uh
Gabby: θɛnsk (shows disapproval again)
Instructor: /θɛŋ/ (shows up with finger; elongates the engma)
Gabby: /θɛŋk/

Additionally, Gabby was observed to use facial expressions that show frustration in some moments when she was not able to repair her error. In short, Gabby’s repair reactions to different types of corrective feedback were varied, and instances in which she showed resistance to repair revealed L1 influences and fossilization.

Amar

In Amar’s case, there were 30 corrective feedback moments. Amar was provided with the combination of explicit correction, metalinguistic feedback, and recasting 25 times. Three instances of metalinguistic feedback and recasting and two instances of explicit correction and recasting were present. Seven corrective feedback instances resulted in repair, twelve indicated
repetition of the same error, ten resulted in partial repair, and one resulted in the production of a different error. Table 8 shows corrective feedback and repair instances of Amar.

Table 8

Analysis of Correction and Repair Instances for Amar

<table>
<thead>
<tr>
<th>Instance #</th>
<th>Correction Type</th>
<th>Repair</th>
<th>Needs Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>2</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>3</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>4</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>5</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>different error</td>
</tr>
<tr>
<td>6</td>
<td>explicit, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>7</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>8</td>
<td>recast, metalinguistic</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>10</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>11</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>12</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>13</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>14</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>15</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>16</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>17</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>18</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>19</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>20</td>
<td>explicit, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>21</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>22</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>23</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>24</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>25</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>26</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>27</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>28</td>
<td>metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>29</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>30</td>
<td>metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
</tbody>
</table>
Three unusual instances of inconsistencies were marked for Amar. In instances 25 and 29, Amar was able to repair his errors once, but the final output he produced was only partially repaired. Similarly, in instance 19, Amar provided the correct form once as a part of the corrective feedback but ended up producing his original error in the end.

The majority of correction instances that resulted in repair in Amar’s case were a combination of explicit correction, metalinguistic feedback, and recasting, facilitating five successful repair incidents. The errors that were repaired were limited to /ɪ/ and /i/, /θ/ and /ð/, and some intonation elicitations. Moreover, two interesting patterns emerged from Amar’s classroom participation.

First of all, the researcher observed Amar’s tendency toward premature repair attempts. That is to say that he was observed imitating the modeled language sample before the teacher actually finished modeling it, attempting to imitate before completely listening to the language sample being modeled. As exemplified below, this behavior speaks directly to the premise of the phonological loop as a key component in L2 pronunciation.

Instructor: Amar, boat.
Amar: /bot/
Instructor: Yeah, and take the “t”, make it smaller. /boot/ (Amar speaks while instructor is modeling.)
Amar: /bu...bɔt...bɔ/
Instructor: Almost. (Amar speaks over instructor again.) Listen to the vowel. (Amar speaks before instructor finishes modeling.) Listen to the vowel. Wait. (indicates “stop” with hand) /boot/ (elongates final sound of diphthong) Repeat.
Amar: /bɛʊl...bʊl/
Instructor: (again elongates /ʊ/ in diphthong) /oʊ/ (Amar speaks before she finishes over instructor modeling.) Almost. Listen, listen. /oʊ...oʊ/ (Amar repeats while the instructor continues to speak over instructor modeling.) Maybe you have this in your language? (Amar speaks /bɛu...mɛu...bɛu/ while the instructor is speaking.)
A second pertinent observation was Amar’s tendency to change the place of articulation of the sounds and articulate them from what seemed to be a further-back position in the mouth, a dominant place of articulation in Bengali, his first language. The findings of Amar’s corrective feedback and repair instances demonstrated the possibility of strong, L1 interference. In addition, he was observed reacting to corrective feedback without paying attention to the correct input being modeled.

Sandra

The analysis of Sandra’s corrective feedback and repair occurrences, depicted in Table 9, disclosed 20 corrective feedback moments, and twelve of these were combinations of explicit correction, metalinguistic feedback and recasting. Four cases of explicit correction accompanied by recasts were noted. In addition, three recasts were provided, and one instance of elicitation combined with recasting.

Eleven instances of corrective feedback resulted in repair in Sandra’s case while nine needed repair. Of these nine instances that lacked repair, five involved the repetition of the same error, and two involved production of a different error. Moreover, two resulted in partial repair, and ten repair cases involved repetition of the correct utterance as Table 9 indicates.
Table 9

Analysis of Correction and Repair Instances for Sandra

<table>
<thead>
<tr>
<th>Instance #</th>
<th>Correction Type</th>
<th>Repair</th>
<th>Needs Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>2</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>4</td>
<td>recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>5</td>
<td>explicit, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>6</td>
<td>explicit, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>7</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>partial</td>
</tr>
<tr>
<td>8</td>
<td>explicit, recast</td>
<td></td>
<td>different error</td>
</tr>
<tr>
<td>9</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>explicit, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>11</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>12</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>different error</td>
</tr>
<tr>
<td>13</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>14</td>
<td>explicit, metalinguistic, recast</td>
<td>repetition</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td>16</td>
<td>explicit, metalinguistic, recast</td>
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</tr>
<tr>
<td>17</td>
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<td>same error</td>
</tr>
<tr>
<td>18</td>
<td>explicit, metalinguistic, recast</td>
<td></td>
<td>same error</td>
</tr>
<tr>
<td>19</td>
<td>elicitation, recast</td>
<td>self-repair</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>recast</td>
<td></td>
<td>repetition</td>
</tr>
</tbody>
</table>

An anomaly was noted in Sandra’s case in Instance 7. She was able to fully repair her error once during the corrective feedback instance. However, the final utterance she provided was only partially repaired.

One corrective feedback instance of significance in Sandra’s performance consisted of *self-repair*.
Sandra: /ʌ gejm in bɔstən/. No. (laughs)  
Instructor: /in/?
Sandra: /in...in/  
Instructor: Okay, try again.  
Sandra: /ʌ gejm in bɔstən/  
Instructor: (gives thumbs up...Sandra laughs.) And I never repeated it! Do you hear it? Pretty good, it’s pretty easy to control if you know. Repeat.  
Sandra: /ʌ gejm in bɔstən...ʌ gejm in bɔstən/  
Instructor: /in/  
Sandra: /in...in/  
Instructor: Again  
Sandra: /ʌ gejm in bɔstən/  
Instructor: Not bad, not bad.  
Sandra: Again?  
Instructor: Nope, it’s good.

This particular example of Sandra’s repair shows her awareness level. When she produces the wrong phoneme, she says, “No.” She is able to self-monitor her error even when it comes to sounds that Spanish speakers struggle with. She attempts self-correction by repeating herself, and in the end, she provides the correct language sample with elicitation from the instructor. Another element to note here is Sandra’s wish to produce the sample again and receive corrective feedback by asking the instructor if she should try again. The field notes also indicated physical behavior employed by Sandra: she was observed closing her eyes as she reacted to the corrective feedback and attempted to repair the error. Conversely, Sandra’s resistant errors appeared to be cognates between her L1 and English. For example, her repair instances indicated a resistance to correction when presented with a language sample also a cognate in Spanish, “salad”.

Furthermore, this participant appeared to be a beginning-level learner based on the demonstration of her listening comprehension skills during the focus-group interviews and classroom interactions. The researcher noted that she did not clearly understand metalinguistic feedback even though she did react appropriately to recasts. In fact, there was an instance where
she asked another Spanish-speaker to translate the interview question during a focus-group session.

In short, Sandra received the lowest amount of corrective feedback of the four cases examined in the data probably because she had fewer errors compared to other participants. She was mostly able to imitate the language samples provided by the teacher and demonstrated a keen ability to self-correct as a reaction to elicitation.

Based the analysis of the correction and repair instances of all four participants, the number of instances differed learner-to-learner despite the teacher’s tendency to use similar corrective feedback methods. The majority of the corrective feedback contained explicit correction in which the teacher informed the participant about the presence of the error, provided metalinguistic feedback that addressed the place and manner of articulation, and recast to provide the correct language sample with the intention of having the learner copy it.

**Composite Findings**

The last step of the analysis involved the researcher’s cross-examination of the findings stemming from the analyses of both data sets, the focus-group interviews and the classroom interactions. In this last analysis, the researcher sought to observe noteworthy patterns within the data regarding the learner lens when it comes to pronunciation correction. Ultimately, overlapping notions of Cognition, Phonological Loop, Fossilization, L1, and Frustration were evidenced.

An important finding that arose from the focus-group interviews and presented itself in the findings of the classroom interactions was Cognition. That is, the relationship of pronunciation corrective feedback with awareness and attention. The instance where Meiling’s focus was on the pronunciation of the previously corrected word, “collect”, reflected the
importance of learner attention. Also evident was the difficulty of self-correcting when participant attention shifted to other aspects, such as meaning and pragmatics, and this phenomenon, also called change detection, was exemplified when Meiling repeated a previous language sample and could not seem to recognize that a new sample was being modeled by the teacher. Meiling continuously said, “collect snack” instead of the language being modeled, “a light snack”.

Also along the lines of cognition, the importance of attention in the pronunciation process was depicted in the field notes of Sandra, the participant who received the least amount of corrective feedback due to her ability to copy pronunciation. For example, in the classroom interactions, the researcher observed Sandra closing her eyes when she was repairing errors in an attempt to reduce the cognitive load of visual stimuli. Sandra also stated in the focus-group interviews that she tries to pay attention to the target sounds, demonstrating her overt awareness-raising efforts.

Another composite finding was the impact of the Phonological Loop which echoed throughout the analyses as relevant to the discussion of correction in pronunciation from the learner’s perspective. The emphasis the participants verbalized in the focus-group interviews with regard to the connection between the ability to listen, to copy, and to self-correct was evidenced by the researcher in the classroom interaction data. For example, the Bengali English-learner participant, Amar, demonstrated a tendency to initiate a repetition without hearing fully the language sample being modeled by the instructor. In fact, Amar ultimately acknowledged, in a focus-group interview, that he had started to realize he needed to work on his listening skills if he wanted to improve his pronunciation. Additionally, the role the phonological loop played in the correction in L2 pronunciation was indicated by the fact that recasts were found to be the
most prominent type of corrective feedback and that instances of correction relied highly upon
the participant’s ability to not only truly hear but also initiate a repetition without hearing fully
the language sample being modeled by the instructor. In fact, Amar ultimately acknowledged, in
a focus-group interview, that he had started to realize he needed to work on his listening skills if
he wanted to improve his pronunciation. Additionally, the role the phonological loop played in
the correction in L2 pronunciation was indicated by the fact that recasts were found to be the
most prominent type of corrective feedback and that instances of correction relied highly upon
the participant’s ability to not only truly hear the correct language sample but also repeat it.

Also worth noting are that notions of the Phonological Loop and Cognition showed
relevance to the findings of the classroom interactions in instances that involved participants
providing the correct language sample but failing to consistently repeat it as well as moments in
which participants captured the correct sample, lost it, and captured it again with the help of
corrective feedback.

Another overlapping finding between the analyses of focus-group interviews and
classroom interactions was in the area of Fossilization. Participants often discussed the difficulty
they experienced with self-correcting a language sample they had been pronouncing incorrectly
for a period of time. This was observable when Gabby was unable to repair her pronunciation
errors in the word “thanks” even though the error, which involved the vowel sound and the
engma, was addressed in two separate corrective feedback instances and she was able to
pronounce each sound the word contains during the previous activities.

Findings of the focus-group interviews revealed that participants perceived L1 as a factor
in L2 pronunciation correction noted with English phonemes not present in the L1. This
perception manifested in classroom interactions when errors that showed resistance to correction
were examined. For instance, Gabby did not achieve self-repair as a reaction to the corrective feedback offered when the errors related to the difference between the phonemes /s/ and /z/. In addition, Sandra was unable to achieve any type of repair when it came to her pronunciation error on the word “salad”, which is a cognate of Spanish. Similarly, Amar’s pronunciation was also highly impacted by the degree of back placement of the articulation of Bengali as compared to English. Furthermore, participants struggled when it came to /ɫ/, commonly referred to as dark L and occurring at the end of a syllable. Despite that, comparison of successful repair instances of each participant showed similar patterns between participants with different L1 backgrounds and differences between the two participants that share the same first language. In short, L1 did not appear to be a strong indicator of self-repair.

Lastly, the researcher found the issue of Frustration an important element in the analyses of data sets and one of significant value considering the overall role affective filter is known to play in second language acquisition. One participant in particular, Gabby, expressed feelings of frustration as a reaction to receiving corrective feedback on pronunciation errors by her family members in addition to feeling outraged when she noticed she had made an error in the focus-group interviews. Gabby did not show signs of frustration in her body language as the instructor corrected her; however, her facial expressions indicated frustration when she realized she was not able to repair her error after the instructor provided corrective feedback. The findings of both data sets coincided in the aspect of feeling frustrated as a reaction to recognizing her own errors.

In conclusion, the patterns found within the findings of the two data sets pointed to the critical aspects when it comes to corrective feedback in L2 pronunciation. L1, Phonological Loop, Fossilization, Cognition, and Frustration presented themselves not only in the perceptions of the participants, but also in the actual instances of correction that occurred in the classroom.
interactions. The number of successful repair instances amongst the participants who speak the same first language were found to be different in relation to the total number of corrective feedback provided to each participant, but the L1 impact was evident in the way participants reacted to corrective feedback in terms of repair tendencies. The phonological loop, the constant interaction between the ear and the mouth, was another discernible theme that took part in both learner perceptions and correction behaviors. Cognition also appeared to play a role, and participants’ beliefs about its role in enhancing and impeding learner repair appeared in terms of corrective feedback instances. In addition, participant beliefs about fossilized errors were observable in certain repair instances observed in classroom interactions as well as their spontaneous comments which occurred in focus-group interviews. The last of the composite findings, frustration, an attitude expressed by a participant in the focus-group interviews, seemed evident in her reactions to failure at repairing her errors. All in all, the phenomenon of correction in L2 pronunciation manifests itself in learner perceptions and performance in real correction instances. It is hoped that this investigation of the learner lens will contribute to the existing literature and help teachers in addressing the needs of the learners when it comes to offering corrective feedback in pronunciation and helping them achieve autonomy in L2 pronunciation correction.
CHAPTER FIVE: DISCUSSION AND CONCLUSION

This study explored learner perceptions in L2 pronunciation correction using narrative inquiry and classroom observations. The data analysis process and findings reported give rise to a need for discussion from numerous standpoints. The theoretical background based on learner perceptions in corrective feedback indicates a need to understand the interconnectedness of learner beliefs about correction in L2 pronunciation and its connection with real-life classroom experiences that involve learner reactions to corrective feedback and the aspect of self-correction, in line with Pawlak et al.’s (2016) finding on the complexity of learner perceptions and the way they shape the nature of the L2 classroom.

Discussion

In looking at the findings, the participants strongly relate to certain attitudes, especially desire, towards corrective feedback provided from external sources, in particular, native-speaker teachers, in L2 pronunciation correction. On the other hand, emphasis on the area of the phonological loop is pervasive in the data along with the aspect of cognition, including attention and awareness, found to be a strong element in correction in L2 phonology.

The first important finding of the present study was associated with a particular feeling in relation to correction: desire. The analysis of focus-group interviews revealed that learners welcome corrective feedback in L2 pronunciation, which aligns with the findings of Oladejo (1993). The participants expressed a desire to be provided corrective feedback while the desired conditions under which the feedback is provided varied. Two participants, Maria and Gabby, expressed that they ask native speakers to correct their pronunciation errors. In addition, Maria stated that she welcomes corrective feedback as long as it is accurate and offered “nicely”. These
findings contrast somewhat with Alghazo (2015)’s study that showed that more learners preferred non-native teachers but that participants expressed advantages of both native and non-native teachers. The source of feedback’s native language echoed along the sub-themes in the findings. Sandra suggested that incorrect modeling offered by non-native speakers may have contributed to her struggles in self-correcting her pronunciation errors.

In addition to welcoming corrective feedback, the participants described strategies of self-correction accompanied by a desire to improve pronunciation. This coincides with the findings of Sardegna et al. (2017) on the connection between desire and strategy use. While all four participants expressed a desire for self-correction, only one participant mentioned a strategy she used to improve her pronunciation, which was recording herself and listening to her pronunciation in order to notice and correct errors. This finding indicates a need for language teachers to promote strategy use for self-monitoring and self-correcting pronunciation in order to achieve autonomy in L2 phonology.

However, findings related to the theme Attitudes may indicate that learners have seemingly contradicting feelings towards correction in L2 pronunciation. These contradicting attitudes were demonstrated when Gabby mentioned the effectiveness of corrective feedback provided by her son despite the fact that she “got mad” at him. Gabby showed no sign of frustration in reaction to the instructor’s corrective feedback. However, she also showed signs of distress and frustration when she realized she was unable to repair her errors during a classroom exchange. Nonetheless, she emphasized her wish to be corrected and mentioned its usefulness on improving her own pronunciation, as indicated by the findings of Huang and Jia (2016). The differences found in Gabby’s reactions to corrective feedback provided by the teacher show discrepancies with Kaivanpanah et al.’s (2012) findings in terms of not feeling humiliated when
corrected by peers but shows parallelisms in the aspect of preferring feedback by the teacher over other sources. Katayama’s (2007) implication on the reason why learners prefer teacher feedback over peer feedback was that it can be a result of concern related to the accuracy of the corrective feedback.

In addition to the juxtaposition of desire and frustration felt towards correction in pronunciation, a less prominent emotion evidenced in the data analysis was that of embarrassment. For example, despite possessing positive attitudes towards corrective feedback, Gabby, Meiling, and Li verbalized a feeling of embarrassment arising from correction provided by others as well as noticing their own errors.

These artifacts of emotion toward correction point out to the rich nature of learner attitudes as well as the possibility that the negative feelings associated with correction seem not to inhibit the strong desire to be corrected. Furthermore, learner perspectives associated with the source of corrective feedback indicate a preference towards native-speaking modeling and politeness of the source.

Another interesting aspect of the study findings speaks directly to the implications of the phonological loop. The role of listening in achieving self-correction was addressed by all participants in the study, where they made connections between the role of listening and imitation when it comes to pronunciation learning. However, researcher field notes of classroom interactions described a particular behavior on the part of one participant, Amar, related to the modeling offered by the instructed. In most cases, especially during the first lessons, Amar started repeating the recast immediately as the instructor began providing it rather than waiting until the recast had been completed, a phenomenon in the present study referred to *false starts.* There were also moments when the instructor was providing metalinguistic feedback, and the
participant did not wait to hear it but instead started his utterance. Also worth noting is that Amar was the participant with the lowest number of successful repair instances in relation to the total number of corrective feedback instances. The researcher concluded that these false starts could be attributed to Amar’s focus on speaking rather than listening. In fact, Amar himself, later in the focus-group interviews, expressed several times the possibility of needing to work on his listening skills in order to improve his pronunciation. He identified himself as a bad listener and suggested that he should work on his ear. Also relevant to the case of Amar is the fact that he was the only male participant in the study, so this may have influenced his tendency toward false starts. In addition, this behavior could stem from his lack of exposure to the classroom dynamic of choral repetition from the prior learning in his home country. All in all, Amar’s case brings forth the significance of listening when it comes to improving pronunciation accuracy.

The case of another participant, Sandra, also shows artifacts of language relative to the areas of the phonological loop and cognition in L2 pronunciation correction. Analysis of the corrective feedback instances showed that Sandra was the participant that received the least amount of corrective feedback by the teacher due to her ability to copy the modeled forms correctly in the lesson. She was observed intently focusing on the phonological aspect of the language sample she was producing when she was imitating the instructor. As a matter of fact, she closed her eyes to reduce her cognitive load when she attempted self-repair as she spoke: “/stɑ…stɑp/, /fɔl…fɔlt/, /we…wæn…wɑndʃɔfʊl/”. She was able to self-monitor her error even when it came to sounds that Spanish speakers struggle with, such as /w/. The findings showed the importance of the interaction between the ear and the mouth, as well as the critical role of controlling point of attention, in being able to self-correct pronunciation.
Related to the notion of the cognition in pronunciation self-correction was awareness of phonology proposed by Schmitt’s Noticing Hypothesis (1990, 1993), which suggests that awareness is a continuum that results in different levels of learning based on its intensity and considers attention on specific language aspects as a necessary process for noticing and intake. Both awareness and attention were verbalized by the participants in the focus-group interviews and observed in the classroom interactions. Participants placed a strong emphasis on the role of awareness and listening in the self-correction of pronunciation errors. Their statements about the impact corrective feedback had on their ability to recognize their own errors indicated a relationship between being corrected and pronunciation awareness. Similar to the findings of Pawlak et al., (2015), participants wished to be explicitly told what the problem area was in their own pronunciation so that they could monitor and attempt to correct the error; they described this process as difficult but necessary. A common experience described by participants was knowing they were making a mistake but not being able to determine how to correct it without explicit corrective feedback. The researcher believes that this shows a need for language teachers to help learners become more aware of their pronunciation errors by providing them more corrective feedback in this area. Since learners express a clear desire to understand where the error is arising from, it stands to reason that recasts should be accompanied by metalinguistic feedback or explicit correction. The findings also show a tendency for learners to seek an analytical approach to understanding sound as a strategy for tackling L2 pronunciation.

Another finding important to note was pertinent to the concept of fossilization. The participants used the phenomenon of the inability to self-correct errors after repeating the erroneous form over a period of time with the opportunity of having more time to practice in the focus-group interviews. Furthermore, the findings of the classroom data depicted in Table 5
indicated that for three out of four participants, over 50% of the corrective feedback instances showed repair, suggesting that fossilization is in fact malleable and possible to repair. This supports Han’s (2004) views about a need for more careful examination in the area of fossilization before assuming it is present.

Also important to note is the notion of explicit correction observed in the classroom interactions. The process of coding the correction types has shown that explicit correction may take many different forms in pronunciation correction. The instructor of the observed lessons used body language, such as shaking head, showing signs of confusion or discontent, and raising finger to signal the learner that an error was present. In addition to that, interjections and impressions that indicate disapproval, such as “Aah!” and “Oops!” were noted. Furthermore, a common technique used by the instructor was contrasting the correct form with the utterance provided by the learner. These behaviors were clearly understood as explicit signals of errors by the participants, and this shows a possibility of providing explicit correction without making the learner feel uncomfortable about making mistakes.

Some other interesting observation stemming from emotion were also revealed through the observational field notes. This was the presence and role of humor and laughter. For example, there were instances where participants laughed as a reaction to their inability to pronounce a target form. Furthermore, several instances of laughter as a reaction to imitating the target form were observed. These were specific to sounds and words that had not been pronounced correctly by the participants before. After pronouncing the target form with precision, participants smiled and, in some cases, even laughed out loud, a spontaneous reaction to hearing their own voice producing the target phonology but finding it awkward:
Meiling: /sɛt/
Instructor: Ah. I hear /ɛt/ on the end of yours. You’re saying /sɛt... ɛt/ (elongating the ending vowel) Not /ɛt/. Listen. /sɪt/ (elongating the medial vowel sound)
Meiling: /sɪt/ (laughs)
Instructor: Ah, that’s it, that’s the idea. Good manipulation.

Laughter was also employed by subjects in Szyszka’s (2017) study as a strategy to reduce anxiety in pronunciation. Its function in the current study is not clear, but it is possible that its role in reducing anxiety had an influence especially when the participants laughed after repeated failures at modeling the language sample and repairing the error.

The findings also reveal interest features regarding the nature of repair. There were several instances where participants were able to repeat the correct form immediately after teacher modeling but reverted to their original (incorrect) utterance when the instructor elicited a repetition of the correct form. There were also instances that involved capturing the correct form and not being able to sustain it but achieving successful repair in the end. Such examples, which resulted in repair, also exhibit the complexity of the interaction between cognition and correction. These patterns in the data analyses indicate that awareness alone may not be enough to allow learners to retain the correct sample and achieve ultimate self-repair.

When it comes to patterns between the type of corrective feedback and successful repairs, the present study, having just four participants, was not able to explicitly identify optimal conditions for correction in pronunciation although the researcher observed satisfactory tendencies when explicit correction and metalinguistic feedback were coupled with recasts in the data. This is in line with the literature in that explicit correction was indicated to result in higher repair rate (Pawlak, 2013), and the combination of explicit correction and metalinguistic feedback was found to result in the highest repair rate along with recasts (Lee, 2016).
The variables of participant L1 and culture should not be ignored, though, when it comes to corrective feedback in L2 pronunciation as some learners may require a higher effort to repair pronunciation errors; this was observed in Amar’s case. Furthermore, culture may play a role in the way learners approach corrective feedback as shown by Yang’s (2016) study. In fact, cultural background and perceptions regarding making mistakes should also be considered when providing corrective feedback. Even though learners may still achieve phonological awareness and gain the ability to self-correct, instructors must aim at providing a safe learning environment. Thus, teachers can remind learners about the fact that making mistakes is an indispensable part of pronunciation errors.

Moreover, it was possible to easily observe participant facial expressions during classroom interactions due to the “gallery mode” of the video recordings. It was observed in the classroom observations that even though participants’ gestures seemed to depict stress after being informed that they made an error, participants were also observed to be proud, content, and happy when they were able to repair their errors. This was also directly expressed in the focus-group interviews. Participants expressed that they felt happy and pleased with themselves when they were able to copy the correct structure in addition to feeling satisfied when their errors were directly corrected.

In summary, the findings of the study revealed the complexity of the repair process in L2 pronunciation. Strong areas of the emphasis displayed in this study relate to feelings of embarrassment and frustration towards pronunciation error although they did not interfere with learners’ desire to correct their pronunciation errors. In addition, also significant were the phonological loop and cognition as their role in pronunciation self-correction was perceived to be impactful by the learner and evident in the classroom. Moreover, implications were offered on
the complexity of the attitudes driving the learner in L2 pronunciation correction. Based on the findings of this study, language educators can help learners become more aware of their pronunciation errors by providing more corrective feedback in the area of L2 pronunciation. Since learners express a desire to know when and how the error arises, metalinguistic feedback or explicit correction should accompany recasts. Based on the researcher’s analysis of classroom interactions, recasts can be effective in correcting L2 pronunciation as they offer the learners with tangible opportunities to imitate the correct form. Furthermore, in line with Miller’s (2011) suggestions, metalinguistic feedback can serve as aids in correction and can be used as a part of elicitation to promote self-awareness and self-correction. The role of the phonological loop in pronunciation learning should not be ignored, and educators should become more aware of learners’ needs and attitudes towards correction in order to provide exactly what the learners need and offer both explicit and implicit corrective feedback on pronunciation.

**Impact of Study**

The study revealed several different findings and implications in the area of L2 pronunciation correction which may contribute to the development of pronunciation pedagogy. Each finding offered by the analysis can be avenues for future research, including the complexity of attitudes towards correction, resistance to repair, perceptions about the interplay between input and output as well as attention and awareness of one’s own pronunciation.

**Limitations**

Like all studies, this study had limitations that merit discussion. First of all, because the language data was collected and obtained from the Repository, it was not possible to address follow-up questions with participants. This in turn limited the expansion and clarification of
statements made during the focus-group interviews. Another limitation attributable to the fact that the analysis was based on secondary data arose from varied participant backgrounds, including first languages and proficiency levels, characterized by data participants. Therefore, a thorough analysis of repair ratios and targeting specific sub-groups of learners sorted by L1 and proficiency would shed light on how the phenomenon is lived by different learner groups, a key piece of knowledge useful to language educators and language program administrations alike.

Limiting the study further is the lack of proficiency level data. Because the corrective feedback was supported by metalinguistic cues and detailed explanations and discussion of pronunciation, participants may have been impacted by their ability to process the target language. Case in point, Sandra, the participant who had trouble understanding metalinguistic feedback, also demonstrated a high degree of ability when it came to imitation and self-repair. This suggests the relevance of considering language proficiency when studying classroom interactions of any nature.

Another important limitation to note is the fact that participants took part in a pronunciation course concurrently as they joined focus-group interviews. This formal course instruction may have influenced the data representing their perceptions regarding correction in L2 pronunciation because the role of listening and imitation was emphasized in the lesson and learners were explicitly made aware of their own pronunciation errors in addition to the phonological differences between English and their first languages.

Moreover, the findings of this study cannot be overgeneralized due to its qualitative nature and the limited number of participants, in addition to purposive sampling used for the focus-group interactions, which was based on the amount of input provided, and the data analysis of the classroom interactions, which was based on attendance.
Future Research

The investigation of L2 pronunciation through the perspective of the learner should be investigated in a case-by-case nature since the present study found parallelisms between learner performance and beliefs. Furthermore, the number of successful repair instances for each learner appeared to be different even though similar correction methods were used with all learners. However, this study did not examine the true nature of this relationship and its underlying reasons due to its scope, qualitative nature, and sample size. Thus, the learner aspect in L2 pronunciation correction should be further investigated by implementing quantitative approaches that examine the issue in an in-depth manner as based on the current study, learner reaction to corrective feedback based on varying linguistic and affective aspects signals a need for more research in the area of learner perspectives and individually-based variables in L2 pronunciation correction. Such analysis of learner perceptions and performances in repair instances could bring about a clearer understanding to the nature of this relationship, for understanding the learner aspect will allow language teachers to meet the pronunciation needs of the learners in the classroom. In addition, a necessity for more case studies understanding learner opinions and performance in the area of L2 pronunciation is supported by findings of the present study.

Conclusion

This study argues that there is a gap in the literature when it comes to exploring learner perceptions in L2 pronunciation correction through a multi-dimensional manner. Analysis of both focus-group interview and classroom interaction data revealed that listening and imitation have a strong relationship with both each other and achieving self-correction in pronunciation. In addition, aspects of cognition, such as awareness and attention, were found to be strongly related to focusing on form in L2 phonology. Fossilization was seen as malleable given with enough and
proper time and practice and was often associated with inaccurate modeling by non-native teachers as well as learner repetition of erroneous forms over long periods of time. Learner perceptions and perceptions related to these phenomena demonstrated the complexity and interconnectivity of the mechanisms that regulate the ways learner react to corrective feedback and achieve self-correction.

The attitudes revealed through the data analysis should bring along a re-examination of the way educators perceive affective factors in the language classroom. The participants were found to have a strong will to be corrected and to monitor and repair self-errors despite possessing negative feelings towards having and noticing errors in pronunciation as well as being provided corrective feedback. The complexity of the interplay between these factors opens doors to future research and encouraging learners to verbalize their needs and wants while becoming aware of their feelings associated with correction in L2 phonology. By opening themselves to understanding true learner needs and wants, educators can allow themselves the opportunity to effectively and efficiently promote learner gains in a language area that is often neglected. Likewise, the learner lens relayed feelings of desire, frustration, and embarrassment related to L2 pronunciation correction.
APPENDIX A
IRB APPROVAL LETTER
January 26, 2021

Dear Elif Saribas:

On 1/26/2021, the IRB determined the following submission to be human subjects research that is exempt from regulation:

<table>
<thead>
<tr>
<th>Type of Review:</th>
<th>Initial Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>Corrective Feedback in Pronunciation: The English Learner Lens</td>
</tr>
<tr>
<td>Investigator:</td>
<td>Elif Saribas</td>
</tr>
<tr>
<td>IRB ID:</td>
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</tr>
<tr>
<td>Funding:</td>
<td>None</td>
</tr>
<tr>
<td>Grant ID:</td>
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- Documents Reviewed:
  - HRP-251_FacultyAdvisorReview_Saribas.pdf, Category: Faculty Research Approval;
  - COLORSRepositoryData-sharingAgreement_Saribas.docx, Category: Other;
  - COLORSRepositoryRequestForm_Saribas.docx, Category: Other;
  - FocusGroupProtocols_Saribas.pdf, Category: Interview / Focus Questions;
  - LATP Variables.docx, Category: Other

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Katie Kilgore
Designated Reviewer
APPENDIX B
COLORS REPOSITORY REQUEST FORM
COLORS REPOSITORY REQUEST FORM

PART I. STUDY DETAILS - PROVIDE THE INFORMATION REQUESTED.

<table>
<thead>
<tr>
<th>Study Title</th>
<th>Corrective Feedback in Pronunciation: The English Learner Lens</th>
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<tbody>
<tr>
<td>Study Design</td>
<td>Mixed-Method Design</td>
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<tr>
<td>Primary Objective</td>
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<tr>
<td></td>
<td>toward correction in L2 pronunciation in relevance to its</td>
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<td></td>
<td>form and source.</td>
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<tr>
<td>Secondary Objective(s)</td>
<td>To educate teachers regarding the impact correction has in</td>
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<tr>
<td></td>
<td>the ESOL classroom and raise awareness in English learners</td>
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<td></td>
<td>about the role such feedback can have on pronunciation</td>
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<td></td>
<td>learning.</td>
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<td>Dates of Data</td>
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PART II. LANGUAGE SERVICES - CHECK EACH LANGUAGE SERVICE DESIRED.

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<td>Grammar-in-writing, online F2F</td>
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<td>Speaking English Grammar, online F2F</td>
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<td>Pronouncing American English, online F2F</td>
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<td>TOEFL ITP Prep, traditional F2F</td>
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<td>TOEFL [R1] Speaking/Writing Prep, online F2F</td>
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PART III. DATA TYPES - CHECK EACH DATA TYPE DESIRED.

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<th>Type</th>
<th>Format</th>
<th>Description</th>
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<tbody>
<tr>
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<td>Participant, self-reported information from Enrollment Request form (native</td>
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<tr>
<td>demographics</td>
<td></td>
<td>language, current location, program of study)</td>
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<tr>
<td>Writing</td>
<td>doc, pdf</td>
<td>Participant original writing sample</td>
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<tr>
<td>Tutor notes</td>
<td>doc, pdf</td>
<td>Participant writing sample with tutor notations</td>
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<tr>
<td>Lesson</td>
<td>mp3, mp4</td>
<td>Video-recorded instructional sessions; includes screen sharing of instructor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>doc cam; images displayed through split-screen display; chat box</td>
</tr>
</tbody>
</table>
COLORS Repository Data-sharing Agreement

The undersigned agrees to the following conditions relative to the use of data from the COLOR Repository:

- COLOR Repository data will be used only for the study included under the IRB Approval issued by UCF.
- COLOR Repository data will not be shared with anyone not included under the IRB Approval issued by UCF.
- Any personally identifying information that may be discernable through the COLOR Repository data will not be divulged.
- All steps will be taken to assure the absolute protection of the identifiable information of participants.
- COLOR Repository data will not be stored in any location other than the University's secure cloud system.
- COLOR Repository data and related data links will be permanently deleted by _______ 04/03/2026 __________.
APPENDIX D
FOCUS-GROUP PROTOCOLS
Pronouncing American English (PAE)

Discussion Topic - Correction

The goal of this activity is to generate spontaneous, authentic participant discussion, to have each participant express their views clearly and in detail. Refrain from explaining concepts or sharing your own views/experiences. Read aloud the script (shaded areas), and elicit a response from each participant. Employ probing only if the discussion does not develop adequately by itself.

1. Start recorder.
2. Greet participants.
3. Follow the instructions below.

Read...
"The topic of today's discussion is correction. First we will talk about correction from others and later self-correction."

Read...
Corrction from others means correction by people, such as a neighbor, a friend, a teacher, a classmate, and even a stranger. This could be a native speaker or a non-native speaker. Please discuss your thoughts about instances where others correct your pronunciation.”
Allow ~5 minutes for discussion.
[Probing ideas...correction strategies, type of correction, feelings about correction, detriment of correction by others]

Read...
"Now let's talk about self-correction, instances where you try to correct your pronunciation. This can mean trying to produce new sounds, adjust sounds, or judge the accuracy of sounds. Describe self-correction from your own experience.”
Allow ~5 minutes for discussion.
[Probing ideas...place/manner of articulation, comparing sounds]

Read...
"Thank you for sharing your thoughts. As we have discussed in PAE, correction is a key ingredient to successful accent modification, therefore, it is important to reflect on its role in pronunciation learning so that we can more fully optimize on its benefits.”

4. Stop recording.
5. Dismiss participants.
Pronouncing American English (PAE)

Discussion Topic - Awareness & Imitation

The goal of this activity is to generate spontaneous, authentic participant discussion, to have participants express their views clearly and in detail. Refrain from explaining concepts or sharing your own views/experiences. Read aloud the script (shaded areas), and elicit a response from each participant. Employ probing only if the discussion does not develop adequately by itself.

1. Start recorder.
2. Greet participants.
3. Follow the instructions below.

Read...
"The topic of today’s discussion is awareness and imitation. First we will talk about awareness and later imitation."

Read...
"Let’s start with pronunciation awareness, your understanding of the way the language should sound. This could be recognizing native from non-native accents or knowing that you or someone else has mispronounced a word. It could also be knowing maybe that a sound does not belong. Discuss your awareness when it comes to second language pronunciation."
Allow ~5 minutes for discussion.
[Probing ideas...noticing different native accents, intonation, different sounds, noticing pronunciation errors.]

Read...
"Now, let’s talk about the role of imitation, or copying, in second-language pronunciation learning. This could include a reflection on your ability to copy, or imitating, sounds or in general how imitation affects pronunciation learning."
Allow ~5 minutes for discussion.
[Probing ideas...imitating someone with a nice accent, strategies, pronouncing the words as a native speaker, practicing different accents, starting to sound the same way as a speaker you listen to everyday]

Read...
"Thank you for sharing your thoughts. As we have discussed in PAE, awareness and imitation are key ingredients to successful accent modification; therefore, it is important to reflect on their role in pronunciation learning so that we can more fully optimize on their benefits."

4. Stop recording.
5. Dismiss participants.
LIST OF REFERENCES


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