

Department of Foreign Language Education

English Language Teaching Program

EFL TEACHER COGNITION IN CORRECTIVE FEEDBACK ON PRONUNCIATION: A CASE STUDY

Tuğçe ERKMEN

Master's Thesis

Ankara, 2022

With leadership, research, innovation, high quality education and change,

To the leading edge ... Toward being the best ...



Department of Foreign Language Education

English Language Teaching Program

EFL TEACHER COGNITION IN CORRECTIVE FEEDBACK ON PRONUNCIATION: A CASE STUDY

İNGİLİZCEYİ YABANCI DİL OLARAK ÖĞRETEN ÖĞRETMENLERİN SESLETİM HATALARINI DÜZELTME KONUSUNDAKİ BİLİŞLERİ: BİR DURUM ÇALIŞMASI

Tuğçe ERKMEN

Master's Thesis

Ankara, 2022

Acceptance and Approval

To the Graduate School of Educational Sciences,

This thesis, prepared by **TUĞÇE ERKMEN** and entitled "EFL Teacher Cognition in Corrective Feedback on Pronunciation: A Case Study" has been approved as a thesis for the Degree of **Master** in the **Program of English Language Teaching** in the **Department of Foreign Language Education** by the members of the Examining Committee.

Chair	Asst. Prof. Dr. Melike Ünal Gezer
Supervisor	Prof. Dr. İsmail Hakkı Mirici
Member	Asst. Prof. Dr. Hatice Ergül

This is to certify that this thesis has been approved by the aforementioned examining committee members on **17/10/2022** in accordance with the relevant articles of the Rules and Regulations of Hacettepe University Graduate School of Educational Sciences, and was accepted as a **Master's Thesis** in the **Program of English Language Teaching** by the Board of Directors of the Graduate School of Educational Sciences from/..../.

Prof. Dr. Selahattin GELBAL Director of Graduate School of Educational Sciences

Abstract

The present study aimed to investigate experienced English as a Foreign Language (EFL) teachers' cognitions of providing corrective feedback (CF) on learners' pronunciation errors. By employing a qualitative mode of enquiry, the study set out to portray teachers' knowledge, beliefs, and feelings about correcting learners' pronunciation errors as well as the factors helped shape them. The study also intended to demonstrate the consistencies and inconsistencies between teachers' stated beliefs and their actual practices. To this end, a case study approach was adopted, and the data was collected through semi-structured interviews, classroom observations and post-observation conferences. Two experienced teachers participated in the study. The findings revealed that these teachers held both convergent and divergent beliefs about whether to correct pronunciation errors or not, which ones to correct and what techniques to use for correction. The study also revealed that the teachers' cognitions developed under the influence of certain contextual factors (i.e., student profile, syllabus, and supplementary materials) and personal factors (i.e., previous language learning experiences, prior teaching experiences and lack of confidence). Lastly, the study showed that most of their beliefs were corroborated by their practices except a few discrepancies. The teachers never addressed suprasegmental errors although they said they would, and they failed to vary their correction methods as much as they initially reported by not employing certain correction tools and techniques they mentioned before. The present study might have important implications for teachers, teacher educators and curriculum designers.

Keywords: teacher cognition, pronunciation teaching, corrective feedback (CF), experienced teachers.

Bu çalışma, yabancı dil olarak İngilizce öğreten deneyimli öğretmenlerin öğrencilerin sesletim hatalarına düzeltici dönüt verilmesi konusundaki bilişlerini araştırmayı hedeflemiştir. Çalışma, nitel bir sorgulama metodu kullanmak suretiyle öğretmenlerin bilgilerinin, inanışlarının ve hislerinin yanı sıra bunların şekillenmesine yardımcı olan faktörlerin resmedilmesi amacıyla başlatılmıştır. Çalışma ayrıca öğretmenlerin ifade ettikleri inanışları ve asıl sınıf içi pratikleri arasındaki tutarlılıkları ve uyuşmazlıkları göstermeyi de amaçlamıştır. Bu amaç doğrultusunda, bir vaka çalışması yaklaşımı benimsenmiş ve veriler yarı yapılandırılmış görüşmeler, sınıf gözlemleri ve gözlem sonrası yapılan ek görüşmeler yoluyla toplanmıştır. Çalışmaya iki deneyimli öğretmen katılmıştır. Veriler, bu öğretmenlerin sesletim hatalarının düzeltilip düzeltilmemesi, hangi sesletim hatalarının düzeltimesi ve düzeltmeler için hangi tekniklerin kullanılması konularında hem benzeşen hem de farklılaşan görüşlere sahip olduklarını ortaya çıkarmıştır. Çalışma, öğretmenlerin bilişlerinin belirli çevresel faktörlerin (öğrenci profili, müfredat ve ek materyaller) ve kişisel faktörlerin (geçmiş dil öğrenme deneyimleri, önceki öğretme tecrübeleri ve özgüven eksikliği) etkisi altında geliştiğini de ortaya çıkarmıştır. Son olarak çalışma, birkaç uyuşmazlık dışında öğretmenlerin çoğu görüşünün pratikleriyle örtüştüğünü göstermiştir. Öğretmenler parçalarüstü sesletim hatalarına değindiklerini söyledikleri halde değinmemişler ve daha önce kullandıklarını söyledikleri bazı düzeltme araç ve tekniklerini kullanmayarak düzeltme yöntemlerini en başta söyledikleri kadar çeşitlendirmekte başarısız olmuşlardır. Mevcut çalışma, öğretmenler, öğretmen eğitimcileri ve müfredat geliştiriciler için önemli çıkarımlar icerebilir.

Anahtar Kelimeler: öğretmen bilişi, sesletim öğretimi, düzeltici dönüt, tecrübeli öğretmenler.

Acknowledgements

Having reached the end of my thesis writing process, I owe a debt of gratitude to a multitude of individuals who have provided help and guidance. Without their encouragement and support, I would not have been able to afford to undertake this endeavour.

First and foremost, I would like to express my gratitude to my supervisor, Prof. Dr. İsmail Hakkı Mirici, for his help, guidance and understanding throughout my study.

A very special thank you goes out to Res. Asst. Berna Ataberk. I must express my sincere gratitude to her for her constant and continued support and patience.

My heartfelt thanks are due to the participants of the study who gave of their time during the data collection process and invited me to their classrooms. I owe a great deal to them for openly sharing their views with me and freely discussing and reflecting on their classroom practices.

Thanks to the rectorate of the university in which the study was conducted for giving me the permission to collect data at their institution.

Last but not least, I would like to thank my family for their valuable advice, tolerance, and reassurance. In particular, I am eternally grateful to my mother, Cennet Erkmen, for being an unfailing source of encouragement and optimism throughout.

Acceptance and Approval	ii
Abstract	iii
Öz	iv
Acknowledgements	v
List of Tables	ix
List of Figures	x
Symbols and Abbreviations	xi
Chapter 1 Introduction	1
Statement of the Problem	3
Aim of the Study and Research Questions	5
Significance of the Study	6
Assumptions	7
Limitations	7
Definitions	8
Chapter 2 Literature Review	9
Conceptual Framework: Teacher Cognition	9
Corrective Feedback in Language Teaching	13
Pronunciation Teaching and Corrective Feedback	18
Teacher Cognition of Pronunciation Teaching and Corrective Feedback	21
Chapter 3 Methodology	26
Research Design	26
Qualitative Research Paradigm	26
Case Study Approach	27
Setting and Participants	28
EXPT1	30
EXPT2	31
Data Collection	32
Instruments	33

Table of Contents

Semi-Structured Interviews
Classroom Observations34
Post-Observation Conferences
Data Analysis
Chapter 4 Findings
RQ1: What are experienced Turkish EFL teachers' cognitions of providing CF on learners pronunciation errors?
Cognitions Regarding the Efficacy of CF on Pronunciation40
Cognitions About the Kinds of Pronunciation Errors to Be Corrected44
Cognitions Related to the Ways of Making Corrections on Pronunciation47
RQ2: What are the underlying factors that shape these teachers' beliefs and practices as to providing CF on pronunciation?
Contextual Factors
Student Profile
Syllabus
Supplementary Materials64
Teacher-Related Factors
Previous Learning Experiences67
Prior Teaching Experiences72
Lack of Confidence
RQ3: To what extent are teachers' reported beliefs about correcting pronunciation errors consistent with their observed practices?
Consistencies
Inconsistencies
Chapter 5 Discussion, Suggestions and Conclusion97
A Summary of the Study97
Discussion
Pedagogical Implications114
Suggestions for Further Research
Conclusion

References	118
APPENDIX-A: Semi-Structured Interview Questions	cxxviii
APPENDIX-B: The Leaflet for Corrective Feedback Types	cxxxiv
APPENDIX-C: Informed Consent Form	cxxxv
APPENDIX-D: Ethics Committee Approval	cxxxvi
APPENDIX-E: Declaration of Ethical Conduct	cxxxvii
APPENDIX-F: Thesis/Dissertation Originality Report	cxxxviii
APPENDIX-G: Yayımlama ve Fikrî Mülkiyet Hakları Beyanı	cxxxix

List of Tables

Table 1 CF Types	17
Table 2 Participants' Profiles	
Table 3 Summary of Data Collection and Analysis	
Table 4 Tools and Techniques Used for CF on Pronunciation	56
Table 5 Summary of the Factors' Influencing Teachers' Cognitions	77
Table 6 The Number and Ways of Corrections Made on Pronunciation	96

List of Figures

Figure 1 Elements and Processes in Language Teacher Cognition	12
Figure 2 Data Collection Procedure	33
Figure 3 The Interrelationship Between the Three Research Questions	39
Figure 4 The Participants' Provision and Ignorance of CF	80
Figure 5 Correction Methods Used by EXPT1 in Observed Classes	93
Figure 6 Correction Methods Used by EXPT2 in Observed Classes	94

Symbols and Abbreviations

- **CF**: Corrective Feedback
- FFI: Form-Focused Instruction
- SLA: Second Language Acquisition
- **ELT**: English Language Teaching
- **L1:** First/Native Language
- L2: Second/Foreign language
- FL: Foreign Language
- EFL: English as a Foreign Language
- **ESL:** English as a Second Language
- **GTM:** Grammar Translation Method
- ALM: Audio-Lingual Method
- **CLT:** Communicative Language Teaching
- **EAP:** English for Academic Purposes
- **CEFR:** Common European Framework of Reference for Languages
- **SSI:** Semi-Structures Interview
- POC: Post-Observation Conference
- IL: Interlanguage
- **EXPT:** Experienced Teacher
- **NNEST:** Non-native English Speaking Teacher
- LMS: Learning Management System

Chapter 1

Introduction

In a language learning classroom, there are basically two sides: the teacher and the students. Although the position of students seems to be highlighted more in research studies, teachers also play a significant role in students' language learning process. With the aim of enabling students achieve a certain level of language proficiency, teachers usually deal with various issues while tracking students' language learning trajectories. Teachers take up so many different roles such as motivator, facilitator, organizer, controller, assessor, participant, tutor, and resource (Harmer, 2007). They have to design their lessons in such a way that it promotes a positive language learning environment and appeals to learners coming from a variety of backgrounds with different motivations. For instance, they are responsible for managing time, choosing the right materials, arranging the classroom, achieving lesson objectives, and so on. While doing all of these, they usually base their decisions and actions on their experiences, thoughts and perceptions, or context-sensitive attitudes. Therefore, investigating teachers' complex cognitive activities turns out be a necessity because "teachers' deep-rooted beliefs about how languages are learned will pervade their classroom actions more than a particular methodology they are told to adopt or course book they follow" (Williams & Burden, 1997, p. 57 as cited in Li, 2020, p. 22).

Teacher cognition has received considerable scholarly attention for the last 30 years or so and turned into a major area of interest within the field of English Language Teaching (ELT) (Li, 2020). Teacher cognition is a theoretical framework, and it is concerned with teachers' knowledge, beliefs, thoughts, perceptions, and attitudes as well as the way these are reflected on their classroom practices (Borg, 2006). Teachers' cognitions have been studied from so many different aspects, "including the study of teachers' beliefs, interactive decisions, teacher knowledge and conceptions, teacher identity and emotions, and so on" (Li, 2020, p. 4). Some studies examined how the teachers' and learners' beliefs matched (Kern, 1995) while others investigated how teachers' beliefs transformed (Mattheoudakis, 2007), or how teachers' beliefs affected their classroom behaviour (Farrell & Lim, 2005). In terms of specific curricular areas, it was found that most of the studies investigating teachers' cognitions of language teaching particularly focused on grammar and literacy instruction (Borg, 2003), and the number of these studies still continues to increase (Çapan, 2014; Watson, 2015). Therefore, there is a need to examine the connection between teachers' cognitions and their classroom practices with respect to different curricular skill areas, such as pronunciation.

Prior to mid-nineties, there were no audio or video recordings of pronunciation teachers in action and there were limited number of classroom-based studies which also focused on different areas of language other than pronunciation (Murphy & Baker, 2015). As a result of this, teachers had to base their pronunciation teaching practices on their own experience rather than research. Pronunciation has been called as 'the Cinderella of language teaching' (Kelly, 1969, p. 87) to imply that "pronunciation has been denied its proper and equal place in the language-teaching household, made instead to labour unseen while other skills receive adulation and recognition" (Levis, 2018, p. 217). That is, teachers tend to neglect pronunciation and give their attention to other four skills as well as grammar and vocabulary due to lack of empirical research and guidance as to pronunciation teaching. This situation has started to improve with the publication of seminal papers showing that pronunciation instruction could be effective (Derwing, Munro & Wiebe, 1998). As a consequence of the accumulated knowledge in pronunciation teaching research, a consensus has been built around two main points: (1) comprehensibility is more significant than acquiring a native speaker accent, and (2) both segmental and suprasegmental features should have a place in pronunciation teaching (Grant, 2014 as cited in Couper, 2019). However, we still do not know much about how much these advances have been acknowledged by teachers and reflected on their classroom practices (Couper, 2019).

As previously mentioned, language teaching is a multifaceted profession which necessitates teachers to make different decisions under different circumstances. One type of decision needed to be made regularly concerns how to react to learners' language errors, which is a topic that has attracted considerable attention and been studied extensively. As a result of this, there has been a proliferation of terms related to error correction; for example, it has been named "as negative evidence by linguists, as repair by discourse analysts, as negative feedback by psychologists, as corrective feedback (CF) by second language teachers, and as focus-on-form in more recent work in classroom second language acquisition (SLA)" (Lyster & Ranta, 1997, p. 38). This proliferation of terms can be seen as evidence for the heated debate among researchers having contradictory views regarding error correction. Brooks (1960), for example, believed a sin was a useful analogy for an error and said that like sins, the best thing to do was to avoid errors and overcome their influences. Krashen (1982) also claimed that error correction raised students' affective filter and had "the immediate effect of putting the student on the defensive" (p. 75). Ur (1996) recognized the place of error correction in language teaching but stated that it was a better approach to invest time in avoiding errors in the first place rather than trying to eliminate them later. According to Gass (1991), on the other hand, CF functions as a tool to capture attention and argues that direct or frequent CF avoids fossilization as it enables learners to

identify discrepancies between their learner language and the target language. Ohta (2001) points out that if the correct form is provided while providing CF, this stimulates hypothesis testing and learners get the chance to compare their own production with that of another. When the correct form is not provided, they are forced to use their own resources in creating reformulations.

In line with the varied viewpoints on the issue, error correction has also taken diverse roles in different methodologies and approaches. For instance, in Grammar Translation Method (GTM) or the Audio-Lingual Method (ALM), errors are immediately corrected as they are thought to cause 'bad habit formation'. On the other hand, in the Natural Approach or Communicative Language Teaching (CLT), the primary goal is to enable learners to achieve 'communicative competence', so errors are seen as a natural outcome of the language learning process and correcting them is regarded as an unavailing attempt (Richards & Rodgers, 2014).

In his article, Corder (1967) briefly summarizes different functions of errors and claims that they are extremely important and should not be ignored since they provide teachers with strong evidence about what learners have learnt up to a certain point in a course. According to Corder (1967), errors are important in three different ways. Firstly, they are important for teachers because if they analyse learners errors systematically, they can get a better grasp of how much learners have progressed and got closer to achieving their language goals as well as how much remains to be learned for them. Secondly, they provide researchers with important insights into how language is learned or acquired through analysing the strategies that learners use on the way of discovering the language. Thirdly and most importantly, making errors functions as a vital device used to ease the language learning process by the learners themselves. That is, it can serve as a useful tool for learners to test their hypotheses about the nature of the target language.

This introductory chapter starts with the statement of the problem linked to the current study which is mainly about language teacher cognition and provision of CF on pronunciation errors. Next, it introduces the aim of the study together with the research questions. Afterwards, the significance of the study, the assumptions of the researcher, and the limitations of the study are presented respectively. The chapter ends with operational definitions of relevant concepts and key terms.

Statement of the Problem

Even though the issue of CF has been a controversial and much disputed subject within the field of language teaching, previous research on oral CF (Hendrickson, 1978;

Lyster & Ranta, 1997; Ellis, Basturkmen & Lowen, 2001; Sheen, 2004) recognizes the critical role played by CF in second and foreign language learning. These studies suggest that judicious use of CF may enhance second and foreign language learning. However, the topic of providing CF on pronunciation has hitherto received scant attention by scholars and a systematic understanding of how CF contributes to pronunciation learning is still lacking. A search of the literature has revealed a small number of studies which dealt with the role of CF in pronunciation teaching (Derwing, Munro & Wiebe 1998; Saito & Lyster, 2012; Gooch, Saito, & Lyster, 2016; Saito & Saito, 2017; Dlaska & Krekeler, 2013). Owing to this scarcity, it seems essential to contribute to the field by carrying out studies investigating teachers' cognitions about the role of error correction in pronunciation teaching has been found to take place mostly just in response to errors (Foote et al., 2016). Therefore, this issue needs to be examined in more detail.

Besides, investigating teachers' beliefs and thoughts is of utmost importance in that teachers may hold beliefs which are consistent or contradictory with their classroom practices based on the teaching context. The way teachers engage in pronunciation instruction or correct learners' pronunciation errors may tremendously vary, even within the case of a single teacher. For example, Basturmen et al. (2004) put forward that while expressing their beliefs in the abstract (i.e., in interviews), they may draw on their technical knowledge and say that they would not disrupt the communicative flow of the lesson; however, they may draw on their practical knowledge when there is a need to address incorrect linguistic forms in the classroom. Citing Oskamp (1991), Basturkmen et al. (2004) also point out that the discrepancies between beliefs and behaviours are usually attributed to the situational constraints; however, reporting on the findings of their own study, they claim that teachers do not show these constraints as a reason for the emerging inconsistencies, and they note that this might be the case due to not being directly asked about it. Therefore, it is essential to do more research to further examine the influence of these contextual factors on the teachers' beliefs and choices in different educational settings. Additionally, relatively little research has been carried out on teacher cognition of pronunciation teaching (Baker, 2014; Burns, 206; Murphy, 2011), and even less on teacher cognition of giving CF on pronunciation (Baker & Burri, 2016; Couper, 2019). Moreover, most of the available studies in this line of inquiry have been conducted in ESL (English as a Second Language) settings, so more research in EFL (English as a Foreign Language) settings is needed to see whether the previous associations between beliefs and practices will be replicated.

Another point is that, eliciting teachers' beliefs and thoughts merely by means of questionnaires might be an inadequate attempt as these beliefs and thoughts may be rooted in their experiential knowledge obtained from their classroom practices. Pajares (1992) argues that although self-report instruments may shed light on areas that need to be improved, more accurate inferences are made when researchers use "additional measures such as open-ended interviews, responses to dilemmas and vignettes, and observation of behaviour" (p. 327). Baker (2014) also notes that most studies investigating Second Language Teacher Cognition (SLTC) and pronunciation pedagogy have employed surveys and questionnaires only and claims that there is "a neglect of pronunciation in classroom-oriented research" (p. 329). Motivated by this methodological shortage in the literature, this study sets out to use classroom observations in addition to semi-structured interviews and post-observation conferences to produce a more detailed account of the issue.

Aim of the Study and Research Questions

The overall aim of this study is to develop a better understanding of how Turkish EFL instructors' stated beliefs as to correcting pronunciation errors of learners and their actual instructional practices match (or mismatch). The goal of the present study is not to investigate the effectiveness of CF, "but rather to portray something of the complex systems that interact in the teacher's emergent cognitions as they engage in and reflect on their classroom practice" (Burns, Freeman, & Edwards, 2015 as cited in Couper, 2019, p. 44). In addition to this, the study also seeks to assess the extent to which teachers' experience might have an influence on their attitude towards providing CF on pronunciation. As Mackey et al. (2004) clearly state, L2 teachers' individual differences such as the level of experience and teacher education might turn into determining factors when it comes to utilizing incidental focus-on-form (i.e., CF) techniques. In alignment with these aims, this study seeks to address the main research question of "What is the degree of experienced EFL teachers' cognition of giving corrective feedback on pronunciation?" Based on this main research questions can be stated as follows:

- 1. What are experienced Turkish EFL teachers' cognitions of providing CF on learners' pronunciation errors?
- 2. What are the underlying factors that shape these teachers' beliefs and practices as to providing CF on pronunciation?
- 3. To what extent are teachers' reported beliefs about correcting pronunciation errors consistent with their observed practices?

Significance of the Study

There are several important areas where this study makes an original contribution to the field. To start with, the findings should make an important contribution to the growing area of teacher education research. Pajares (1992) asks the following critical question: "It is easy to urge teacher educators, for instance, to make educational beliefs a primary focus of their teacher preparation programs, but how are they to do this without research findings that identify beliefs that are consistent with effective teaching practices and student cognitive and affective growth, beliefs that are inconsistent with such aims, and beliefs that may play no significant role?" (p. 327-328). Thus, the findings of the present study are expected to provide teacher educators and curriculum designers with valuable insights through analysing teachers' cognitions and their CF practices. Ellis (2009) also explicates that one of the roles that educators in teacher education programmes need to adopt is "to help teachers see how their ideas about CF reflect their overall teaching philosophy and thus to assist them to review this critically" (p. 15). Therefore, teacher educators may benefit from the findings of the current study to raise teachers' awareness as to the importance of having consistency between conceptions and actual CF practices and guide them in how to use efficient CF strategies for pronunciation development without sacrificing the consistency. With respect to professional development, the results can also inform administrators about various contextual factors influencing teachers' conceptions of correcting pronunciation errors so that they can shape their institutional policies accordingly and organize in-service training in their institution if necessary.

Considering that teachers' conscious or unconscious beliefs have a profound effect on their classroom practices, an in-depth analysis of their cognitions will probably not only enable teacher educators and curriculum designers to make informed decisions but also help teachers improve their own classroom practices. The study presented in this thesis will be one of the first investigations to focus specifically on EFL teachers' cognitions of CF on pronunciation, so the findings might encourage teachers to engage in reflective practice. In the light of previous research, Baker and Burri (2016) also points out that there is a need for teachers to not only advance their knowledge of English phonology but also learn how to provide effective feedback on it. Pronunciation is an indispensable part of communicative competence, so this study may function as a reminder of its importance and help teachers review their techniques and attitudes towards it critically. Consequently, they might consider adopting pedagogically and linguistically new CF approaches. As Ellis (2009) expresses, teachers "should not accept pedagogic proposals without submitting them to their own empirical enquiry" (p. 16) That is, the research findings might be used to guide teachers, but teachers should also test these findings on their own to see how applicable they are for them and their classrooms.

Assumptions

Within the scope of this study, it is assumed that the instruments chosen for the data collection process will both ease the process and yield valuable insights as they are the most appropriate tools for the in-depth investigation of the topic in this study. The participants will be asked to express their beliefs, thoughts, and attitudes in the interviews and then within the same study, they will have the opportunity to either prove the consistency between their cognitions and their actual practices (in classroom observations) or justify the inconsistencies if there is any (in post-observation conferences). It is also assumed that as a natural outcome of this data triangulation, the convergence will probably offer highly accurate results that can also be confirmed by the participants themselves. Another assumption is that the participants will provide answers to the questions in an honest and candid manner. In order to maximize truthfulness, the anonymity and confidentiality will be preserved carefully throughout the study.

Limitations

The present study is subject to a number of potential methodological limitations that need to be acknowledged. A major limitation of the study is that it was designed as a case study which included only two experienced instructors as participants, so the findings are only pertinent to the specified setting and participants. With a small sample size, caution must be applied, since the findings cannot be generalized and transferred to other settings. Secondly, each participant was observed for six hours in total, and the limitation of observing a limited amount of class hours is that it precludes reaching more conclusive and tangible results. Thirdly, the current study is also limited by the absence of a second coder. To avoid possible bias, the data set was frequently revisited and each participant was asked to take part in a validation interview. Finally, another potential source of bias for the study might be the researchers' familiarity with the participants. However, the necessary precautions were taken to overcome subjectivity while collecting and analysing the collected data. These limitations mean that findings of the study need to be interpreted cautiously.

Definitions

The operationalized definitions of the key terms adopted throughout the present study can be listed as:

Teacher Cognition: "The beliefs, knowledge, theories, assumptions and attitudes that teachers hold about all aspects of their work" (Borg, 1999 as cited in Borg 2006, p. 49).

Beliefs: "Statements teachers make about their ideas, thoughts and knowledge that are expressed as evaluations of what should be done, should be the cased and is preferable" (Basturkmen, Loewen & Ellis, 2004, p. 244).

Corrective Feedback (CF): It can be defined as "responses to learner utterances containing an error" (Ellis, 2006a, p. 28).

Form-Focused Instruction (FFI): It refers to refers to 'any pedagogical effort which is used to draw the learners' attention to language form either implicitly or explicitly' (Spada, 1997, p. 73).

Uptake: It "refers to a student's utterance that immediately follows the teacher's feedback and that constitutes a reaction in some way to the teacher's intention to draw attention to some aspect of the student's initial utterance" (Lyster & Ranta, 1997, p. 49).

Chapter 2

Literature Review

The aim of this chapter is to provide the reader with a review of the studies related to the current research. These will be presented in four separate sections. In the first section, the notion of teacher cognition is introduced as it offers the conceptual framework that forms the basis of this study. In the following section, the concept of CF is also presented along with the empirical research focusing on this area of inquiry in the field of ELT. In the third section, the studies about pronunciation teaching and CF on pronunciation are reviewed since pronunciation is the primary skill area that this study intends to investigate. Finally, the last section includes an objective evaluation of the previous research that specifically deals with teacher cognition of pronunciation teaching and CF so as to contribute to the better understanding of the present study in particular.

Conceptual Framework: Teacher Cognition

There has been a growing interest in teacher cognition research since 1970s and it has offered several viewpoints from which it is possible to study teachers' mental lives (Borg, 2006). Teacher cognition refers to the unobservable cognitive dimension of teaching which includes what teachers think, know, and believe as well as the connection between these mental constructs and teachers' classroom practices (Borg, 2003). "Teacher cognition can thus be characterized as an often tacit, personally-held, practical system of mental constructs held by teachers, and which are dynamic - that is defined and refined on the basis of educational and professional experiences throughout teachers' lives" (Borg, 2006, p. 35). Formerly, the focus was on teaching behaviours rather than teacher thinking; however, this viewpoint has markedly shifted thanks to the developments in psychology (Borg, 2006). Following this shift, it has been found that teachers are not just passive implementers of given prescriptions but active decision-makers whose knowledge and beliefs play a key role in designing classroom activities (Borg, 2006). Teachers make judgements and decisions based on the interpretation of their experiences, so it is important to understand the way teachers make sense of their experiences. In their review article, Clark and Yinger (1977) analysed a number of studies on teachers' judgements, decision making processes and implicit theories about teaching. They found that teachers made interactive decisions in an ongoing lesson when there were interruptions by students despite their reluctance to change the instructional process in the middle of a lesson. Another finding was that there are some guiding beliefs operating unconsciously behind the thought processes and behaviours of teachers. In alignment with these findings, Clark and Peterson (1986) also indicate that there is a nonlinear and bidirectional relationship between teachers' theories and beliefs and their interactive thoughts and decisions. That is, teachers' cognitions have an impact on their planning and decisions, but they might also create new theories and beliefs in their minds depending on their classroom experiences. Considering these, investigating teachers' cognition seems essential for a proper grasp of the interplay between teachers' tacit theories about language teaching and their praxis, or vice versa.

Besides, some researchers (Elbaz, 1983; Clandinin & Connelly, 1987; Fenstermacher, 1994) have developed various models of teacher knowledge, which have captured considerable attention in the field. One of the most influential models has been that of Shulman's (1987). Upon analysing both the origins of teacher knowledge and the way it was acquired and employed in the classroom environment, Shulman (1987) proposed seven categories as to the knowledge base of teachers: "content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners, knowledge of educational contexts, and knowledge of educational ends, purposes, and values, and their philosophical and historical grounds" (p. 8). Of all, pedagogical content knowledge is especially crucial in teacher knowledge research since it requires teachers to blend content and pedagogy in such a way that they can successfully plan, deliver, or adapt the topics to be instructed based on the interests and abilities of their learners (Shulman, 1987). In a similar vein, Carter (1990) formed three distinct categories with respect to the acquisition of teacher knowledge: "(a) teachers' information processing, including decision making and expert-novice studies; (b) teachers practical knowledge including personal knowledge and classroom knowledge and (c) pedagogical content knowledge" (as cited in Borg, 2006, p. 23). Carter also made a substantial contribution to this line of inquiry through making a clear distinction between pedagogical content knowledge and practical knowledge (as cited in Borg, 2006). In her review, she defined pedagogical content knowledge as a form of knowledge "grounded in disciplines and formulations related to school curriculum and the collective wisdom of the profession" whereas practical knowledge referred to more informal, personal, and situational knowledge (Carter, 1990, p. 306 as cited in Borg, 2006, p. 24). What is good about teachers' knowledge is that it can be investigated in empirical studies through interviews or questionnaires. Nevertheless, as Fenstermacher (1994) clearly states, "the critical objective of teacher knowledge research is not for researchers to know what teacher know but for teachers to know what they know" (p. 50).

It is worth mentioning that there is a vague dividing line between teachers' knowledge and beliefs. In his comprehensive review on teachers' beliefs, Pajares (1992) asserts that educational belief is a "messy construct" which is not only too broad but also

hard to operationalize. Pajares (1992) claims that in many studies researchers rely on artificial definitions such as ""[b]elief is based on evaluation and judgment; knowledge is based on objective fact" (p. 313). In spite of the presence of these definitions, it is still demanding for researchers to study teachers' beliefs due to their subjectivity. In an attempt to ease the process, Pajares (1992) offers a more extensive definition and proposes that a belief is "an individual's judgement of the truth or falsity of a proposition, a judgement that can only be inferred from a collective understanding of what human beings say, intend, and do" (p. 316). Moreover, Calderhead (1996) provides a more detailed analysis by specifying different types of beliefs (e.g., beliefs about teaching, beliefs about subject, and so on) and avoids studying beliefs generically, which is also something suggested by Pajares (1992). However, the idea of separating knowledge, beliefs, and conceptions has not been viewed as a fruitful practice anymore because "in the mind of the teacher, components of knowledge, beliefs, conceptions, and intuitions are inextricably intertwined" (Verloop et al., 2001, p. 446).

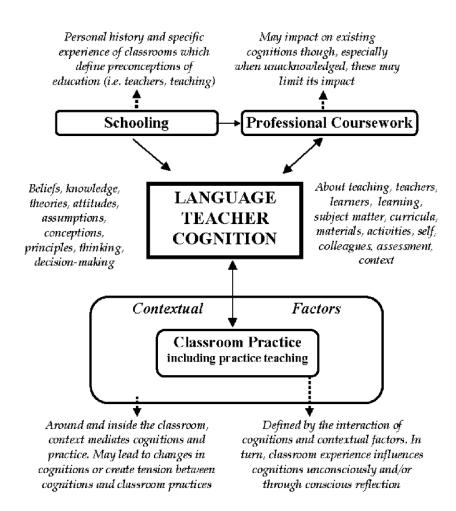
This body of literature clearly indicates that there is a strong connection between teachers' knowledge, beliefs, and their pedagogical practice. In the light of previous research, Borg (2006) clearly states that teacher cognition is "personally defined, often tacit, systematic and dynamic" (p. 272). He adds that it is also extremely context sensitive. Teachers may share their opinions about various factors that have an effect on their choices in the classroom; however, their reports on these issues do not make much sense without an investigation into their classroom practices. Borg also puts forward that carefully examining what teachers do in the classroom should be an indispensable part of language teacher cognition research since the ultimate goal is to better understand teachers and teaching. He questions any teacher cognition research that is grounded solely in teachers' accounts of their perceived classroom practices. Borg underscores the fact that studying cognitions and practices without examining the contextual factors provides only a partial, sometimes even flawed, characterization of teachers and teaching. Thus, teacher cognition research should ideally be based on a nexus of teachers' knowledge, beliefs, and their actual practices.

One of the most significant current discussions in teacher cognition research is the nature of expertise in language teaching. Borg (2006) claims that a key issue concerning this area of research concerns how the concept of expertise is defined. Some may assume that there is a direct association between expertise and years of teaching experience; nonetheless, depending on the findings of previous research, Borg points out they do not necessarily co-occur. Yet, it is a crystal-clear fact that the cognitions of expert and novice teachers differ considerably in terms of content and structure. The cognitions of expert

teachers are characterized by their experiential knowledge that allows them to foresee learning potential in an instructional context, predict possible problems and respond to them successfully, whereas the cognitions of novice teachers are characterized by the dearth of flexibility as to incidental learning, the use of similar instructional techniques and the inability to look from learners' point of view (Borg, 2006). For example, Nunan (1992) conducted a study focusing on the interactive decisions of experienced and novice ESL teachers in Australia and found that experienced language teachers made decisions that were mostly about language problems, whereas novice teachers' focus was on classroom management. Such studies investigating the thought processes of novice teachers, experienced teachers, or both are noteworthy as they deepen our understanding of how teachers' cognitions change and develop over time.

Figure 1

Elements and Processes in Language Teacher Cognition (Borg, 2006, p. 283)



Having analysed the mainstream educational research on teacher cognition, Borg (2006) recognized the absence of a unifying framework withing the field; therefore, he provided a schematic conceptualization (see Figure 1) representing the relationship between teacher cognition and other constituents of teaching in order to impose some structure on this research tradition. In this model, Borg employs teacher cognition as an umbrella term which comprises a variety of notions such as beliefs, knowledge, attitudes, and conceptions and psychological constructs used to describe different sides of their profession since these are all intertwined in the minds of teachers. Schooling, which refers to teachers' prior learning experiences (generally as children) and perceptions about their initial training, is also included as a category in this model since it may affect teachers' cognitions about teaching and learning. Professional coursework can be defined as the professional preparation that takes place through teacher education programmes. These programmes may have a better impact on trainee teachers' cognitions unless their previous beliefs are ignored. Contextual factors also act as a determining factor since it helps or hinders teachers' ability to keep their instructional practices in harmony with their cognitions. Similarly, classroom practice can be defined as the actual place where teachers' cognitions and contextual factors interrelate and become mutually informing. Teachers may prefer certain classroom practices over the others owing to their cognitions or the other way around. It is also possible to see their classroom experiences shape their cognitions either consciously or unconsciously.

Corrective Feedback in Language Teaching

Corrective feedback (CF) has been the subject of much systematic investigation in the field of second language acquisition (SLA). It can simply be defined as "responses to learner utterances containing an error" (Ellis, 2006a, p. 28). The pedagogical aspect of this research tradition derives from the communicative language teaching paradigm whereas its theoretical basis stems from the interactionist approach in the field (Brown, 2016). According to Ellis (2009), there are basically two types of feedback: positive and negative. Positive feedback is seen significant in terms of boosting learners' motivation owing to its affectively uplifting nature. Negative feedback, on the other hand, has long been viewed as something to be avoided because it signals inaccuracy and might be discouraging. Both positive and negative evidence can be provided by using different kinds of CF. Positive evidence indicates what is acceptable in the language through exposure to the correct models of language in the input, whereas negative evidence signals what is unacceptable in the language through corrections and explanations (Gass, 1997). Debate has long prevailed as to whether CF, which is considered as a kind of negative evidence, is necessary or useful for language acquisition (Sheen, 2004). For example, Krashen (1982) claims that the correcting learners' errors is "a serious mistake" (p. 74). He has two main arguments to support this view. To begin with, students feel threatened when faced with an error correction, thus they stop producing complex structures so as to avoid this feeling. Secondly, error correction has no power over the development of "acquired knowledge" although it may help increase "learned knowledge" to a certain degree. In contrast to Krashen (1982), VanPatten (2003) argues that the provision of CF may actually foster language acquisition when it is offered in a way that encourages students to negotiate meaning through making form-meaning connections. Currently, it is possible to see some theoretical positions acknowledging the facilitating role of CF, including Swain's (1995) output hypothesis, Long's (1996) interaction hypothesis, and Schmidt's (2001) noticing hypothesis.

In the literature on SLA, the relative importance of CF has been subject to considerable discussion. Hendrikson's (1978) study marks the beginning of this interest in the field. In his article, Hendrickson systematically reviewed the relevant studies in the literature and provided an extensive account on different perspectives about learners' errors. Basically, he tried to answer five questions about whether, when, which, or how student errors should be corrected and who should correct them. The result of the analysis revealed that correcting oral and written errors was much more beneficial when compared to leaving them uncorrected. As for when to correct student errors, he found that it was counter-productive to correct every single error because it discouraged learners from expressing their ideas freely and confidently. Regarding which errors to correct, the proposed action was to prioritize the errors that caused communication breakdown and the ones that were produced much more frequently by learners. Besides, some empirical studies in Hendrikson's review also proved that direct error correction was inefficient. Finally, he claimed that self-correction and peer correction might be a more useful instructional strategy compared to teacher correction despite the lack of empirical research to support this argument at the time of his study.

According to Brown (2016), much of our knowledge about the tendencies of teachers in feedback choices comes from a small number of influential studies including that of Lyster and Ranta (1997), Ellies et al. (2001) and Sheen (2004). Lyster and Ranta (1997) was specifically interested in the issue of how to correct learner errors. In their seminal study, they investigated the relationship between CF and learner uptake through conducting an observational study in six French immersion classrooms at the primary level in Montreal area. According to Lyster and Ranta (1997), uptake "refers to a student's utterance that immediately follows the teacher's feedback and that constitutes a reaction in some way to the teacher's intention to draw attention to some aspect of the student's initial utterance" (p. 49). After analysing the transcripts of classroom interaction, they developed a taxonomy for incidental corrective feedback and identified six main types of CF: recasts (55%), elicitation (14%), clarification requests (11%), metalinguistic feedback (8%), explicit correction (7%), and repetition of error (5%). Recasts were the most popular technique used for error correction, but surprisingly, it was the type that resulted in the least uptake (31%). On the other hand, the most successful technique leading to uptake was elicitation (100%). Theoretically, Lyster and Ranta's study contributed a lot to L2 research as their taxonomy is still used to code CF type in observational reports and pedagogically, it also increased teachers' awareness of a variety of alternatives at their disposal for giving CF (Brown, 2016).

Ellies et al. (2001) carried out a descriptive study to examine the connection between focus-on-form practices, learner uptake and repair in a private English language school in New Zealand. This study has shown that the number of focus-on-form practices might be high in communicative ESL classrooms involving trained teachers and motivated students. This finding disproved the prevalent view that high number of focus-on-form practices might disrupt the communicative flow of the lessons. As in Lyster and Ranta's (1997) study, this study also showed that recasts were the dominant CF strategy; however, it was also found to generate the highest amount of uptake (76.3%). This result was in stark contrast to that found in Lyster and Ranta's (1997) study. Moreover, a major finding in this study was that the overall uptake (72%) was much higher than that reported for the immersion classrooms examined by Lyster and Ranta (1997). Ellis et al. (2001) attributed this to the fact that meaning-focused communication lessons they observed followed lesson plans designed mainly for form-focused instruction, which caused learners to pay more attention to form. Regarding successful uptake, linguistic foci was found to be an important factor. For instance, successful uptake occurred more when the focus was on pronunciation rather than vocabulary. Also, successful uptake was seen to take place more when learners discovered problematic language areas themselves and negotiated around these linguistic problems.

Sheen's (2004) study investigated the role of context in teachers' CF choices and learner uptake. Sheen compared four communicative classroom settings - French Immersion, Canada ESL, New Zealand ESL and Korean EFL - using Lyster and Ranta's (1997) taxonomy of CF. The findings revealed that recasts were the most frequently employed error treatment strategy in all instructional settings, but they were much more frequent in the New Zealand ESL (68%) and Korean EFL (55%) classrooms. The uptake and repair were also greater in these two contexts. A post-research interview with teachers

demonstrated that they were concerned about maintaining the flow of communication, so they preferred to provide implicit CF through recasts. Uptake and repair were observed to occur more in ESL and EFL settings involving educated adults compared to immersion setting with children and ESL setting with less-educated learners. For example, there was a sharp contrast between Canada ESL and Korean EFL contexts in terms of learner uptake and this was found to be the case due to the difference in proficiency level of students in two instructional settings. Learners in Korean EFL context were high in proficiency, so they worked on recasts more explicitly. Therefore, it was reported that when recasts were more salient, they resulted in more uptake and repair. The study is significant in that it showcases the role of different contextual factors and the impact of these factors on CF and successful repair.

In another study, Ranta and Lyster (2007) divided six CF types into two main groups: reformulations and prompts. In this classification, reformulations consist of recasts and explicit correction, whereas prompts involve elicitation, metalinguistic clues, clarification requests, and repetition. Sheen and Ellis (2011) extended this new taxonomy by adding the distinction of implicit and explicit CF (see Table 1). In their state-of-the-art article, Lyster, Saito, and Sato (2013) reviewed these studies as well as other research on oral corrective feedback in L2 classrooms. They found that learners tended to recognize explicit CF more easily when compared to implicit CF; however, implicit corrective feedback had more longlasting effects. In this study, it was also found that learners generally did not want their errors to be ignored and preferred to receive CF although teachers were reluctant to correct their errors. Drawing on the experimental studies of CF, Lyster, Saito and Sato (2013) actually confirmed that receiving CF was much more effective than getting no CF and learners who got CF in the form of a prompt or explicit correction were likely to have more gains when compared to the ones who got recasts as error correction. However, it is not possible for researchers to find the most efficient CF type as there are so many other learner factors determining the effectiveness of CF such as age, metalinguistic knowledge, the level of proficiency and the instructional context (Sato, 2011). For example, teachers are often inclined to provide CF and instruction on morphosyntactic errors, yet learners have been observed to produce more successful uptake and repair upon receiving CF on lexical and phonological errors (Lyster, Saito & Sato, 2013). This finding is especially important in terms of L2 pronunciation development.

Table 1

CF types (Lyster, Saito & Sato, 2013, p. 4)

	Implicit	Explicit
 Reformulations Conversational recasts a reformulation of a student utterance in an attempt to resolve a communication breakdown often take the form of confirmation checks 		Didactic recasts • a reformulation of a student utterance in the absence of
		 a reformulation of a student utterance in the absence of a communication problem
	Explicit correction	
	 a reformulation of a student utterance plus a clear indication of an error 	
	Explicit correction with metalinguistic explanation	
	 in addition to signalling an error and providing the correct form, there is also a metalinguistic comment 	
adjusted intonation to Clarification request • a phrase such as 'Pardo	Repetition	Metalinguistic clue
	 a verbatim repetition of a student utterance, often with adjusted intonation to highlight the error 	 a brief metalinguistic statement aimed at eliciting a self-correction from the student
	Clarification request	Elicitation
	 a phrase such as 'Pardon?' and 'I don't understand' following a student utterance to indirectly signal an 	 directly elicits a self-correction from the student, often in the form of a wh-question
	error	Paralinguistic signal
		• an attempt to non-verbally elicit the correct form from the learner

In his meta-analysis, Brown (2016) reviewed research in this line inquiry with an aim to determine the rate and linguistic foci of CF types that teachers provided rather than investigating the effectiveness of CF types by looking at learner uptake or repair. With regards to CF types, he found that reformulation formed 66% of total CF (with recasts comprising 57%) while the proportion of prompts as a CF strategy was 30%. That is, there was a tendency among L2 teachers to provide reformulations as a CF strategy twice more often than they elicited reformulated responses from their students. As for the linguistic foci, the findings demonstrated that grammar was the most corrected language area (43%), followed by lexis (28%) and pronunciation (22%). The findings also revealed that there were a number of contextual and methodological factors affecting the CF choices across teaching contexts. These variables included student proficiency, second/foreign language context, and teacher experience. For instance, the study showed that teachers provided less recasts to beginner students compared to advanced proficiency students. Besides, the analysis of SL and FL contexts revealed that teachers supplied more correction on grammar and phonological errors in foreign language (FL) contexts. Moreover, the findings indicated that experienced teachers were more likely to focus on lexical errors rather than phonological ones. Although there were no differences between native, non-native, and bilingual teachers in terms of CF provision, teacher experience and education/training were found to be a determining factor.

Pronunciation Teaching and Corrective Feedback

With the influence of audio-lingual approach, pronunciation was viewed as the most important component of English language teaching in the 1970s, so teaching practices were mainly made up of drilling and imitation. In contrast, it was mostly ignored in communicative approach. According to Levis (2005), "pronunciation's importance has always been determined by ideology and intuition rather than research" (p. 369). Levis (2005) explains that there are basically two competing principles in pronunciation research and pedagogy: the nativeness principle and the intelligibility principle. The nativeness principle advocates that achieving native-like pronunciation is something desirable in a foreign language. On the other hand, the intelligibility principle holds that being understandable is enough for learners. Currently, intelligibility prioritized over accuracy. Proponents of this view suggest that instruction should focus on the aspects that make communication intelligible and comprehensible rather than reducing the number of pronunciation errors to promote accent-free speech (Levis, 2005; Derwing & Munro, 2005).

To date, pronunciation instruction has been investigated from many different aspects such as "learners and contexts (e.g., various target languages and proficiency levels), pedagogical approaches (with vs. without feedback), linguistic features (e.g., segmentals vs. suprasegmentals), and outcome types (i.e., constrained vs. guided vs. open-ended)" (Lee, Jang, & Polonsky, 2015, p. 345). Two main areas that has been mainly investigated within the scope of pronunciation instruction in L2 settings are (a) the effectiveness of different instructional approaches and (b) the role of language awareness in learning pronunciation (Kennedy, Blanchet, & Trofimovich, 2014). The most critical considerations regarding pronunciation instruction include which features to target and whether instruction is more effective on segmentals or suprasegmentals (Lee, Jang, & Polonsky, 2015). The study of Derwing, Munro, and Wiebe (1998) is a good example for this area of investigation. It is also one of the few quasi-experimental studies that is conducted in actual classrooms (Saito & Lyster, 2012). In their method-comparison study, Derwing, Munro, and Wiebe (1998) investigated the effectiveness of pronunciation instruction targeting either segmentals or suprasegmentals on accentedness and comprehensibility. One group of learners got instruction targeting suprasegmental features such as word stress, rhythm, and intonation while the other group received a more traditional pronunciation instruction targeting individual segments or sounds. At the end of a 12-week instructional period, native English listeners judged these learners' accentedness and comprehensibility in sentencereading tasks and extemporaneous narratives. The findings revealed that learners' pronunciation gains varied depending on the unit of measurement. Students' accents in both segmental and suprasegmental groups showed substantial improvement in sentencereading tasks, but their accents showed no observable progress in extemporaneous narratives. In terms of comprehensibility, only the suprasegmental group showed improvement in extemporaneous speech. The study clearly illustrates that before adopting a pronunciation instruction approach, it is crucial to consider the evaluation method and different aspects of pronunciation to be improved.

Traditionally, pronunciation has been taught in a decontextualized way through the use of explicit instruction on phonetic transcriptions followed by mechanical drills and repetitions (Saito & Lyster, 2012). This is probably because learning pronunciation necessitates not only understanding pronunciation rules but also the actual use of motor skills to produce correct L2 sounds (Trofimovich & Gatbonton, 2006). However, the best approach to adopt seems to employ decontextualized methods together with contextualized ones. Currently, the prevailing view among SLA researchers is that meaning-focused instruction should be complemented with form-focused instruction (FFI) in order to achieve success in L2 learning (Saito & Saito, 2017). FFI refers to "any pedagogical effort which is used to draw the learners' attention to language form either implicitly or explicitly" (Spada, 1997, p. 73). Explicit FFI is also considered to work most effectively in communicationoriented, content-based classrooms (Spada, 2011) because being able to notice and practice target linguistic features in a meaningful discourse improves learners' ability to make better form-meaning associations (VanPatten, 2004). Therefore, it might be a good idea to involve L2 learners in form-focused tasks while teaching pronunciation in which they can both use target phonetic structures in a meaningful context and try to achieve the communicative purpose at the same time.

CF is an important aspect of FFI that is used in response to learner errors. According to Derwing and Munro (2015), pronunciation errors refer to "cases in which a speaker aims to produce an utterance, but as a result of a lack of full control over its segmental or suprasegmental structure, produces something else instead" (p. 57). Though very few in number, there are also studies focusing on the effects of FFI and CF on the development of segmentals (Saito & Lyster, 2012; Gooch, Saito, & Lyster, 2016), suprasegmentals (Saito & Saito, 2017) or overall comprehensibility (Dlaska & Krekeler, 2013). In Canada, Saito and Lyster (2012) carried out a quasi-experimental study with a pre-test and post-test design to examine the effects of form-focused instruction with or without CF on Japanese learners' pronunciation development of English /』/. The study included two phases. In the first phase, all learners (except the ones in control group) received FFI in two different groups (i.e., FFI-only group, FFI + CF group) to notice and practice the target phonetic feature in a

meaningful discourse. In the second phase, native speaker listeners assessed and rated the speech samples. The findings revealed that L2 pronunciation development might be enhanced by means of a communicative emphasis on phonological structures. It was also found that the learners who received FFI as well as CF (in the form of recasts) had better results regarding the acquisition of English /J/ when compared to the ones FFI-only group on both controlled (i.e., word and sentence reading tasks) and free response (i.e., timed picture description task) outcome measures. Despite the sufficiency of positive evidence in instructional input, learners still needed to get CF, which was probably because they were unable make online judgments about the intelligibility of their output. The study is notable in that it showcases the significance of providing explicit phonetic information together with CF.

Saito and Saito (2017) also carried out a similar quasi-experimental study, but this time to investigate the effects of FFI with CF on the comprehensibility and suprasegmental development of inexperienced Japanese EFL learners. The study adopted a pre- and posttest design and students who were assigned to two groups (experimental and control). The ones in the experimental group received three hours of FFI over six weeks and their performance was assessed via controlled tasks (reading aloud) by native speaker teachers. The analysis of pre- and post-test data demonstrated that students' pronunciation in the controlled group improved markedly in terms of overall comprehensibility as well as word stress, rhythm, and intonation. The suprasegmental-based instruction helped learners enhance different aspects of L2 suprasegmental learning such as the full/weak vowel distinction and tonal melody through explicitly directing students' attention to cross linguistic differences. Specifically, it enabled students to mark stressed syllables with longer and clearer vowels, reduce vowels in unstressed syllables, and use appropriate intonation patterns for yes/no and wh- questions. Moreover, the results illustrated that FFI including the provision of CF and metalinguistic knowledge was useful for even lower-level learners with limited amount of conversational experience in L2.

In their study, Dlaska and Krekeler (2013) employed a pre- and post-test design and examined the effect of individual CF on the pronunciation development of L2 learners in order to find out whether it requires to complement listening-only interventions. The participants were adult learners of German coming from various backgrounds and they were assigned to two groups in which they involved in either listening only activities to get implicit feedback (i.e., listening to their own recorded pronunciation and then teacher's model pronunciation) or listening activities including explicit CF provided by the teacher. They took part in a controlled speech production task (text reading) in individual sessions and each speech sample pair (pre- and post-test sample) was randomly rated for their

comprehensibility by two experienced language teachers. The results of the data analysis revealed that individual CF was more effective than listening-only interventions in the short term for improving L2 comprehensibility. Dlaska and Krekeler (2013) concluded that this was probably because learners were unable to self-assess their pronunciation skills accurately and relied on teacher's guidance to reach conclusions about their pronunciation. Therefore, they argue that individual CF cannot be replaced by listening-only activities even though they are much easier to employ in a language classroom.

In addition to these, there are also models that have been developed to guide teachers on pronunciation teaching and help them deal with learners' phonetic difficulties. For example, Flege's Speech Learning Model (SLM) particularly addresses L2 phonetic learning and holds that perceptual difficulties are the main cause of errors in production. Flege (1995) proposed that learners were inclined to hear L2 sounds in relation to their own language and stressed the importance of distinguishing L2 from L1 sounds. According to this model, it is extremely challenging for learners to produce an accurate pronunciation of a newly introduced L2 sound that is very similar to an L1 sound. In contrast, if the new sound is very different from any L1 sound, learners make the distinction much easily, thus produce the sound more accurately. However, Derwing and Munro (2015) claim that it is unrealistic to expect all speakers who share a common L1 background to make the same errors since individual variability is a distinctive quality of L1 phonetic learning. They maintain that there are a variety of factors influencing a speaker's production such as "age of learning, aptitude, previous learning experiences, and the quality and quantity of exposure to the L2" (p. 72). Besides, Fraser (2001) argue that conceptualization of English phonology is also essential for pronunciation learning. For example, Fraser states that errors made while using stress do not result from the complete absence of stress in a word or sentence, but from using it inappropriately for English. She explains that they need to conceptualize stress so that they can use it appropriately; that is, they need to understand the concept of stress, and then be able to recognize it, use it and change it when necessary to convey the intended meaning. It can be concluded that along with the empirical research on pronunciation teaching and error correction, it is also of utmost importance to take the theoretical perspectives into consideration.

Teacher Cognition of Pronunciation Teaching and Corrective Feedback

Although there is a limited number of research into ESL/EFL teachers' cognition of pronunciation teaching, a variety of themes have emerged from an increasing number of studies conducted in various locations including Australia (Burns, 2006), Ireland (Murphy, 2011), North America (Baker, 2011, 2014), Brazil (Buss, 2016), Canada (Foote et al, 2011,

2016), Uruguay (Couper, 2016), New Zealand (Couper, 2017), and Costa Rica (Gordon, 2020). A common theme is that even experienced and well-trained language instructors lack knowledge about pronunciation instruction (Foote et al., 2011), so teachers need better training as well as more professional development opportunities as to the actual teaching of pronunciation (Burns, 2006; Murphy, 2011; Foote et al., 2016). The findings showed that teachers did not have systematic information on how to teach pronunciation even though they got training on phonetics and phonology (Baker, 2011; Couper, 2016). For example, it was found that teachers who took a graduate course on pronunciation pedagogy was able to utilize a greater number of techniques in their lessons (Baker, 2014), whereas others revolved around listen-and-repeat type of activities (Foote et al., 2011; Buss, 2016; Couper, 2017). The general consensus is that teachers are aware of the significance of teaching pronunciation, but they neglect it for different reasons such as lack of confidence (Baker, 2011; Foote et al., 2011; Couper, 2016). Some teachers were found to be anxious and uncertain about their own pronunciation, which caused them to avoid teaching certain aspects of pronunciation such as intonation (Couper, 2016). Another reason is the lack of time and additional materials on pronunciation teaching, which causes teachers to set priorities due to curriculum constraints (Baker, 2011; Couper, 2016). Murphy (2011) also reported that teachers in Ireland were dissatisfied with the pronunciation teaching resources available to them since they were based solely on British English. They expressed that the materials used in pronunciation instruction needed provide learners with a wide range of accents. An additional reason for teachers' negligence in teaching pronunciation is that they think it is not as important as grammar, vocabulary, or skills such as reading or writing (Foote et al., 2011, 2016) and some of them stated that this was the case due to curricula demands and exams (Couper, 2016).

The second theme that has emerged from these studies concerns which aspect of pronunciation to teach. It was reported that teachers were likely to focus on segmental features more frequently and they were uncertain about teaching suprasegmental features (Burns, 2006; Foote et al., 2011, 2016; Couper, 2016, 2017; Buss, 2016). Research findings suggested that most instructors were inclined to deal with word-level features (i.e., problematic sounds) by using repetition when needed (Buss, 2016). It was reported that teachers noticed and dealt with pronunciation only when it caused a communication breakdown or interrupted fluency and intelligibility (Burns, 2006). For some instructors, the most helpful activities were those that focused on segmental features such as minimal pairs (Foote et al., 2011); however, findings in the literature clearly show that suprasegmental features are vital for intelligibility and comprehensibility (Derwing et al, 1998). Some instructors also expressed their lack of knowledge as to how to teach stress and intonation

and were unable to describe these features accurately in English (Couper, 2017). This might be because it is much more demanding to describe suprasegmentals without any reference to specialized terminology (Foote et al., 2016). In his case study of an EFL instructor, Gordon (2020) found that the instructor needed to equip learners with some metalanguage of English pronunciation (through using phonetic transcription and terminology) to enable them 'speak the same language' and ease the implementation of explicit pronunciation instruction. This study illustrates that knowledge base of teachers plays a crucial role in attaching equal importance to both segmental and suprasegmental features.

The issue of how to treat pronunciation pedagogically forms another theme which also covers the provision of CF on pronunciation. It was reported that most of the pronunciation instruction was ad hoc, which took place in response to errors and as a follow up to recasts (Foote et al., 2016; Couper, 2017, 2019). In their corpus-based study, Foote et al. (2016) examined teachers' pronunciation teaching behaviours in communicative L2 classes and found that CF was an indispensable part of pronunciation teaching, and it was generally used when there was no other pronunciation intervention. The same study found that teachers tended to correct segmental errors more when compared to suprasegmental ones probably due to suprasegmental errors' quality of being more difficult to correct as they do not concern only a single lexical item but several words, phrases, or sentences. Foote et al. (2016) suggests that pronunciation teaching should be proactive, rather than reactive, and teachers should pronunciation activities in their lesson plans by means of which they can explicitly treat pronunciation difficulties. It might be good to adopt such an approach as Couper (2016) also previously reported in his qualitative study that error correction worked best when students attended to pronunciation difficulties and actively engaged with the correction. In addition to this, Couper's (2016) study had other important findings regarding teachers' choices of when and how to correct pronunciation errors. Teachers in this study expressed a preference for on-the-spot correction if there was a communication breakdown; however, in other cases, they chose to provide delayed feedback through taking notes of the errors first and then correcting them on board. Also, some teachers expressed their concern about affective factors and stated they chose peeror self-correction instead of correcting the errors themselves. As for the overall attitude of teachers towards CF, Couper's (2016) reported that some teachers thought it could work if done in the right way while others expressed their uncertainty as to whether it worked or not. It can be concluded that teachers clearly need guidance on how to provide clear explanations and constructive feedback on learners' pronunciation (Baker, 2014).

To the best of my knowledge, there exist only two published studies that particularly deal with teachers' cognitions of giving feedback on pronunciation. These studies come

from Baker and Burri (2016) and Couper (2019). In their qualitative study, Baker and Burri (2016) investigated how five experienced English for Academic Purposes (EAP) instructors dealt with certain aspects of pronunciation which had a negative impact on the comprehensibility of learners' pronunciation. The main aim of the study was to examine the relationship between teachers' beliefs about giving feedback on learner pronunciation and their actual classroom practices. The data collected through semi-structured interviews, classroom observations and semi-structured interviews in an EAP program in North America. The findings suggested that all instructors in the study were focused mostly on comprehensibility as their main aim was to enable students survive in their academic life with an acceptable pronunciation. These instructors viewed CF feedback as the key tool to foster learners' comprehensibility. Besides, they chose to give feedback only on the target features identified by the curriculum. For example, if the focal feature were word stress in a unit, instructors would only correct word stress errors. This was seen as a feasible strategy to address learner needs. In addition to these, the other strategies used by all instructors while providing feedback on pronunciation were also found to be similar. They were seen to benefit mostly from peer feedback, whole-class feedback, recasting, and oral or written feedback on voice recordings. Although the instructors were able to utilize a variety of techniques to provide feedback on pronunciation, they had concerns about the effectiveness of these techniques and the time-consuming nature of feedback provision.

Couper (2019) also published an article on teacher cognition of CF on pronunciation in which the data was drawn from a more comprehensive, qualitative study (Couper, 2017) on teachers' cognitions of pronunciation teaching. In his article, Couper (2019) aimed to portray these teachers' beliefs and practices using the findings which are specifically about providing CF on pronunciation. At the time of the study, the participants were teaching in different language institutes in New Zealand. The data was collected via holding semistructures with nineteen teachers and observing the classroom practices of six of them. The data analysis revealed that teachers tended to correct word-level errors (e.g., syllables or word stress) when they thought it hindered communication or the error was excessively frequent. Couper (2019) reported that teachers used a variety of CF techniques including recasts, prompts, reformulations, and metalinguistic explanation. Recasts were generally followed by instructional events, but an interesting finding was that recasts could not bring about any learner uptake even though it was the most frequently used technique along with listen-and-repeat practices. Teachers explained that the reasons for their overuse of these two techniques were (a) the time constraints and (b) the fear of increasing learner anxiety. Instead of 'putting them on the spot', they preferred to use peer correction more so as to boost learner autonomy. However, this was not the only reason since some teachers also

expressed that peer correction saved them from providing explanations for errors. They stated that they called upon peer correction as they did not have enough confidence and content knowledge to correct every pronunciation error. The study echoes the findings in this line of research and emphasizes the need for training and support on how to teach important facets of pronunciation and provide CF on prosodic elements.

This section has attempted to provide a brief summary of the literature relating to the terms, concepts, and the framework that are essential for studying teachers' conceptions of CF on pronunciation. Taken together, these studies support the notion that teacher cognition of pronunciation teaching is an area of inquiry that needs to be studied in a greater extent and the reported findings provide solid evidence for the usefulness of the current research.

Chapter 3

Methodology

This chapter intends to offer a comprehensive account of the methodology employed in the current study. First, the chapter introduces the rationale for the research design. Secondly, it gives information about the setting and the participants. Then, the data collection procedure is outlined, which is followed by the information about the data collection instruments. Finally, the details of the data analysis procedure are presented.

Research Design

Qualitative Research Paradigm

Qualitative research is a complex and evolving research methodology which is now employed in all areas of social science research, including applied linguistics (Heigham & Croker, 2009). Citing Duff (in press), Dörnyei (2007) notes that the visibility and acceptance of qualitative research in the field of applied linguistics has been on a substantial increase since 1990s. According to Dörnyei (2007), this is because there are so many factors affecting second language acquisition (e.g., social, cultural, situational) and qualitative research is the best alternative to provide insights into such factors. The current study particularly aims at uncovering teachers' cognitions of providing CF on learners' pronunciation. For this reason, a qualitative methodology was employed because it seems to be the best approach to adopt for researchers who desire to study a certain phenomenon in great detail. For qualitative researchers, reaching an average conclusion about a group of people is "an undesirable reduction process" because they think that real meaning can only be found by examining individual cases who form that group (Dörnyei, 2007, p. 27). Therefore, this study set out to portray participants' conceptions and actions by looking at the issue from their perspective, rather than trying to generalize the findings to other groups.

The key features of qualitative research have been gathered in many sources written by various authors including Bogdan and Biklen (2007) and Dörnyei (2017). In their book, Creswell and Creswell (2018) also clearly outlines these features. In qualitative research, data collection takes place in the *natural setting*; that is, at the site where participants experience the issue being investigated. Qualitative researchers neither take participants to a lab nor send out instruments for them to complete. Instead, face-to-face interaction is preferred to gather *multiple sources of data*, such as interviews, observations, documents, and audio-visual information. *Researchers function as a key instrument* as they collect and interpret the data themselves despite depending on questionnaires or instruments previously designed by other researchers. When the data is collected, qualitative researchers go through an *inductive process* in which they construct categories and themes from the bottom up with an increasing amount of abstractness in the units of information. Throughout the whole process, researchers try not to let the meaning they bring to the study interfere the data analysis. They try to figure out the meaning that participants hold about the issue and make sense of it from the *participants' perspective*. Qualitative research also has an *emergent design*. That is, no aspect of a qualitative study can be pre-figured, and some phases of the process can change, evolve, or shift when researchers start to collect data. Therefore, the process is kept open so that it can respond to new details in a flexible way during the investigation process (Dörnyei, 2017).

Case Study Approach

There exists a plethora of approaches within qualitative research such as narrative inquiry, case study, ethnography, action research, phenomenology, and grounded theory (Heigham & Croker, 2009). The current study was designed as a case study to examine participants' experiences and cognitions concerning giving feedback on the pronunciation of learners closely and intensively. Case study refers to "an intensive, holistic description and analysis of a single instance, phenomenon, or social unit (Merriam, 1988, p. 21 as cited in Merriam, 1998, p. 27). Creswell (2007) defines case study as "the study of an issue explored through one or more cases within a bound system (i.e., a setting, a context)" (p. 73). Similarly, other definitions of case study in the literature also emphasizes the 'bound', singular nature of the case, the significance of the context, accessibility of multiple sources of information or viewpoints on observations, and the detailed analysis of the data (Duff, 2008, p. 22). Basically, what is expected from a case study is that it captures the complexity of a single case (Stake, 1995). Besides, it is possible to find different views on what a case is. According to Johansson (2007), the 'case' should display three basic qualities: it should (1) be a complex functioning unit, (2) be investigated in its natural context with a multitude of methods, and (3) be contemporary. Dörnyei (2007) also points out that although the cases are people for the most part, it is also possible for researchers to investigate in depth a program, an institution, or a community. Citing Nisbet and Watt (1984), Cohen, Manion and Morrison (2000) state that case studies can capture unique features that might possibly be lost in larger scale data (e.g., surveys). These features cannot be ignored as they may be central to the understanding of the issue. What is more, Cohen, Manion and Morrison (2000) also indicate that case studies are also "strong on reality" and provide valuable insights which may help interpret other cases (p. 256). That is, case studies pave the way for making better sense of similar situations and cases even though its findings cannot be generalized to those cases.

According to Yin (2018), there are three types of case study *explanatory* (answering 'How?' or 'Why?' questions to uncover the cause-and-effect relationship in the data set), *exploratory* (to formulate new research questions and hypotheses), and *descriptive* (answering 'What?' questions to provide a thorough depiction of case within its context). Merriam (1998) also proposes three distinctive categories for case studies, which are *descriptive*, *interpretive*, and *evaluative*. In education, a descriptive case study tries to provide a detailed description about the phenomenon under investigation. In an interpretive case study, researchers collect as much data as possible about the issue to analyse, interpret and theorize about the phenomenon. Evaluative case studies, on the other hand, include description, explanation, and most importantly judgement. Case study as a qualitative research methodology served well to the purpose of the present study as it intended to obtain further in-dept exploratory, descriptive, and interpretive information as to participants' thoughts and beliefs as well as the reflection of these on their classroom practices.

Setting and Participants

The research was conducted at an English-medium Turkish private university in which graduate and undergraduate students receive foreign language education in various programmes including English Preparatory Programme, Second Foreign Languages Programme, Associate English Programme, and Undergraduate English Programme. The study was particularly carried out at English Preparatory Programme in which learners are expected to equip themselves with the necessary language skills and knowledge to be prepared for the English-medium academic studies at their departments. By the end of the year, the primary goal of the programme is to increase the proficiency level of learners to B2 according to Common European Framework of Reference for Languages (CEFR). To achieve this goal, a modular system is employed at the programme. It consists of four modules, each of which lasts for eight weeks. At the beginning of the academic year, students are grouped into different levels according to the scores they get from the Placement Exam. The first module usually starts with three groups: elementary (A Level), pre-intermediate (B Level) and intermediate (C Level). Throughout each module, students complete four different in-module assessments, which aim to evaluate their vocabulary, grammar, reading, listening, writing, and speaking skills. They also get a classroom participation grade from their teachers. These grades are used to determine whether they will be able to take the end-of-module test. If they get 59.50 or above out of 100 at their respective level, they become eligible to take the end-of-module test. They also need to get the same score from the end-of-module test to progress to the next level. If students cannot

pass the module, they repeat the same module with a different book. Students who want to take the proficiency exam must complete C Level successfully. The ones at the upperintermediate level (D Level) are not required to take the end-of-module test. Provided that the scores they get from in-module assessments add up to 64.50, they become entitled to sit the proficiency exam. Those who obtain at least 64.50 in the proficiency exam qualify to pass to their faculties.

Each classroom is shared by two instructors. One teacher is responsible for the integrated skills (IS) course, whereas the other teaches the reading/writing (RW) course. There is no listening/speaking course and listening and speaking skills are covered in both courses together with other aspects of the language. However, supplementary speaking materials are covered in RW courses, so improving students' speaking skills as well as pronunciation primarily falls within the scope of RW courses. Both teachers use the same coursbook, named *Roadmap*, but they cover different parts of it following their own syllabus in each module. Also, they are to stay in touch throughout the module to inform each other about other requirements such as the announcements to be made.

Smart technologies are widely used at the university to increase the quality of instruction and student learning. *Blackboard Learn*, an internet-based Learning Management System (LMS), is used by the lecturers at the university for a variety of purposes such as sharing course materials, collecting assignments, and grading students' written work. *Panopto*, a video platform, is also utilized by instructors to record their lessons and share the video recordings with their students on Blackboard. Students who cannot attend classes benefit from the videos to keep up with the lessons. Panopto can also be used by teachers to reflect on their classroom practices. They can watch the videos to evaluate the effectiveness of their methods and techniques.

For the present study, two experienced EFL teachers at the preparatory school of the university were contacted and asked whether they would like to take part in the study. The number of the participants was kept small on purpose as the data analysis in qualitative research is likely to take more time when compared to quantitative research (Braun & Clarke, 2006). These participants were selected through purposive sampling (i.e., criterion sampling in particular) as well as convenience sampling. Dörnyei (2007) defines criterion sampling as a strategy through which participants are selected based on some predetermined criteria. There were two basic criteria for participant selection, and they were both closely related to the aim of the study: exploring teachers' cognitions of CF on pronunciation. Considering that it is more likely to see instructors correcting pronunciation errors in speaking-oriented lessons, the participants were chosen from RW teachers because they were the ones who were mainly responsible for fulfilling the objectives linked

to the speaking skill and its subskills. Also, instructors with at least fifteen years of teaching experience were invited to the study to investigate the influence of some factors more comprehensively such as classroom experience and additional professional training. However, not only the participants' long years of experience but also their additional qualifications such as the certificates they obtained (e.g., DELTA), the additional roles they took on in the profession and their attitude towards academic work and research were also taken into consideration. Along with purposive sampling, the study also employed convenience sampling, which can be defined as collecting data from participants who are available and willing to take part in a study (Dörnyei, 2007). In qualitative studies, participants are expected to allocate substantial amount of time to the data collection process. Therefore, it is vital to have willing participants to ensure the richness in the dataset. Due to anonymity in data collection, pseudonyms were used instead of participants' real names and each participant was requested to sign a consent form before the study began (see Appendix C). The table below displays the demographic information related to the participants:

Table 2

Pseudonym	Age	Sex	BA	MA	PhD	Experience
EXPT1	49	F	ELL	ELT	ELT	27
EXPT2	41	F	ACL	TI	TS	19

Participants' Profiles

ELL: English Language and Literature; **ELT:** English Language Teaching; **ACL:** American Culture and Literature; **TI:** Translation and Interpretation; **TS:** Translation Studies.

EXPT1

She always studied at state schools. Back in her time, her teachers used to favor her due to her special interest and talent in learning languages, which fired her enthusiasm even more. She liked her English teachers a lot when she started learning English in secondary school. During her high school years, there were no training centers preparing students for the university entrance exam, so she enrolled in a language school called *English Fast*. In her senior year of high school, she went there to learn English for 8 months. She got a good score from the exam and got into the department of English Language and Literature (ELL). When she decided to study at this department, her main aim was to become a writer and produce something in the future. However, she learned that she could get a pedagogical formation certificate in the 3rd year of college and use it if she wanted to become a teacher, so she decided to get the certificate, just in case. In the 3rd year of college, her teacher asked them to teach a sample lesson on a given topic in their methodology course. After her sample lesson, her teacher talked to her in private and said that she really wished her to become a teacher. She never forgot that day, and when she was in her senior year of college, she had almost no doubts about being a teacher.

When she graduated from college, she started working at a language course. In the following years, she worked in different schools and universities in Turkey. She has still been working at the preparatory school of a university. She completed her MA in ELT and she is currently pursuing her PhD in the same program. She holds the DELTA qualification. Having completed several training courses such as the *Train the Trainer* course offered by *Cambridge English*, she also works a member of the teacher development unit and a freelance teacher trainer. In addition to these, she also been a speaking examiner in *Cambridge Young Learner* examinations such as *KET* and *PET*. She has published conference proceedings.

EXPT2

She first started learning English by studying at preparatory school in secondary school when she was 11. It was a private school and she used to study English for long hours. She liked learning English a lot and when she was in her senior year of secondary school, she decided that she wanted a language-related profession because she had always been curious about how languages worked. After the university entrance exam, she was torn between two departments: Translation and Interpreting (TI) and American Culture and Literature (ACL). Eventually, she chose ACL.

Although she got a pedagogical formation certificate during her university education, she also considered staying at university and become an academician. However, she applied to a university to work as an English language teacher. When she got hired, she liked the idea of having a job immediately after graduation, so she wanted to start working as soon as possible and earn her own money. She explained that she made this decision mostly for financial, practical reasons and added that if she had been an idealist, she would have chosen the other path.

She has been working at the same university for 19 years. During those years, she completed her MA in Translation and Interpretation (TI) and currently, she is studying for her PhD in a similar department, namely Translation Studies (TS). She attaches particular

importance to professional development. She participates in most in-house teacher training activities, and she has a published article as well as conference proceedings.

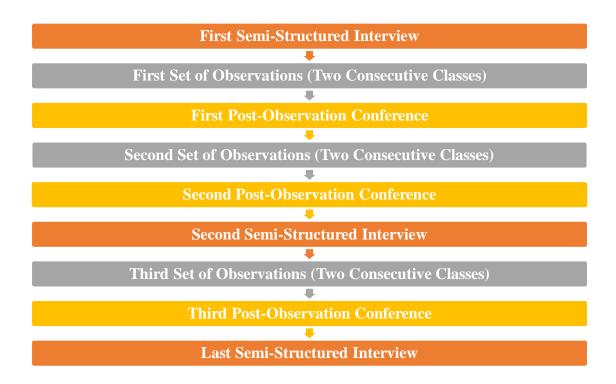
Data Collection

Investigating teachers' cognitions is a demanding task since researchers are required to use the most appropriate data collection tools so that they can portray even the most abstract beliefs and conceptions of teachers explicitly. Therefore, participants' in-dept cognitions and instructional decisions were investigated using various instruments throughout a module. Data triangulation was used to ensure the validity of the data. Cohen, Manion and Morrison (2000) simply defines triangulation as "the use of two or more methods of data collection in the study of some aspect of human behaviour" (p. 141). Participants who agreed to take part in the study went through three types of data collection procedure: semi-structured interviews, classroom observations and post-observation conferences.

Before the data collection started, the institution was contacted via e-mail to get permission for the study as well as to give information about data collection procedure, and the anonymity of both the instructors and the university. Upon getting the permission from the director of the school of foreign languages and the rectorate of the university, the data started to be collected in the third module of the 2021-2022 academic year. The semistructured interviews took place at beginning, in the middle and at the end of the module. The aim of these interviews was to discover participants' thoughts and beliefs about providing CF on pronunciation. After the first interviews, classroom observations were scheduled considering the availability of the participants and the researcher. Also, the participants were asked to invite the researcher to the classes with high level of spoken interaction. As the classroom observations were mainly concerned with how pronunciation errors were corrected by teachers, the classes with communicative foci were thought to be more appropriate in term of yielding more data. The researcher observed two consecutive classes of each participant on the same day and observed six classes of each participant in total over eight weeks. Immediately after each set of interviews, the post-observation conferences took place, in which the participants had the chance to reflect on their practices linked to correcting pronunciation errors, retrieve their thoughts relevant to those correction moments and justify their practices. The data collection procedure for each participant is illustrated in Figure 2:

Figure 2

Data Collection Procedure (adapted from Baker, 2011, p. 59)



Instruments

Semi-Structured Interviews

Despite the variety in data collection tools available to researchers, the interview is the most frequently used technique in qualitative research (Dörnyei, 2017). It is employed "to gather descriptive data in the subjects' own words so that the researcher can develop insights on how subjects interpret some piece of the world" (Bogdan & Biklen, 2007, p. 103). According to Patton (2015), interviews enable researchers to "enter into other person's perspective" and "gather their stories" as it is not possible to "observe how people have organized the world and the meanings they attach to what goes on in the world" (p. 628). The present study employed semi-structured interviews to gain insights into participants' cognitions regarding providing CF on learner pronunciation, encourage them to share their views on how to approach the issue and reflect on the meaning of their error correction experiences. Three semi-structured interviews per teacher were held throughout the module. All the interviews were conducted in participants' native language (i.e., Turkish) in

order not to cause any language blockage and to help decrease the level of anxiety so that they could feel more comfortable while answering the questions.

The questions in all three interviews (see Appendix A) were adapted from and organized in reference to the earlier studies in teacher cognition, CF, and pronunciation research literature, including those of Hendrickson (1978), Lyster and Ranta (1997) and Baker (2011). The first interview included questions that aimed to get information about participants' background, language learning experiences, the teacher education they received, their classroom practices regarding pronunciation, and some other factors affecting their cognitions. The second interview included questions that enabled participants to reflect on their knowledge of their students and practices for correcting pronunciation errors. In the final interview, the researcher asked follow-up questions to fill and clarify the account. Considering the advantages and disadvantages of interview recording methods (notetaking, audio-recording, and video recording), the interviews were audio-recorded at the expense of losing nonverbal cues since the complete, verbatim transcription of them was much more useful for the present study. To ensure credibility and reliability, the interview questions were reviewed by an expert in the field as well as the supervisor to confirm their clarity. When the transcription of each interview was over, they were shared with the participants so that they could check if there was a misstatement.

Classroom Observations

Observation is a useful data collection tool as it provides researchers with the chance to collect 'live data from naturally occurring social situations' (Cohen et al., 2000, p. 396). Citing Moyles (2002), Cohen et al. (2000) points out that observational data are context-sensitive, and they are powerful in demonstrating ecological validity. The current study requires the researcher to use classroom observations as it is not possible to carry out teacher cognition research without examining teachers' actual actions, behaviours, and practices in their natural settings. Considering that observational data enable obtaining a more objective account of events and behaviours than second-hand self-report data (Dörnyei, 2007), classroom observations in this study were utilized with an aim to move beyond perception-based data and explore things that participants might not freely and comfortably mention in interview situations (Cohen et al., 2000). The observations were used to reveal the match or mismatch between what participants said they would do and what they actually did.

Each participant in the study was observed six times throughout the module. The participants were asked not to do any special preparation for the observations, and they were told that they should teach the way they normally do. In this stage of data collection,

the participants had the chance to provide a practical demonstration of their reported beliefs and attitudes. During the observations, the researcher acted as a non-participant observer without involving in the setting through interacting with students or the teacher. The researcher only sat at the back of the class without disturbing the flow of the lesson and watched the behaviours and practices of the teacher regarding providing CF on learners' pronunciation. The researcher audio-recorded the classes in order not to miss any relevant detail. The observations were unstructured. That is, the researcher did not use any observation scheme to record the classroom events in pre-determined categories. Instead, the researcher took descriptive notes about the events that were somewhat interesting or noteworthy as well as her personal thoughts. She also took notes of the participants' important remarks uttered in lesson breaks. These notes were used to support and complement the data collected through audio-recordings.

Post-Observation Conferences

The aim of choosing the post-observation conference as one of the data collection instruments was to involve the participants in reflection with regard to a pre-determined aspect of their teaching, which was providing CF on pronunciation errors. Reflection can be defined as an "ongoing conversation about teaching that gives teachers the opportunity to uncover the implicit beliefs and experiences that guide their pedagogy" (Chamberlin, 2000, p. 353) and it plays a crucial role in not only novice but also expert teachers' learning process. Tsui (2009) describes the expert teacher thinking of L2 teachers as 'expertise as a process' (p. 194), meaning that "an expert teacher, when confronted by a problem in the classroom, is able to reflect consciously on the various dimensions of a teaching context" (Golombek, 2011, p.121). Therefore, by means of using post-observation conferences, the present study relied on the participants' expertise and ability to thoroughly reflect on both the tangible aspects of their praxis as well as the underlying personal and contextual factors contributing to it.

The post-observation conferences were held immediately after each set of observations so that the participants could better remember the events. Each participant took part in three post-observation conferences in total. In each of them, the researcher asked participants different questions specific to their instructional practices regarding providing CF on students' pronunciation and audio-recorded their responses. The researcher listened to these recordings during the data collection process to determine the consistencies and inconsistencies between their cognitions and actual practices. When there was a discrepancy, she tried to confirm it in the following interviews or post-observation conferences before including it in the data analysis.

Data Analysis

Qualitative data analysis was used for the current study, following the steps suggested in Creswell & Creswell (2018). First, the data was organized and prepared for analysis. The interviews were transcribed verbatim, the notes taken in classroom observations were typed, and audio-recordings were sorted. The researcher started transcribing the interviews and translating them into English during the data collection process, which enabled pre-coding by underlining, circling, or highlighting the striking words, phrases, and sentences. As soon as the data collection ended, the researcher first read the interview transcriptions and field notes to get a general sense of the main points expressed by both participants. Secondly, the researcher started coding them manually. It is recommended to code manually on hard-copy printouts first for first-time or small-scale studies as it gives "more control over and ownership of the work" (Saldana, 2013, p 26). In the first cycle coding, initial coding, also known as open coding, was utilized through bracketing chunks and writing words or phrases representing these chunks in the margins. Initial coding basically means to divide qualitative data into separate parts, analyse them closely as well as comparing them for similarities and differences, which "allows for fine discrimination and differentiation among categories" (Strauss & Corbin, 1998, p.102). Initial coding enables researchers "to remain open to all possible theoretical directions indicated by your readings of the data" (Charmaz, 2006, p. 46 as cited in Saldana, 2013, p. 100). In the second cycle coding, the researcher performed focused coding on the qualitative data. The goal of focused coding is to determine the most important and frequent codes to create "the most salient categories" in the data set and it "requires decisions about which initial codes make the most analytic sense" (Charmaz, 2006, pp. 46, 57 as cited in Saldana, 2013, p. 213). All of the data were re-read many times to detect any unexpected and recurring codes. At the end of this procedure, a list of codes was created in a systematic order, and the original field notes and transcriptions were recoded according to these new codes to confirm their validity. Next, these codes were applied to the data set to explore emerging categories. Codifying is a significant process on the way of categorizing since it enables the data to be "segregated, grouped, regrouped and relinked in order to consolidate meaning and explanation" (Grbich, 2007, p. 21 as cited in Saldana, 2013, p.9). The interrelation between the categories was analysed through reading the textual data iteratively and the categories were also merged, segregated, or refined depending on the situation. This process was repeated until the categories were saturated; that is, to a point "when gathering fresh data no longer spark[ed] new insights or reveals new properties" (Creswell & Creswell, 2018, p. 290). Finally, the data was put into overarching themes and the meanings of these themes were interpreted. The observational data including field notes and collected

instructional materials were re-examined at this stage to make a final interpretation about the degree of consistency with regard to participants' reported beliefs and observed practices. Moreover, the extracts coming from observed lessons were examined carefully to determine significant instructional moments that could serve as evidence for the emerging themes and some of them were used to support the findings. In short, the researcher performed a "cyclical data analysis", which included "a hypothesis-formation stage utilizing the first round of data collection, followed by a second and more focused round of data collection where hypotheses [were] tested and further refined" (Mackay & Gass, 2016, p. 230).

This study did not make use of pre-determined categories for coding. Using an inductive approach, an in-depth analysis was carried out to discover the emerging themes in the data set. That is, the data analysis in the current study was guided by grounded theory which refers to "developing theory based on, or grounded in, data that have been systematically gathered and analysed" (Mackay & Gass, 2016, p. 231). Throughout the process, it is also crucial to have a copy of the research questions at hand to focus your coding decisions and avoid anxiety (Auerbach & Silverstein, 2013, p.44 as cited in Saldana, 2013, p.21). Therefore, the research questions served as an important reference point throughout the whole process as the coding choices had to align with the goal of the study and the main research concern. When the emerging themes were identified at the end of the coding procedure, they were grouped based on the research questions before they were presented in the findings section. The key quotes of the participants were used in this section to support the interpretations of the researcher. When the data analysis was completed, both participants were asked to take part in a validation interview to check whether the translated quotes and the tentative results resonated with their experience. This opportunity was also used to make them clarify some self-contradictory statements which had caused confusion on the part of the researcher. The validity of the research was reinforced through this member checking process. Table 3 summarizes the data collection and analysis processes:

Table 3

RQ	Sources of Data	Rationale	Form of Analysis
Q1	Semi-structured interviews & Post-observation conferences	To portray experienced teachers' cognitions as to providing corrective feedback on	Pre-coding Open coding
Q2	Semi-structured interviews & Post-observation conferences	pronunciation To determine the factors influencing experienced teachers' about correcting learners' pronunciation errors	Focused coding Categorization
Q3	Semi-structured interviews & Post-observation conferences & Classroom observations	To reveal the extent to which experienced teachers' reported beliefs match their in- class practices	Theming the data

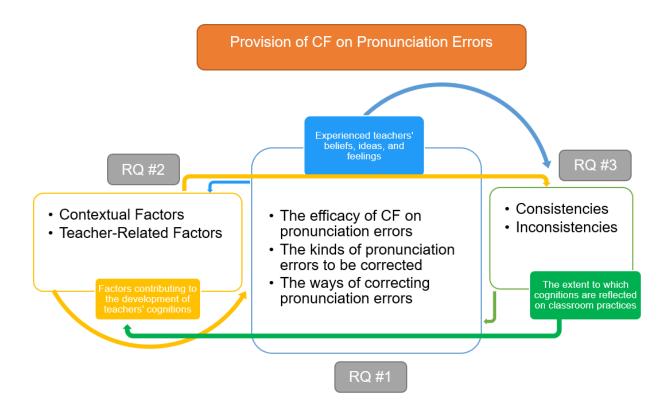
Summary of Data Collection and Analysis

Chapter 4

Findings

In this chapter, the findings derived from the data analysis are presented. The chapter is divided into three sections in which the results obtained from the qualitative data collected over eight weeks are reported following the order of the research questions (see Figure 3). The first section is designed to answer the first research question which aims to portray teachers' cognitions with regard to providing CF on learners' pronunciation. The goal of the second section is to address the second research question which focuses on the sources that help develop teachers' cognitions as to making corrections on learners' pronunciation. The final section aims to answer the third research question which is about the extent to which teachers' cognitions are consistent with their actual classroom practices. In each section, the findings are presented by elaborating on the themes emerged during data analysis and they are supported with the verbatim quotations of the participants depending on their relevance to those themes.

Figure 3



The Interrelationship Between the Three Research Questions

RQ1: What are experienced Turkish EFL teachers' cognitions of providing CF on learners' pronunciation errors?

The first research question aimed to explore experienced teachers' deeply held thoughts and beliefs as well as their genuine feelings as to correcting learners' pronunciation errors. The aim of this question was not to learn their views on the 'right errors' to correct or 'ideal ways' of correcting pronunciation errors. Instead, the participants were asked to express their personal opinions and emotions about the topic through reflecting upon their long years of experience. To address this first research question aiming to investigate the perceptions of two experienced teachers in a university context, the data obtained from the semi-structured interviews and the post-observation conferences were analysed. Then the findings were presented under the following emerging themes: (1) cognitions regarding the efficacy of CF on pronunciation, (2) cognitions about the kinds of pronunciation errors to be corrected and (3) cognitions related to the ways of making corrections on pronunciation. Under each theme, first the findings belonging to the first participant (EXPT1) were presented followed by the findings from the second participant (EXPT2).

Cognitions Regarding the Efficacy of CF on Pronunciation

The first emerging theme was related to the efficacy of CF on pronunciation. Both teachers believed that CF did not result in permanent improvements in students' pronunciation unless students took corrections seriously and decided to do something about their own pronunciation problems. EXPT1, for example, held strong views on this point and claimed that error correction actually never worked:

I've seen that what essentially matters is modeling. No matter how many corrections we provide students with, they acquire the correct pronunciation of words in one way or another as long as our modeling is successful. Our corrections don't enable students to make less mistakes; therefore, it's actually a waste of time. (EXPT1, SSI-1)

EXPT1 put forward that input had a crucial function in correcting pronunciation errors, so the best thing teachers could do was to expose learners to accurate and sufficient language modelling as much as possible. She pointed out that she corrected errors just to raise students' awareness of their errors since she believed that the main function of CF was to make them notice their errors:

During my PhD, I've learned that error correction has the impact of merely raising students' awareness through noticing. Error correction only works on the condition that the student making the mistake shows a genuine willingness to correct his own mistake after the correction. Our professors told us that no matter how many times we correct students, our corrections actually don't mean anything if they don't want the correction, if the correction doesn't attract their attention, or if they're not concerned about speaking with correct pronunciation at all. When I learned this, it made me happy as I realized that I was on the right track. (EXPT1, SSI-1)

EXPT1 complained that some words that she repeatedly corrected were still mispronounced, which put the students in a 'loop'. She thought that this happened because they could not notice the difference between correct and incorrect pronunciations, or they just did not pay attention to or cared about pronunciation errors: *"They still mispronounce the word 'because' /b1'koz/ as /b1'kauz/ although I've corrected this mistake so many times up to now. It's all about noticing and selective attention. Obviously, they don't hear how they pronounce the words themselves"* (SSI-2).

As can be seen, EXPT1 argued that everything depended on students' personal efforts. She underscored that even though she made the corrections in front of the whole class, not all the students improved at the same rate; therefore, she stressed that students themselves played a key role in improving their own pronunciation: *"At the end of the day, how much they benefit from my pronunciation is a matter of concern to them, not to me.* Yes, *I'm definitely a factor, but students themselves are the major determinants"* (SSI-1).

In the light of these, EXPT1 stated that she had considerably cut down on the time spent on error correction and she intentionally avoided making so many corrections in her lessons. She mentioned that what she cared about was intelligibility and the continuity of communication. She asserted that correcting pronunciation errors was significant only when errors influenced intelligibility badly and damaged meaningful communication: *"Correction is important just in terms of intelligibility. If errors hinder communication or break the flow of it, correction becomes a must. I might need to step in at those moments"* (SSI-1). EXPT1 maintained that she tried to keep students' affective filter so low that they could be comfortable about 'taking a chance' on pronouncing new words in the classroom. Thus, she admitted that she stayed away from making corrections as much as possible unless students experienced a problem in conveying their message or an incorrect pronunciation caused a complete change in meaning.

Overall, EXPT1 concluded that error correction did not result in huge improvements in students' pronunciation, so she prioritized intelligibility over accuracy through promoting an environment in which students spoke English without feeling threatened or under pressure. The following excerpt clearly summarizes how her views on error correction correlate with her teaching philosophy:

We should think about the ultimate goal. What's the goal? I think the keystone of English language teaching is to create a comfortable environment which will encourage learners to produce the language as much as possible. The most important thing is to create a sense of accomplishment in learners and make them say, "I can speak English despite my pronunciation mistakes" (EXPT1, POC-1).

EXPT2, on the other hand, stated that speaking with correct pronunciation was somewhat important, and she tried to correct pronunciation errors if she heard them. She said that incorrect pronunciation might have a negative impact on students' level of production as well as their listening comprehension: *"Speaking with incorrect pronunciation causes students to be passive and it may also cause problems when it comes to producing the language although communication might be achieved to a certain extent"* (SSI-1).

Nevertheless, she added that this did not mean that it was impossible to achieve effective communication when students mispronounced some words. She believed that teachers were responsible for correcting pronunciation mistakes as it was their job to teach proper English: *"I care about accuracy as well because as a teacher, I want them to internalize the correct pronunciation of a word in the first place"* (SSI-1).

Although EXPT2 was not against making corrections, she also acknowledged that it was unrealistic to expect all corrections to result in permanent improvements in learners' pronunciation depending on her classroom experience. Like EXPT1, she also held the belief that it was impossible to deal with all the pronunciation problems in class and emphasized that students first needed to put an effort to correct their pronunciation problems themselves:

No matter how many times we warn them about common mispronounced words such as 'wear' /weər/ and correct them in isolation, they keep making the same mistakes again and again because they don't hear these words used in meaningful contexts. They neither hear these words nor use them themselves. It's not possible for teachers to solve all pronunciation problems with a few corrections in a 40-minute class period. (EXPT2, SSI-2)

Upon being asked about the persistent pronunciation errors made in her first set of observed classes in POC-1, EXPT2 expressed her frustration and indicated that she worked on mispronounced words as much as the time allowed her by correcting and drilling them and there was nothing else she could do:

I did my best to correct most of the errors. After that point, everything is up to them. They can internalize them or not. I tell them to study the words considering all the aspects of them, including their spelling and pronunciation. I also remind them to revise what we do in class and use online dictionaries to listen and repeat the words on their own. In the end, everything depends on their own efforts, not mine (EXPT2, POC-1).

To illustrate, in POC-2, EXPT2 bitterly complained about students who mispronounced the word 'consequence' after correcting it so many times both in the observed and the unobserved classes:

By the way, we've come across the word 'consequence' today again and they couldn't pronounce it, can you believe it? You saw it with your own eyes before. I corrected it, drilled it and it was also among the linkers I told them to use while writing the cause-and-effect essays. Sometimes I seriously feel shocked." (EXPT2, POC-2)

EXPT2 noted that she corrected the pronunciation mistakes in the best possible way and pointed out that she had no control over what happened outside the class. She felt desperate about how to deal with persistent pronunciation problems in the classroom: *"I think there's no other way to correct pronunciation mistakes. I really try everything. I can only hope that my corrections serve the expected function as it's up to students to pay attention to them and notice the difference"* (POC-1). She stated that students had to notice their pronunciation errors and care about correcting them themselves in the first place:

There are also fossilized errors that I can never correct such as the pronunciation of the word 'wear' /weər/. They keep pronouncing it as /wɪər/ no matter what they hear from me. I already teach them so many things, so it's impossible for them to differentiate correct pronunciations from incorrect ones. (EXPT2, POC-2)

In the final interview, EXPT2 maintained that she did her part, but she felt uncertain about meeting students' pronunciation needs through correction:

I need to see the results of the end-of-module exam to be able to comment on this, but I doubt it. Some students have definitely improved their pronunciation, but I'm afraid most of them haven't been able to achieve success in the area of pronunciation. The ones who allocated enough time for pronunciation work outside the classroom have made considerable progress, but I cannot be sure about the rest of the class. (EXPT2, SSI-3) In sum, these results suggested that both participants doubted the efficacy of CF provided on pronunciation since they could not see any positive change in students' pronunciation. This, in return, caused them to feel discouraged in terms of correcting pronunciation errors. EXPT1 seemed to be completely against making corrections as long as there was no distinctive pronunciation error whereas EXPT2 tried to correct most pronunciation errors thinking that it was in her job description although she had little faith in the efficacy of those corrections. There was a consensus about the role of students' own effort to cope with pronunciation problems. Both participants claimed that students had to develop their noticing ability to be able to recognize their pronunciation problems, and they needed to be willing to work autonomously outside the classroom if they wanted to improve their pronunciation.

Cognitions About the Kinds of Pronunciation Errors to Be Corrected

The next theme emerged from the data set concerned the type of errors that participants tended to correct. The participants' opinions differed as to which features of pronunciation to prioritize while providing CF. EXPT1 expressed that she was well-aware that there was something called *World Englishes* and Standard English was not the ideal variety of English anymore. However, she pointed out that despite this, she wanted her students to be able to recognize Standard English when they heard it. In the light of this view, EXPT1 claimed that working on suprasegmental features was significant for her since the accurate use of those features were much more needed for intelligibility and the natural flow of a conversation:

I guess my focus is usually on suprasegmental features because segmental features require me to correct them in isolation, which I don't like. I think we're supposed to use and teach natural language use. Some might consider classroom as an artificial environment, but actually it's natural in its own way. If my students had the chance to communicate with native speakers, I don't think natives would correct their mispronunciation of words one by one. However, intonation, connected speech, etc. seem to be more likely to be corrected by them. Correcting suprasegmental features fits more naturally in the language teaching process. (EXPT1, SSI-1)

Elaborating more on it, EXPT1 clarified that she found catching phoneme-level pronunciation errors more demanding as lots of students spoke at the same time in a pair or group work activity. However, she thought this was not the case for suprasegmental errors. She believed suprasegmental errors could be identified much easily during

communicative activities because they stood out more while monitoring and walking around in the classroom.

EXPT1 stated that she corrected individual phonemes or syllables on the condition that they belonged to the common, essential words that her students were supposed to learn in the first place:

If they're some basic and common words which will be essential for them throughout the module, I expect them to pronounce those words properly. However, if it's such a rare word that they will probably not come across till they become D level students, I model the pronunciation of the word myself once and do not waste so much time on teaching the pronunciation of it thinking that perhaps they won't even hear the word again. Frankly speaking, I'm not concerned about teaching the proper pronunciation of every single word. (EXPT1, SSI-1)

EXPT1 described that her another criterion for correcting a phoneme-level pronunciation error was its frequency. She stated that if a word was mispronounced at the same time by the majority of the students in the classroom, she might consider correcting it:

For example, if 1 student out of 15 mispronounce the word 'hour' / auer/ as / hauer/, I wouldn't correct this mistake because that student will already hear the correct pronunciation of the word either from his friends or somewhere else. However, if 10 students out of 15 make the same mistake, I might correct that pronunciation mistake. (EXPT1, SSI-1)

In SSI-1, EXPT1 explained that it was unnecessary to correct every single pronunciation error as it was unrealistic to expect that students would internalize them all. She thought they needed only a certain degree of accuracy which would be sufficient for them to achieve intelligibility and help them communicate their message clearly enough. She believed that this would also enable them to successfully recognize both correct and incorrect forms while listening others during interaction, decreasing the probability of comprehensibility problems.

Contrary to EXPT1, EXPT2 asserted that students were usually challenged by phoneme level errors, which made them pronounce most of the words incorrectly. For this reason, she thought phoneme-level or word-level errors mattered more. She claimed that suprasegmental features such as intonation did not cause serious communication problems and they varied tremendously depending on the accent, so there was nothing wrong with allowing them to use a foreign accent: I can't stand word level mistakes, especially when it's a distinctive mistake. And do you know why I don't pay much attention to sentence-level pronunciation features? Because English is an international language and there are so many accents in the world. For instance, we don't care about or try to correct Indians' or Koreans' pronunciation as long as we understand them. (EXPT2, SSI-1)

EXPT2 insistently expressed that word level errors 'irritated' her more, so she generally paid attention to and corrected such errors. She claimed to occasionally correct pronunciation errors as to some aspects of connected speech such as *reciprocal assimilation* that happened while asking questions with modals or *elision* that occurred when pronouncing grammatical contractions, but she underlined the fact that she did not expect to hear fully correct uses related to these features in students' speech. Commenting on this in the first SSI, EXPT2 said:

I sometimes correct sentence-level mistakes which sound funny such as the pronunciation of modals like "What <u>would you</u> like to do?", or contractions in questions like "<u>What'll</u> you do?". However, I don't correct those mistakes every time I hear them, or I don't force them to use contracted forms all the time. I just teach how to pronounce them correctly, but if they keep mispronouncing them or avoid using contracted forms, I don't spend much time on them since word-level mistakes irritate me more. (EXPT2, SSI-1)

She went on to explicate that she felt kind of sorry for not being able to pay attention to certain suprasegmental features of pronunciation although she was aware that she should have:

Actually, I should work on connected speech more so that their speech sounds more natural, but I can't. If you asked me to name an aspect of pronunciation that I wish I didn't have to neglect, I would say that it is connected speech. I don't allocate much time to it, to be honest." (EXPT2, SSI-1)

She stated that she could only focus on word stress from suprasegmental features. She saw it as an indispensable part of vocabulary teaching; therefore, she thought it should definitely be touched upon while correcting word level pronunciation errors as well. In the first SSI, she said:

I don't focus on sentence stress or anything in my classes. I usually correct pronunciation errors at word-level, so word stress is the only suprasegmental feature I care about. My priority is to make them pronounce words correctly and I do not spend much time on sentence stress or other aspects of pronunciation although I know that I should. Spending that much time on those aspects seems a bit of a luxury to me. (EXPT2, SSI-1)

EXPT2 also believed that wrong intonation patterns could be detected only when students got to interact with each other in a meaningful context: *"It's not possible to catch and fix wrong uses of intonation without a meaningful context since it's not something you can treat in isolation like word-level errors"* (EXPT2, POC-3). However, she thought that even the meaningful context might not be enough to fix intonation problems since teachers might still be unable to catch them during pair or group work activities: *"It's only possible to observe such moments if I'm monitoring them at that time. When I move on to and listen to another group, I might miss such moments"* (EXPT2, POC-3). In short, she did not believe in the feasibility of coping with pronunciation problems connected to suprasegmental features in the classroom.

All in all, the participants' views dramatically varied as to which pronunciation errors to correct. On the one hand, EXPT1 said she disliked treating errors in isolation and preferred to correct suprasegmental errors detected during communicative activities since she believed they impaired natural speech more. Also, she said she was against correcting every single mispronounced word, so she chose to make corrections at the word level only when they were common, essential words or they were frequently mispronounced by most of the students. On the other hand, EXPT2 said she liked to make corrections at the word level more since she thought wrong use of suprasegmental features did not hinder meaningful communication. She observed that students' pronunciation suffered from mispronounced words more, so she prioritized word-level errors over sentence-level ones. Despite the major differences in their approach, both participants stated they cared about intelligibility more than accuracy and tried to make their students transmit their message as naturally as possible.

Cognitions Related to the Ways of Making Corrections on Pronunciation

Comments on how to correct pronunciation errors were particularly prominent in the data set, so they eventually formed the broadest theme for the first research question. Both teachers expressed various views on different ways of correcting pronunciation errors and also mentioned their general approach towards how to provide CF on pronunciation. EXPT1, for example, indicated that she corrected pronunciation errors mostly implicitly considering students' affective needs and demands. However, she said that she might use explicit correction as well if she came across persistent errors or faced a sort of resistance

on the part of students. The comment below summarizes the correction techniques she claimed to be using:

I usually make the correction using implicit recast first, but if they keep making the same mistake, I might use explicit correction as a second step. I never provide metalinguistic feedback. Sometimes I use elicitation and also ask for clarification requests thinking that I might have misheard the student. I don't repeat the errors unless there's a grave mistake since I don't want the incorrect form to stick in their memory. (EXPT1, SSI-1)

In SSI-1, EXPT1 mentioned reading some studies from which she learned that adult learners usually expected their errors to be corrected explicitly: "As teachers, we value inductive learning and teaching a lot. However, I've recently learnt that adult learners actually wish to get one-to-one, explicit corrective feedback." Surprisingly enough, immediately after telling this, she added that recast was still the technique that was used most frequently by her despite this recently acquired piece of knowledge:

However, I continue to use recast more than other techniques because it includes modelling and it's also a correction technique which doesn't upset students. Explicit correction might be the ideal way of correction for some learners, but I still try to employ it without being too direct. If a student says, "I waited for an hour /'haʊər/", I softly repeat the sentence and say, "So you mean you waited for an /'aʊər/" instead of saying, "Don't say /'haʊər/. Say /'aʊər/." (EXPT1, SSI-1)

EXPT1 also stated that she generally opted for whole class feedback rather than correcting students' pronunciation mistakes individually thinking that it might be unpleasant to be corrected in front of other students. She said that whole class feedback was always her first preference unless there was a serious error causing ambiguity or a communication breakdown:

If it's a mistake made by most students in class, I generally wait a little bit and give whole class feedback – of course, provided that it doesn't affect the flow of the activity negatively. When I feel the need to urgently correct a student's pronunciation, I approach to the student at that moment and correct his mistake individually rather than showing that mistake to everyone in the classroom. (EXPT1, SSI-1)

As can be understood from the answer above, she said that she generally collected common mistakes first and then corrected all of them on the board in order to avoid making students feel personally attacked in class. However, she avoided giving whole class feedback for mistakes that she heard from only one student. EXPT1 explained that this was an intentional choice because *"this might be very demoralizing for that student when he identifies his mistake on the board. Instead, I correct those mistakes in a way that can be heard by only those students in the pair"* (POC-1).

Despite her tendency towards providing whole class CF, EXPT1 indicated that she sometimes felt the need to correct students' pronunciation errors individually at times. On such occasions, she stated that she chose to involve students in self-correction first as she acknowledged the importance of making students think critically to explore and correct their own mistakes. EXPT1 prioritized self-correction over peer correction and stated that she was not in favor of promoting peer correction since it caused students to get offended or shy with each other: *"They either feel inferior by thinking their friend knows better than them or avoid speaking with the fear of mispronouncing words in front of their friend"* (POC-1).

Drilling is a disfavored tool by EXPT1. She thought that it was a mechanical, an oldfashioned, and a time-consuming practice, so she said that it should be used rarely. She believed that no drilling was needed as long as the correction was made, and the correct use was modelled just after the correction. She said that although she used drilling at times, she usually expected students to pick up on correct pronunciations while she was modelling them and encouraged them to use online dictionaries:

Quite simply, I don't feel the need to do drilling most of the time. It's not a tool that I frequently use. I see it as an artificial practice interrupting the natural flow of the lesson. I believe in the power of exposing students to correct language use. If drilling was such an effective tool, all of us would be using ALM now. Obviously, it didn't work, and they came up with new ideas and techniques in time. Instead, it's important to encourage them to use online dictionaries for pronunciation practice. (EXPT1, SSI-1)

As clearly indicated in her comment, EXPT1 believed that the use of online dictionaries was a much more useful tool than drilling for students. She said that instead of correcting the errors herself, she guided them in using online dictionaries because it helped students raise their awareness of their own errors and made the correction themselves. She added that they could also drill the words on their own after making the discovery, which seemed much more effective to her than drilling with everyone else in the class. She claimed that when students used online dictionaries in this way, they also got to see the spelling of the words and comprehended sound-to-letter correspondences, which increased their ability to retain and recall those words.

In SSI-1, EXPT1 was asked to elaborate more on directing students to use online dictionaries so as to correct their own pronunciation errors, and she explained the other reasons of her preference in her reply below:

Firstly, I want them to increase their autonomy. How long can we spoon-feed the students? Secondly, it's timesaving. While drilling a word mispronounced by only one student, I might be wasting the time of some other students who don't have a problem in pronouncing that word at all. However, when the student making the mistake listens to the pronunciation of that word from an online dictionary using his earphones, he can immediately solve his own problem without wasting time. Sometimes they pronounce very simple words in such an absurd way although they have all the opportunities and sources of information. Their job would be much easier if they got into the habit of developing such study skills. (EXPT1, SSI-1)

Another advantage of online dictionaries mentioned by EXPT1 was that it did not require students to figure out the symbols of the phonetic alphabet since all they needed was just a click to listen to the pronunciation of words: *"In the past, we desperately needed phonetic alphabet because we didn't have online dictionaries or the Internet. I had to puzzle out the alphabet to be able to pronounce words. I'm not sure whether students need it that much today"* (SSI-2). She believed that training students on how to read phonetic alphabet nor the descriptions as to the physiology of pronunciation were of value for students. She said that these were useful only for teachers since English was at the center of their lives. EXPT1 clearly indicated that such things were only 'trivial details' for students and they perceived them as an extra burden on their shoulders. That's why she reported that she never attempted to make articulatory descriptions regarding the production of sounds or write phonemic symbols representing those sounds on the board with the aim of correcting pronunciation errors.

As another disfavored way of providing CF on pronunciation, EXPT1 mentioned that comparing words consisting of similar sounds and homophones or making use of minimal pairs was not a good idea. In SSI-1, she reported that it was better to expose them only to the words they were supposed to learn and there was no point in confusing them. She added that offering alternatives in such a way seemed wrong to her since she believed that it was more likely for pronunciation corrections to result in uptake or repair when these corrections were made separately.

For instance, during the first set of classroom observations, EXPT1 employed a web-based tool called *Padlet*. She made students record their speech in the production stage of the lesson and told them to share their recordings using the QR code given to them

so that she could give feedback after the lesson. Upon being asked about the way she provided CF on their pronunciation outside the classroom, she explained how she avoided comparing words in her feedback to one of her students and replied as follows:

I paid attention to the most problematic word in each recording. For example, one of the students pronounced the word 'hard' /ha:rd/ as /h3:rd/ in his recording, so I asked him to check the pronunciation of it by writing a comment like this: "Thank you, great job! Please check the pronunciation of the word 'hard'." I didn't write that 'heard' /h3:rd/ is a totally different word. While giving feedback, I usually try to focus on only one or two words because when we make numerous corrections, comparisons, or negative comments, they get demotivated. (EXPT1, POC-1)

If we now turn to EXPT2, unlike EXPT1, it is seen that she stands for explicit correction when it comes to dealing with pronunciation problems. EXPT2 subscribed to the belief that students felt comfortable about receiving correction on their pronunciation and she got the idea that they actually expected her to make corrections: *"I don't think they get annoyed at being corrected explicitly in front of their friends – at least that is what I observe and think"* (SSI-1). She maintained that students came to study English at the preparatory school to learn the language properly, in its most correct form. Therefore, they perceived corrections as a natural part of the process. Apart from explicit correction, EXPT2 also mentioned some other techniques she claimed to be using in one of her comments:

I use recast the most as it is timesaving, but I don't hesitate to use explicit correction when I need to. I also make use of clarification requests very often as I like to make them reconsider what they've said and give them a chance to correct their own mistake by saying "Excuse me?" Making clarification requests might even be the most favored technique by me because it enables me to use peer and self-correction at the same time. When I say, "I'm sorry?" or "Excuse me?", there's always a student who steps forward and corrects the mistake and the student who makes that mistake in the first place self-corrects after his friend. I sometimes use elicitation as well, but I don't give metalinguistic feedback. I don't prefer to repeat the errors, either since I don't want the wrong form to stick in students' memory. (EXPT2, SSI-1)

In contrast to EXPT1, EXP2 expressed that she liked to provide individual correction on pronunciation more despite giving whole class feedback at times as well. She explicated that this was because she felt students required one-to-one attention to be able to better notice and fix their pronunciation problems. She added that students benefited from to-thepoint corrections and personalized treatment of their pronunciation errors more. In SSI-1, she described how she usually brought a student's pronunciation error into sharp focus: First I listen to what the student says very carefully to detect the pronunciation errors. When I hear a mispronounced word, I involve him or her in self-correction through asking a question including both the correct pronunciation of the word and its mispronounced version. For example, I ask a question like, "Is it library /'laɪbrəri/ or /'lɪbreri/? The student usually chooses the correct alternative and then I ask him to repeat it individually again and again so that it sticks in his memory. (EXPT2, SSI-1)

As can be understood from the last two excerpts above, EXPT2 likes to use both self-correction and peer correction. However, she said she found peer correction more effective than self-correction and the teacher's correction. She held the view that it both motivated students and enhanced retention as well as recall. According to EXPT2, the students making the correction felt good and thought that they impressed everyone with their pronunciation. She added that this, in return, served as a source of determination for the students receiving the correction because they started to put an effort to experience the same sense of achievement and paid more attention to using correct pronunciation:

That peer-correction moment will make them recall the pronunciation of that word more easily later on. They will remember who corrected it and how it was corrected. Actually it's more effective than the other techniques. I already correct their mistakes on a daily basis, so they're used to hearing my voice. For them, it's more effective to hear the correction from a friend. I think it has to be used more often. (EXPT2, SSI-1)

As a language teacher who likes to make explicit corrections on pronunciation errors, EXPT2 also likes to compare the words including similar sounds and makes use of homophones or minimal pairs to correct students' pronunciation errors. Unlike EXPT1, EXPT2 claimed that it was a commonly used tools by her since she argued that it helped students to differentiate this word from the others more easily and increased its possibility to be retained for a longer time:

I also use other words with the same pronunciation to correct a mispronounced word. For example, I compare 'where' /weər/ to 'wear' /weər/ or I compare 'won' /wʌn/ to 'one' /wʌn/. And then I drill the word individually or chorally till they pronounce it correctly" (EXPT2, SSI-1).

Contrary to EXPT1, EXPT2 reported that drilling was an important step in the process of correcting pronunciation errors. Just like what she did while correcting the errors in the first place, EXPT2 stated that she encouraged students to help their peers after the correction and let them initiate the drilling as well: *"Instead of making students repeat after"*

me all the time, sometimes I choose a student from the class who pronounces the word correctly and then I ask other students to repeat the same word after their friend" (SSI-1).

In a similar vein with EXPT1, EXPT2 liked to get help from online dictionaries for pronunciation corrections. She said that she not only encouraged students to use online dictionaries but also utilized them herself. She believed that pronunciation teaching was intertwined with vocabulary teaching, so she told that every module the first thing she did was to find a word from an online dictionary, project it on the board and train students on how to use online dictionaries to correct their own pronunciation errors:

I just tell them to listen and repeat the words again and again at home using an online dictionary. I tell them to be selective and note down the words they mispronounce and study for them on their own at home. Also, I sometimes list the commonly mispronounced words to direct their attention to them and I emphasize that they have a problem in pronouncing these words. I tell them to check both the spelling and the pronunciation of these words in an online dictionary. I cannot think of any other solution. I just advise them to study with an online dictionary in a pronunciation-focused manner. (EXPT2, SSI-1)

In addition, EXPT2 explained that she herself liked to correct pronunciation errors using online dictionaries in class. She thought making students listen to the words directly from online dictionaries such as *Oxford* or *Cambridge* was more beneficial because she felt it was better for students to hear the correct pronunciation of words from a native speaker. EXPT2 also thought that the correct pronunciations sticked to students' memory more when she created a memorable moment in class through attracting everyone's attention to how that word was pronounced in an online dictionary: *"When they hear something from a native speaker, it sticks to their memory, and they don't forget it. They already hear everything from me, so it's a way of adding some variety to the lesson"* (POC-2).

In accordance with the views of EXPT1, EXPT2 also noted that when making corrections, there was no need to make articulatory descriptions explaining the production of sounds or to write the phonemic symbols representing those sounds on the board thanks to online dictionaries. Like EXPT1, EXPT2 also viewed online dictionaries as a 'blessing' since she believed that correcting pronunciation errors with phonemic symbols was not doable:

I cannot attempt to do such a thing. That's a whole new level. Let's say that I managed to find the time for teaching the symbols. It's still not enough. They have to revise those symbols and study on their own to internalize them. Therefore, it does not seem to be viable to me. Instead of using symbols, listening the words from

online dictionaries might be much more useful for them to hear the correct pronunciation. (EXPT2, SSI-2)

EXPT2 acknowledged the fact that some visual learners might need to see the phonemic symbols, or some others might benefit from articulatory descriptions made during corrections, but she said that she avoided using these tools as long as students did not make such a request because she said personally she neither liked to use them nor thought they were useful. She maintained that what actually mattered was practicality for corrections and claimed that we might even witness the disappearance of these tools in the near future:

They have become a little bit old-fashioned. Students are not using paperback dictionaries anymore these days, so it's easier for them to listen to the words via online dictionaries. Making corrections with phonemic symbols is not a must. Perhaps they may feel the need to get help from them in some quiet places where it's not possible to listen to something, but I think those situations are really rare. They usually have the opportunity to listen to the correct pronunciations, so those phonemic charts and symbols may even become redundant in the future. (EXPT2, POC-3)

To summarize, the participants held both convergent and divergent views on how to correct pronunciation errors. As for the divergences, the findings showed that EXPT1 preferred to correct pronunciation errors implicitly considering the affective needs of students whereas EXPT2 said she did not hesitate to use explicit correction since she believed students never had a problem with being corrected directly. As a way of keeping the corrections as implicit as possible, EXPT1 said she preferred to give whole class feedback on the most frequent mistakes, but EXPT2 liked to attract students' attention to their errors through correcting them individually. Also, EXPT1 argued that self-correction was better than peer correction as it fostered critical thinking and prevented students from being shy with each other; however, EXPT2 asserted that although she used self-correction as well, peer correction was better due to being a good source of motivation. Moreover, EXPT1 claimed that drilling was such an artificial tool that she seldom used it while EXPT2 claimed that it was an essential step in the correction process, so she used it in various ways (viz. individual drilling, choral drilling, and peer drilling). Besides, EXPT1 expressed that comparing words was not a good tool for pronunciation corrections owing to creating confusion. Conversely, EXPT2 indicated that she used it a lot because she believed it eased recognition and differentiation of correct and incorrect pronunciation of words.

When it comes to the convergences, the results suggested that both participants said that recast was the most frequently used technique by them for pronunciation errors

although they also preferred to use other techniques at times. They liked to use recast for different reasons. EXPT1 preferred it as it was the best way of making implicit corrections. EXPT2, on the other hand, generally opted to use it to save time. The results also showed that both experienced teachers liked to utilize online dictionaries while correcting pronunciation errors. EXPT1 stated that online dictionaries helped increase learner autonomy and saved time. She also thought seeing sound-to-letter correspondences increased students' ability to retain and recall the correct pronunciation of words. In addition to these reasons, EXPT2 was in favour of employing online dictionaries herself as well since she believed hearing the correct pronunciations from native speakers added variety to the lesson. The final advantage of online dictionaries mentioned by both participants was that they saved students from the need to learn phonemic symbols or hear articulatory descriptions to reach accurate pronunciations. Besides these, both of them also expressed that they did not like to give metalinguistic feedback or repeat the errors while correcting pronunciation errors. Table 4 summarizes the different tools and techniques that the participants told to be using for providing CF on pronunciation.

RQ2: What are the underlying factors that shape these teachers' beliefs and practices as to providing CF on pronunciation?

The goal of the second research question was to examine the factors contributing to the development of teachers' cognitions as to correcting pronunciation errors. Both teachers pointed out certain crucial factors to support their views and justify their practices while expressing themselves during the semi-structed interviews and post-observation conferences. To address the second research question, their responses to the questions were analysed, the most recurrent factors in the data set were identified and these factors were reported under two main themes: (1) contextual factors and (2) teacher-related factors. The former involved three major categories named *student profile*, *syllabus*, and *supplementary materials*. The latter also consisted of three main categories named *previous learning experiences*, *prior teaching experiences* and *lack of confidence*. Under each category connected to each theme, the findings belonging to the first participant (EXPT1) and the second participant (EXPT2) were reported respectively.

Table 4

Tools and Techniques	EXPT1	EXPT2
Recast	\checkmark	/
Necasi	\checkmark	\checkmark
Explicit Correction	\checkmark	\checkmark
Elicitation	\checkmark	\checkmark
Metalinguistic Feedback	Х	Х
Clarification Request	\checkmark	\checkmark
Repetition of Error	Х	Х
Prompting Self-Correction	\checkmark	\checkmark
Prompting Peer Correction	Х	\checkmark
Drilling Corrected Errors	\checkmark	\checkmark
Comparing Words	Х	\checkmark
Online Dictionaries	\checkmark	\checkmark
Phonemic Symbols	Х	Х
Articulatory Descriptions	Х	Х

Tools and Techniques Used for CF on Pronunciation

Contextual Factors

Student Profile. The data analysis showed that both participants mentioned certain student-related factors which had a profound effect on their cognitions of providing CF on pronunciation. Both experienced teachers explicated their rationale behind their decisions and reflected on their classroom practices through referring to those factors frequently. According to the participants, the *age* and the *proficiency level* of students had an influence on how they approached and corrected their pronunciation errors in class.

Both participants thought that students' age was a drawback in terms of achieving permanent improvements in their pronunciation. EXPT1, for example, stated that it was not sensible to expect students to pronounce everything accurately since she stressed that the improbability of accomplishing this after a certain age had already been proven in some studies found in the literature:

I mean it'd great if everyone pronounced everything correctly. However, we read in the literature that for some people, especially for those learning a foreign language after a certain age, this isn't achievable. I mean why do we force it? We can try to achieve correct pronunciation in learners as much as possible, but the priority should be given to avoiding misunderstandings and enabling them to communicate their message successfully. (EXPT1, SSI-1)

EXPT1 maintained that correcting pronunciation errors was a challenge at tertiary level since the age of the students became a hinderance in terms of achieving successful results after the correction. She said that their native language was a hurdle for them on the way of acquiring correct pronunciations and retarded progress:

My job would be easier if they were younger. Maybe I wouldn't even need corrections as they absorb what is told to them like a sponge at young ages. At the very least, they internalize the correct forms after just a few corrections. However, our students already have a strongly rooted native language, so they have to pay special, intentional attention to their own mistakes to correct them. In that sense, age is a disadvantage for them. (EXPT1, SSI-2)

According to EXPT1, fossilization was also a problematic aspect of teaching young adults. She explained that throughout the years before university, they got education from various teachers and unfortunately they heard some words incorrectly from them and internalized those pronunciations, which caused students to normalize their errors when they started learning English at university: *"Sometimes there might even be teachers mispronouncing words in class. When we have a look at different error types, we may find out that some of them are caused by incorrect instruction"* (EXPT1, SSI-2). She expressed that she felt desperate about how to deal with fossilized errors permanently:

Fossilization is a huge problem at this age. They just read the words in the way they want to. I correct some mistakes thousands of times, and they still mispronounce them. I'm sorry, but there's nothing else I can do. How can I correct them? I wish I could. (EXPT1, POC-3)

By the same token, EXPT2 also viewed students' age as a handicap and fossilization as a downside brought by it. She believed that it was hard to correct fossilized pronunciation errors at tertiary level since it was 'too late'. She indicated that it was not simple to correct such fossilized errors permanently as those words had been pronounced incorrectly for a very long time. Talking about this fossilization problem related to students' age, she hopelessly said:

I think university is too late to master the pronunciation system of a language. Pronunciation teaching is something that may produce better results at earlier ages. It's really difficult to correct fossilized mistakes after this point. It's a case of too little, too late. Improving pronunciation is something that requires intrinsic motivation for young adults, and unfortunately our students lack it. (EXPT2, SSI-2)

In short, both experienced teachers believed that acquisition of correct pronunciation forms through correction became much more demanding for students at tertiary level due to their age. The participants stated that they were either under the influence of their native language or unable to cope with the fossilization built over long years. Therefore, they argued that the best solution was to make them take the responsibility of their own learning.

Another factor related to the student profile mentioned by both experienced teachers was the proficiency level of the students. Despite having C level students during the data collection, they both thought that their proficiency level was below the intermediate level. EXPT1, for instance, complained about their tendency to speak with the same words at all times and how this seriously hampered determining their pronunciation errors: *"These students' vocabulary knowledge is very limited. They speak with the same words all the time, which prevents me from hearing and correcting new words. There's no material to be used for correction"* (POC-3). In addition to these students speaking with the same words, EXPT1 told that there were also students who never talked at all due to not being proficient enough to study in C level, which badly influenced how much time she allocated for pronunciation work: *"I can determine their errors only when they speak. I know that quiet students keep their silence either because they lack vocabulary knowledge or they're unconfident about their pronunciation. This influences how much time I allocate for corrections on pronunciation"* (SSI-2).

EXPT1 added that students were concerned with a variety of other things in C level other than pronunciation, which demotivated teachers in terms of allotting time for pronunciation work. She made a comparison with A level and C level students and stated that she felt much more motivated while correcting pronunciation errors in A level because in C level she felt like 'spitting in the wind':

In A level, students do not feel overwhelmed by extensive vocabulary or complex grammar. Accordingly, teachers also deal with very basic problems in A level, so they can make time for pronunciation. They also know that a good beginning makes a good ending, which encourages them to work on pronunciation more. They are willing to invest the time and effort. However, in C level, there are still a great number of fossilized mistakes related to the most basic sounds. It's very frustrating and demotivating. I feel like I'm spitting in the wind. (EXPT1, POC-3)

As can be seen above, EXPT1 thought that students' level hindered the process of making corrections on pronunciation. Besides, she said that it was also a determining factor

in deciding which techniques to use for correction. For instance, she indicated that there was no need to make articulatory descriptions or employ phonemic symbols for corrections since C level students were expected to already know how to produce certain sounds:

I don't use these techniques with C level students, but if I had lower-level students being exposed to these sounds for the first time, I would make time for such descriptions while making corrections. I have C level students, though. They should already be able to know where to put their tongue while producing certain sounds. This kind of information should be shared with beginner level students as those are very basic sounds like the $/\theta/$ sound. For example, we generally introduce the $/\theta/$ sound in A level while teaching numbers – one, two, three $/\theta ri:/.$ (EXPT1, POC-3)

Likewise, EXPT2 also stated that students' level hindered the way she addressed pronunciation errors rather than facilitating it. She explained that students usually caused her to waste so much time on pronunciation errors due to not being proficient enough and lacking the language abilities necessary to be a C level student. She made a comparison between the students who started as C level students in the first module and the ones who started in A level and became C level students in the third module. She explicated that having C level students in the first module was much easier since they already 'had an ear' for English language, and it was enough just to remind them the correct pronunciations when they made a mistake. On the other hand, she said that having C level students in the third module was hard since they kept making the same errors and there was hardly any positive change upon receiving correction. Commenting on this gap between the English proficiency of 'so-called' same level students in two distinct modules, she said:

My C level students in the first module knew how to pronounce most of the things correctly. They had an ear for English language. They had already known the correct pronunciations before they came to class although they weren't sometimes sure about the meanings of the words. When they made a mistake, all I had to do was to remind them the correct pronunciation of the word. Unfortunately, this isn't the case for these students. They make more pronunciation errors and error correction turns into a more time-consuming practice. (EXPT2, SSI-2)

In another comment, this time EXPT2 compared her current C level students to D level students and underscored the importance of having good listening comprehension skills in correcting fossilized pronunciation errors for good. She explicated that being exposed to English only in classroom prevented her current C level students from enhancing their listening skill and also inhibited the improvement of their pronunciation skill. EXPT2 stressed that D level students were intrinsically motivated to enhance their listening

skill outside the classroom via different media sources, so this helped them to easily pick up on the correct pronunciations or to quickly internalize the corrections made in the classroom:

There are some fossilized pronunciation errors such as the mispronunciation of the words 'foreign', 'wear', and 'climate' which are very difficult to correct permanently. The main reason for this is that their listening comprehension is not good although they're intermediate level students. If they did more listening practice, their pronunciation would improve as well. Unfortunately, they don't have an ear for English language. For example, D level students do not have such problems as they watch Netflix, listen to English songs, etc. These students do not have such habits. They are exposed to English only in classroom. Therefore, D level students' awareness of pronunciation is much more increased, which makes them comprehend and internalize the corrections much easily. (EXPT2, SSI-2)

In sum, both participants viewed the low proficiency level of students as a hindrance on the way of correcting their pronunciation errors. EXPT1 said that although they were C level students, their vocabulary knowledge was limited, so they either avoided speaking or spoke with the same words all the time and this prevented her from hearing new things and having 'material' for correction. She also stated that they should have learned how to produce certain sounds in A level, but they did not. Therefore, solving their pronunciation problems became a demanding and an extensive task and unfortunately she could not afford to take time to teach pronunciation from the beginning. That is why, she saw making corrections on pronunciation as an overwhelming task and she mostly avoided doing it. Similarly, EXPT2 also thought that her students' proficiency level was not enough to make them C level students and they pronounced most of the words inaccurately, which led to wasting so much time on error correction. She underlined the fact that they had trouble with listening comprehension, which resulted in the incapability of picking up on correct pronunciations easily. Thus, she believed that students had to put an effort to improve their listening comprehension outside the classroom to meet the requirements of their level and improve their pronunciation more easily.

Syllabus. In addition to the student profile, syllabus was also reported as a factor in the development of participants' cognitions as to correcting pronunciation errors. Although the course taught by both participants was called *reading/writing*, speaking skill was also included in the course syllabus and they were responsible for covering supplementary speaking materials as well. Both experienced teachers expressed that this caused them to prioritize reading and writing skills over speaking and pronunciation because they suffered from lack of time.

In SSI-1, EXPT1 told that there was a curriculum development unit which was responsible for preparing the syllabus for the course and she had to follow it. She reported that if it was something up to the teachers, she would try to make a place for pronunciation in her lessons. However, she said that it was basically a reading/writing course although speaking was told to be included in it. She explained that listening and speaking skills were intertwined and she would make a better transition to pronunciation work if she could do more listening exercises in her lessons, but unfortunately she was unable to add such exercises to her lesson plan due to time constraints:

For example, there are listening exercises in which students get to identify whether the speaker shows an interest in the conversation or whether he is bored depending on his intonation pattern. I wish I could use such exercises in my lessons to attract their attention to their wrong intonation patterns. However, as it's basically a reading/writing course and the syllabus is loaded, there is no time left for such extra work, unfortunately. (EXPT1, POC-1)

EXPT1 also explicated that it was hard to focus on pronunciation problems in a reading lesson. In reading lessons, she said that making students learn the meaning of the words was enough and it was not necessary to spend much time on the correct pronunciation of them. For instance, upon being asked about ignoring the mispronunciation of a target word during the pre-teaching part of her reading lesson in POC-3, EXPT1 admitted that sometimes she had to prioritize the meaning and appropriacy of a word over its pronunciation due to lack of time:

If it's a speaking-oriented lesson, I may lay more emphasis on pronunciation errors, but it was a reading-focused lesson, so I put it on the back burner. It's impossible to work on the pronunciation of every single word. It's not viable as we don't have that much time. We have a syllabus to follow. Vocabulary is more important for me – their meaning, use, appropriacy in a context. I think these aspects of a word matter more than its pronunciation because these are the aspects that make students understand a reading text. (EXPT1, POC-3)

EXPT1 also implied that the necessity to follow the syllabus prevented her from using different tools or techniques to provide CF on different aspect of students' pronunciation, so she did not attempt to use such techniques with the fear of wasting her time in vain:

One of my friends would use a rubber band to correct word stress errors by stretching it while saying the stressed syllable. Who knows, perhaps these practices might become useful if they're done properly. Maybe in the syllabus, they should allocate a separate lesson period for pronunciation work each week. However, there's no time for these now. (EXPT1, POC-3)

EXPT1 believed that perhaps it might have been possible to employ phonemic symbols or charts as a reference point in classes when there was an error provided that the institution made time for pronunciation work in the syllabus. However, she said that pronunciation did not have a place in their syllabus and time constraints did not allow teachers to make such decisions on their own:

We may teach them the sound-symbol correspondences, but how many times can we use them to correct errors? I don't think we can find the time to do so. We can put a chart on the wall and refer to it when needed, but this kind of a decision should be made by the institution and all the teachers should abide by it. When this is the case, they should also allocate time for pronunciation in the syllabus so that we don't struggle to make extra time for it in class. (EXPT1, POC-3)

When reflecting on whether she was able to make sufficient time for addressing students' pronunciation needs throughout the module in the last SSI, EXPT1 admitted that she could have done better if it had not been for the time management problems posed by the syllabus:

What we mean by the word 'sufficient' is open to interpretation. Since pronunciation is not a priority for me now, I think the amount I've allocated for it has been sufficient. However, I'm not sure whether this is the ideal amount of time that should allotted for pronunciation in a module. As I indicated before, I would have worked on pronunciation errors more if I'd had more time; however, I believe I've done my best under these circumstances, while trying to cover the syllabus. (EXT1, SSI-3)

In a similar vein, EXPT2 also held the same view that syllabus was a huge determining factor when it came to making time for pronunciation work. Among other factors such as the needs of the students and their level of motivation, syllabus also played a crucial role in teachers' decision-making processes:

When students are enthusiastic about pronunciation work, this might increase the amount of time I spare for pronunciation errors. It's the same for the times when students' needs urge me to touch upon pronunciation mistakes more. Of course, all of these choices are also affected by the level I'm teaching as well as the time I have left because there is a syllabus that we have to follow. I also need to be realistic while making decisions in class. (EXT2, SSI-1)

EXPT2 also agreed with the idea that pronunciation work became difficult to do within a reading/writing course. Just like EXPT1, EXPT2 thought that it was hard to find the time to handle pronunciation problems since she had to prioritize other subskills regarding reading and writing to cover the syllabus. She said that she was well-aware that speaking and pronunciation practice fell within the scope of her course as well, but sometimes she was unable to make time to address students' pronunciation errors. Commenting on this issue in POC-1 after the first set of classroom observations, EXPT2 said:

To be honest, I didn't aim to do anything related to pronunciation. It was a writing lesson, so I put pronunciation on the back burner. It wasn't my priority. If the foci of the lesson had been different, if they hadn't had any problems with topic sentences or essay organization, maybe I would have done something about pronunciation-related problems as well. (EXPT2, POC-1)

EXPT2 asserted that writing was the predominant skill in the course syllabus, and it was thought to contribute to students' academic success in faculty more. On the other hand, she told that pronunciation did not have a place in the syllabus. She said that this put pronunciation at a lower level on her own list of priorities as well since it was harder to see and encourage student production in writing lessons. According to EXPT2, fostering students' pronunciation awareness through error correction was more than enough: *"Pronunciation will not help them to pass the proficiency exam. I teach pronunciation only through error correction just to help them see the full picture"* (SSI-3). Due to this high level of importance attached to the writing skill, EXPT2 stated that there were always some tasks to do related to it, which sometimes left no time for coping with pronunciation problems: *"Pronunciation might be neglected when there is a writing assessment because we have to do writing practice as a preparation. There's always a duty I have to fulfil regarding writing, so I have to prioritize things due to lack of time"* (SSI-2).

As indicated before, EXPT2 preferred to correct pronunciation errors at the word level and viewed vocabulary and pronunciation as two connected things. However, she said that sometimes the syllabus urged her to change the way she treated word-level pronunciation errors such as skipping drilling. Although drilling was an important step for EXPT2 in correcting pronunciation errors, she explained that sometimes she had to skip it owing to lack of time and the following incident is such a case in point.

During the first set of observations, while EXPT2 was doing the supplementary writing material, she suddenly started doing a unit from the book towards the end of the second lesson. In POC-1, she explained that her partner requested her to cover a vocabulary part in that unit since she was unable to finish it herself due to lack of time. EXPT2 said that she had to move quickly so that she could finish that part on that day and

move on to the next phase of the lesson as she had other things to complete in her lesson plan as well. Being in such a rush, she explained that she could not spend much time on some mispronounced words during vocabulary teaching and had to skip drilling them:

Of course I model the correct pronunciation as I work on mispronounced words, but I am unable to drill every word I correct. For example, I taught them the correct pronunciation of the word dull is $/d\Lambda I/$, not $/d\omega I/$, but unfortunately I couldn't drill it. There were so many words to teach, and I had so many other things to do, so I couldn't spare much time to the drilling of some mispronounced words. (EXT2, POC-1)

Being faced with such problems in class on a daily basis, EXPT2 said that it was demanding to deal with even word level errors, let alone sentence level problems. She stated that touching upon problems regarding other aspects of pronunciation was a 'luxury': *I cannot spend much time on suprasegmental features such as connected speech or intonation due to lack of time. Sometimes I wish I could spend more time on that side of pronunciation, but I usually find myself working on word-level pronunciation mistakes. The reason behind this is that pronouncing words correctly is the most problematic aspect for students and I have so many other things to cover on syllabus. That's why spending time on other aspects seems a bit of a luxury to me.* (EXPT2, SSI-1)

Taken together, these results suggested that there was an association between the nature of the syllabus and the time allocated for pronunciation work. Both participants gave more importance to reading and writing although they were also supposed to teach the speaking skill and the subskills linked to it. They both indicated that pronunciation did not have a place in the syllabus, which caused them to neglect pronunciation. EXPT1 told that she could not even make time for correcting the mispronounced words in reading lessons since she thought the meaning of the words would make them understand a text, not the pronunciation of them. In a similar vein, EXPT2 stated that she had to prioritize writing over pronunciation since it was the predominant skill in the syllabus. She said that pronunciation was pushed to the background due to other duties and responsibilities related to the writing skill.

Supplementary Materials. The data analysis revealed that the next factor contributing to the development of teachers' cognitions as to correcting pronunciation errors was supplementary materials. Although pronunciation errors could be seen in any kind of lesson, the participants stated that the nature of in-house supplementary materials used in speaking-oriented lessons played a significant role in identifying and dealing with students'

pronunciation problems. For example, in POC-2, EXPT1 said that she was dissatisfied with that week's speaking material as it had no room for student production, so she changed the suggested way of it so as to make it more communicative:

There were too many new words in the speaking material. The focus of the lesson was going to shift from speaking to vocabulary as it required pre-teaching for the reading part included in it. In such speaking activities, I want students to do all the production, so I design my lessons accordingly. That's why I changed the content of it a little bit. (EXPT1, POC-2)

She added that supplementary speaking materials provided by the institution were not successful in terms of teaching pronunciation. EXPT1 claimed that the institution does not aim to include anything pronunciation-related in the materials as they did not have any concerns about pronunciation. She argued that if they did, they would have designed the speaking materials accordingly by adding a listening part as well to enable teachers work on pronunciation more effectively:

I don't think pronunciation has even a place in the speaking materials. If pronunciation had been important, they would have included a listening part in them for the better modelling of the language. For example, there could be listen-andrepeat exercises in it along with recordings. A listening activity should be integrated into it to be able to do pronunciation work. As there's no such thing, I don't think materials encourage us to find and fix students' pronunciation problems. (EXPT1, POC-2)

As can be seen in the excerpt above, EXPT1 believed listening was a must to improve pronunciation since listening and speaking skills were intertwined, so was pronunciation. She thought the more they listened, the better they got at pronunciation: *"Listening is the skill which raises the awareness for pronunciation. This awareness, in return, helps them to understand how to pronounce words correctly"* (POC-2).

In parallel with the views of EXPT1, EXPT2 thought that the topics in supplementary speaking materials were old-fashioned, and tasks were not viable. During the data collection, she indicated that it was her second module of teaching C level students in that academic year, and she did not use that material in her first C module, either. Like EXPT1, she also indicated that pronunciation did not constitute a part in speaking materials and added that if the institution had aimed for a more systematic teaching of pronunciation to a great extent. She argued that teachers could not prepare or search for pronunciation

materials themselves due to lack of time resulting from the loaded syllabus, so she expressed her need for more materials and guidance in one of her comments:

We don't have enough materials on teaching pronunciation or solving common pronunciation problems. We can also have a separate listening lesson, or they can provide us with more ideas about how to teach listening together with pronunciation in a more effective way. As we don't have useful materials, we can only share the names of some websites so that students can do listening practice on their own. (EXPT2, SSI-3)

This excerpt illustrates that just like EXPT1, EXPT2 also highlights the importance of focusing on pronunciation through listening exercises. She stressed that teachers needed materials enabling them to work on pronunciation problems through listening, in an integrated way:

Listening exercises should go hand in hand with pronunciation practice to raise students' awareness. For example, sometimes they complain about 'omitted' words or phrases by native speakers in recordings because the concept of unstressed syllables or words is unfamiliar to them. The importance of pronunciation might be shown to them by emphasizing the fact that it's actually needed for listening comprehension. How can we expect them to pronounce things correctly when they don't even understand what they listen to? (EXPT2, SSI-2).

She concluded that lack of self-study and listening practice were the biggest hurdles on the way of acquiring correct pronunciation:

Those students do not study or do enough listening practice. Their listening scores are also low, so those pronunciation mistakes are related to their listening comprehension problems. Pronunciation cannot be improved by being exposed to the teacher's speech all the time. They should also do listening exercises and practice pronunciation on their own, and one way of doing this is to provide them with extra listening materials. (EXPT2, SSI-2)

In summary, for the informants in this study, the nature of in-house speaking materials was not suitable for teaching pronunciation or dealing with students' pronunciation problems. Both participants indicated that pronunciation did not occupy a prominent place in the materials, which caused both teachers and students to neglect pronunciation even more. Also, both experienced teachers asserted that listening parts should have been included in the speaking materials to enable teachers to make a better transition to pronunciation work. They indicated that it was also a good chance for students to do

listening practice since they believed poor listening comprehension skills had a negative impact on the acquisition of accurate pronunciation. The idea was also to make students see the importance of authentic recordings in enhancing both their pronunciation and listening comprehension.

Teacher-Related Factors

Previous Learning Experiences. A variety of perspectives were expressed by the participants as to the personal factors being influential on their own cognitions, but one of the prominent factors that mainly surfaced linked to providing CF on pronunciation was previous learning experiences. Both experienced teachers indicated that their past language learning experiences had an impact on the way they approached pronunciation and corrected pronunciation errors.

Regarding previous learning experiences, EXPT1 emphasized that both her language learning experiences, and her professional education had a profound effect on how she approached pronunciation errors in the classroom. For instance, she mentioned learning about how individually correcting students made them feel bad in her PhD program and said that it resonated powerfully with her due to experiencing the same feelings herself, too. That is why, she said that she avoided correcting students individually as much as possible:

Both my experiences and my education have an influence on my attitude. For example, I learn a lot related to error correction during my PhD. I've learnt that being individually corrected in a group arouses negative feelings in students. I experience the same feelings as well. I'm a teacher, though; therefore, my feelings may differ from my students, but thinking that it might be unpleasant to be corrected in front of other students, I generally prefer whole group feedback rather than correcting students individually. (EXPT1, SSI-1)

EXPT1 clearly indicated that she also disliked being corrected herself during both schooling and her personal life. She expressed that she did not remember being corrected directly in early years of her school life and if this had been the case, she would have got 'offended' and remembered that moment vividly:

I remember one of my teachers, who I am still in touch with, speaking English all the time, but I don't remember her correcting our English. She might have used recast for our mistakes. I also don't remember feeling upset upon being corrected by the teacher. As far as I can remember, our teachers didn't correct our mistakes directly. As I indicated before, it was long time ago, but if they had corrected me, I might have got offended and wouldn't have forgotten it because pronunciation was significant for me. (EXPT1, SSI-1)

To illustrate how it felt to be corrected for her, she gave an example of a time when she was corrected by her professor in her master's degree and told that she felt upset and got angry with herself owing to her lack of knowledge:

For instance, during my master's degree, I learned that the pronunciation of the word 'stimuli' was /'stɪmjəlaɪ/, not /'stɪmʊli/. I clearly remember my professor correcting me and myself being upset upon this correction. If I wasn't an English teacher and had a totally different profession, maybe I wouldn't have got upset that much. Instead, I would have learnt the word and forgotten about that moment. (EXPT1, SSI-1)

EXPT1 added that she experienced such things in her social life as well. She told that she still made pronunciation mistakes while talking to her foreign friends and explained that when they corrected her she felt upset and ashamed despite their good intentions:

There are still words that I mispronounce, and I have British friends correcting me sometimes. I get upset because I'm an English teacher and I think to myself, "how could I not know this?" To tell truth, I feel a little bit ashamed although I know that they are trying to help me. Actually I get angry with myself when I mispronounce a word and I regret not checking the pronunciation of that word for such a long time. (EXPT1, SSI-1)

While talking about her previous language learning experiences in SSI-1, EXPT1 also mentioned that she enrolled in a language course named *English Fast* in high school where she had the opportunity to interact with native speaker teachers for the first time. She explained that she was fascinated by the way English was taught there as it was very different from what she saw in high school: *"I can say that the dominant skills were listening and speaking. This is what I distinctly remember, but I'm not sure whether this was the skill they intentionally aimed to focus on. It was just what impressed me the most"* (SSI-1). She said that she benefitted from the authenticity of her native speaker teachers' speech while learning English, so she argued that the best way to work on pronunciation was through authentic listening materials:

Being exposed to native speakers' speech helped me a lot, so for example, if I'm focusing on connected speech in a lesson, I feel the need to support students' understanding with a recording. My modelling or the sentences I write on the board

would be insufficient when handling such a thing as connected speech. (EXPT1, SSI-1)

In another comment, EXPT1 stated that she learned about the theoretical background of the correction techniques she had already been using in class while she was doing her master's degree. She explained that she learned the basics of correcting pronunciation errors in one of the courses in the program: *"I had a course on how to teach speaking as a skill during my master's degree. I remember having an assignment on error correction, and correcting pronunciation mistakes constituted a part in it"* (SSI-1). However, she indicated that the biggest influential effect on the development of her views as to pronunciation corrections was the knowledge she gained in a course within the scope of her PhD program. She said that it was during that time when she learned that error correction had proved to be ineffective on pronunciation errors and this made a lot of sense to her:

My views on this topic have been shaped very recently. In one of our courses in our PhD program, our professor said that no matter how many corrections we make, learners will keep doing the same mistake. The only thing we can do is to model the language and expose them to the correct use of it. This point of view makes sense to me because only a restricted number of corrections result in repair even when I correct most of their mistakes. (EXPT1, POC-2)

As can be seen in the excerpt above, EXPT1 subscribed to the belief that error correction required learners' own noticing to be successful and said that this piece of knowledge acquired during her PhD program overlapped with her own learning experiences. By way of illustration, in POC-3, she explained how she managed to notice a mispronounced word herself without being corrected by someone else and learned to produce it accurately after a long time of wrong use:

For example, the word 'debris' ends in /s/, but it is pronounced as /'debri:/. I learned this when I was working at Yeditepe University, but till I learned this, I had pronounced it as /'debri:s/ many times in my classed before, which made me feel embarrassed later on. I was able to correct this mistake only after I noticed it myself and checked the dictionary. This experience of mine is in alignment with what is taught to me. (EXPT1, POC-3)

Just like EXPT1, EXPT2 also thought that her previous language learning experiences acted as a significant factor in determining how she provided CF on pronunciation. Regarding her teachers' attitude towards correct pronunciation, EXPT2 said

that they did not attach very much importance to pronunciation, and they thought pronunciation developed naturally in time. Considering the students in her classes, she indicated that the ones who were intrinsically motivated improved their pronunciation in one way or another, but she commented that she wished her teachers had focused on pronunciation a little bit more since classroom was the only place in which students could improve their pronunciation in those days:

Accurate pronunciation was not of primary importance for our teachers. There was no extra effort to achieve accurate pronunciation. It was thought to happen by itself, naturally during the learning process. The students who had a special interest in pronunciation used to learn it by themselves. However, in those years, we did not have many of the opportunities that our students have now such as watching movies with subtitles. We only had the chance to listen to our teachers for correct pronunciation of the words and study the pronunciation parts in our books. Therefore, we needed pronunciation work. (EXPT2, SSI-1)

In SSI-1, while talking about the position of pronunciation in English lessons during her early years of education, EXPT2 stated that it was treated as a peripheral subskill. She maintained that pronunciation was not focused on much at that time, but she thought it was a crucial subskill. EXPT2 expressed that it saddened her to see that pronunciation was neglected, so she herself tried to correct students' pronunciation errors as much as possible: *"Our teachers did not use to focus on pronunciation skill much although it was a private school. Now in my own classes, I try to do the pronunciation practice that they did not do at that time"* (SSI-1). She described that in the coursebooks, the pages including pronunciation work was always skipped over due to lack of time. However, she personally believed teachers had to find ways to integrate it in the lessons as students always learned pronunciation incorrectly, which caused more serious problems later on.

Looking back on her personal language learning experience, EXPT2 indicated that the most challenging aspect of English for her was listening: "Sometimes it was difficult to understand authentic conversations, such as the ones in movies. There are still occasions in which I have difficulty in understanding some things in movies or songs" (SSI-1). She believed that if her listening comprehension skills had been more developed, she could have had less trouble with pronunciation. She explained that this was the reason why she believed pronunciation needed to be taught via listening exercises. She reported that she continuously encouraged her students to do more listening practice by using an online dictionary outside the classroom if they wanted to have a more accurate pronunciation.

Regarding her feelings about being corrected while learning English, EXPT2 stated that she never felt upset about being corrected; therefore, she never hesitated to correct

students' errors in the classroom. To illustrate how it made her feel to be corrected, she shared a memory of herself being corrected when she was at university in SSI-1:

For example, one day, I used the word 'overwhelming' / əʊvə welmɪŋ/ in class. I never forget that day. I was sitting at the back of the class and when I mispronounced the word as / əʊvə helmɪŋ/, our American teacher could not understand it. When he asked me to say it again, I mispronounced it one more time. After I struggled for a while, my friends corrected my mistake and that's how I learned the correct pronunciation of the word. At that moment, I thought to myself: "Why doesn't he understand me? Is my pronunciation so incorrect that he doesn't even have a clue about what the word is?" (EXPT2, SSI-1)

However, she explicated that this was how she managed to stop mispronouncing that word at that moment in spite of feeling upset for a moment. She added that this experience influenced her very deeply, but in a good way. She said she still remembered it as a positive experience and acknowledged that individuals learned some things better thanks to their mistakes.

Lastly, EXPT2 also commented on the techniques her teachers used while correcting pronunciation errors in the past and stated that she liked to use these techniques herself, too. In SSI-1, she described that they modelled the correct use first and then asked students to repeat it and added that she also used this way of correction in her own classes. She added that she participated in some workshops on pronunciation teaching before, and she also got a certificate after a phonology training. However, she did not think she learned much from those workshops and the things taught there did not seem to be feasible in the class, so she thought the certificate was a rather symbolic document. She stated that she never got help from articulatory descriptions or phonemic symbols while acquiring English pronunciation, so never utilized the techniques taught in those trainings while providing CF on pronunciation:

I haven't learned English pronunciation by using symbols, charts, or through articulatory descriptions, so I don't think they're necessary. If I am able to acquire the correct pronunciation without charts, they can also do the same thing. This might be a wrong point of view, but it's what it's. (EXPT2, SSI-1)

Together these results provided important insights into the influence of previous learning experiences on the participants' cognitions. For EXPT1, both her language learning experiences, and her professional education emerged as a significant source influencing her cognition of correcting pronunciation errors. As a person not feeling good about being corrected, she usually avoided correcting her students' pronunciation considering their

affective needs. During her graduate studies, she found theoretical proof for this belief of hers, which helped shape her general approach towards correcting pronunciation errors. For EXPT2, on the other hand, her past teachers' attitude towards pronunciation corrections was a determining factor in forming her own approach towards the issue. Seeing how neglected pronunciation was when she was learning English and experiencing actually how beneficial pronunciation corrections were back then despite being very limited in number, she herself decided not to ignore her students' pronunciation problems and tried to deal with them using the very same techniques she benefited throughout her own language learning journey.

Prior Teaching Experiences. Apart from previous learning experiences, the participants' prior teaching experiences were also found to have an impact on their cognitions with regard to providing CF on learners' pronunciation. It was understood from their remarks that when the participants went to the classroom, they already had an idea about what kind of pronunciation errors students could make depending on their teaching experience. They seemed to have already made a collection of errors in their minds, so they seemed to be more alert to those mispronunciations.

The data analysis revealed that EXPT1 had an extensive 'repertoire' of common pronunciation errors that she created over long years of teaching, and she said that she tended to correct those errors the most although she came across new pronunciation errors as well:

I do not correct every mispronounced word. However, there are some words such as 'career' which Turkish speakers of English always mispronounce. I know from my experience that it's a problematic word for our students, so when we come across to this word in class, I immediately lay emphasis on the correct pronunciation of the word through modelling. There are times when I decide which words to correct based on solely my teaching experiences. (EXPT1, POC-1)

EXPT1 maintained that another type of pronunciation error she dealt with through referring to her prior teaching experiences was the word stress errors. She indicated that although she did not focus on word stress problems much in her classes, she sometimes felt the need to warn students about their wrong stress placements on words, especially while teaching vocabulary. She added that she even did this before they made any word stress errors because she was able to predict the words with which students might have difficulty thanks to her practical knowledge:

For example, different forms of some words such as 'present' are spelled the same, but when we change their part of speech without changing the spelling, their meaning and pronunciation also change. The verb 'present' is pronounced as /prr'zent/ while the noun form of it is pronounced as /'preznt/. When such commonly mispronounced words come up in class, I point out the pronunciational differences without delay since more or less I know which words cause problems for Turkish speakers of English in terms of pronunciation. (EXPT1, POC-1)

While talking about correcting word stress errors, EXPT1 also mentioned that her experience has taught her not to use certain techniques due to seeing that they rarely worked throughout the years. For instance, in POC-3, she said that she never showed the word stress on the board with a colored pen or used a similar technique upon seeing in the previous years that students had difficulty in understanding such practices and did not gain any benefit from them:

In some coursebooks, they put squares or circles on all the syllables in a word but show the stressed syllable with a bigger square or circle. I've seen so many students who were unable to understand even the purpose of such exercises throughout the years, so they all turned out to be futile. It's the same for using a colored pen for it on the board. I don't think these techniques are absolutely necessary or viable, so I have learned not to use such techniques or work on every single word stress error. (EXPT1, POC-3)

Similarly, teaching experience seemed to be a significant reference point for EXPT2 as well. Actually it played an important role for EXPT2 when it came to dealing with pronunciation problems because she underscored that she learned everything related to pronunciation through experience. In SSI-2, she expressed that experience was definitely the best teacher and she said that she learned most of the things she knew as to pronunciation through her teaching experience:

I have learned how to teach pronunciation and deal with pronunciation problems in time. You see students making mistakes in class and this urges you to do something about the issue and forces you to do research and find ways to correct those mistakes. I've learned most things related to pronunciation thanks to my own efforts and experience. (EXPT2, SSI-2)

Just like EXP1, EXPT2 also thought that it was easier to deal with pronunciation problems in classes where students spoke the same native language because she said that the words they usually mispronounced were almost the same due to sharing a common language. For this reason, she said that teaching English in the same context for long years helped her identify the most common pronunciation errors that Turkish students made. In a similar vein with EXPT1, EXPT2 also stated that there were some words that she typically

corrected in her lessons or used in her examples. She reported that she automatically laid more emphasis on those words or attracted students' attention to the pronunciation of these words when they came up in classes with the hope of saving students from mispronouncing them any longer and not wasting her own time. In the following excerpt, she summarized some of the most common pronunciation errors she corrected:

Our students have difficulty in accurately placing the stress in words such as 'separate' which have the same spelling but pronounced differently when the part of speech changes. In addition, there are also some words such as 'wear' which are always mispronounced. I already know from my experience that these are the problematic areas for our students, so this subconsciously makes me correct these errors more frequently. I tend to correct errors that I'm used to correcting, to be honest. (EXPT2, SSI-2)

As can be seen above, EXPT2 admitted being under the influence of her teaching experience while making decisions about which errors to correct in the classroom. Besides, she added that it affected which tools she used to correct certain errors. She stated that there were errors which she corrected mostly in the same way, using the same techniques. However, she also accepted that following such correction patterns sometimes made her fail to see how certain tools could also be used effectively for new errors. For instance, while correcting the mispronounced word '<u>ch</u>emistry' during the last set of observations, she did not choose to compare it to the other words including the same sound such as '<u>ch</u>aos' or 'stoma<u>ch</u>' although she previously reported that she used this technique a lot. When she was asked about this in POC-3, she replied that she usually utilized this technique on only a small set of words which she regularly used over the years:

I occasionally use this technique, but it's not something I can employ all the time because it is hard to recall other words including the sounds of the word that I'm correcting in every lesson. There are some pairs of words that I have been using in my examples for a long time now such as 'wear-where' or 'won-one' due to having to deal with them many times previously, but that's not the case for every word. (EXPT2, POC-3)

In sum, the findings revealed that the participants' teaching experience served as a significant reference point when making corrections on pronunciation. Thanks to their long years of teaching experience, they were well-aware of the problematic sounds or words that the students in their context might have trouble with, so this helped them act more quickly on those common errors. Having tried various correction techniques before, they also did not prefer to waste time by experimenting with new techniques every time they came across

a pronunciation error. Instead, they tended to follow the familiar path and corrected them mostly in the same way. Taken together, the results showed that the participants made crucial decisions in the light of their teaching experience about which pronunciation errors to correct as well as which techniques to use for corrections.

Lack Of Confidence. The participants' reflections on the issue revealed that sometimes their lack of confidence was also an influential factor determining whether they corrected pronunciation errors or how they corrected them. In spite of being teachers with long years of experience, they expressed that sometimes being a non-native speaker of the language prevented them from working on certain problematic aspects of pronunciation confidently.

EXPT1 openly stated that she still felt unconfident about mastering the English pronunciation completely and added that she was aware of the fact that she would never be as proficient as a native speaker. For this reason, she believed that native speaker teachers and non-native speaker teachers differed very much in their approach towards pronunciation issues. She thought that non-native teachers including herself had a tendency to ignore some pronunciation errors due to lack of confidence unlike native teachers:

We, as non-native teachers, may tend approach pronunciation differently or fail to focus on it as native teachers do due to not being confident enough about our own pronunciation. We are very much inclined to neglect pronunciation errors since we can easily understand the students in one way or another even when they make errors thanks to speaking the same native language. I guess this results in some sort of laziness for us. (EXPT1, SSI-3)

As can be seen above, EXPT1 pointed out that non-native teachers were able to understand Turkish students despite their errors because they spoke the same native language, and their learning trajectories were similar. In addition to these, she also noted that she used some features of English pronunciation just like Turkish students, so she did not attempt to fix their foreign accent and make them sound like a native speaker. In POC-3, she said that although she was able to speak English very well, she spoke it with the intonation patterns that belonged to Turkish. She maintained that she was unable speak English with the intonation patterns of British or American accent, and she did not believe she had the same pauses or stress placements of a native speaker. Therefore, she indicated that she kept her corrections on suprasegmental features of pronunciation as simple as possible and stayed away from going into too much detail. For example, in POC-3, EXPT1 described that she corrected suprasegmental errors basically in two ways. She told that while giving feedback on intonation, she just warned students about using a rising intonation in wh- questions and a falling intonation in yes/no questions if there was a

misunderstanding, and as for stress, she reported that she just told them to stress content words in a sentence when words sounded so unclear thus became difficult to understand. That was all.

In the following excerpt, she clearly explicated that she was unable to fully figure out how to use suprasegmental features herself for long years, so she did not believe she could solve her students' pronunciation problems concerning suprasegmental features in just one module. That is, her lack of confidence regarding the use of suprasegmental features prevented her from comfortably addressing students' pronunciation problems in that area:

Now that I haven't been able to master those suprasegmental features for so many years, how can I solve my students' pronunciation problems connected to those features in just 8 weeks? There are even words that I've just recently realized that I've been mispronouncing for years, let alone use correct intonation. (EXPT1, POC-3)

When we turned to EXPT2, it was seen that she experienced a similar confidence problem concerning how to correct pronunciation errors. Although she tried to correct pronunciation errors at the word level during class time as much as possible, she also highly recommended her students to use online dictionaries to improve their pronunciation on their own. In POC-1, she explained that one of the reasons behind this was the belief that it was better for students to hear the correct pronunciation of words from native speakers. She reported that no matter how well she pronounced the words, she thought she would not be able to pronounce them as naturally as native speakers or to place the stress on them as accurately as natives did. She explicated that English was not her native language, so she was still a learner despite her long years of experience. For this reason, she believed being exposed to native speakers' speech through online dictionaries or authentic listening exercises was much better for the students.

In POC-2, EXPT2 remarked that she was also not willing to employ certain correction tools due to her lack of confidence among other reasons. For instance, she told that physiology of pronunciation was not within her area of interest, so she was neither capable of making articulatory descriptions nor using phonemic symbols to correct pronunciation errors. She said that maybe if she had studied linguistics, she would been able to go deeper using these techniques while providing CF on pronunciation, but she thought it was not her 'department'. She acknowledged that a teacher definitely needed to have a solid grasp of different aspects of pronunciation, but she did not see pronunciation as one of her strengths:

Articulatory descriptions or symbols don't make sense even to me. I myself neither understand them nor know how to use them as a tool for correction. If students ask about how to position the mouth or the tongue while pronouncing certain sounds, first I have to learn about how to provide them with an explanation because I never use techniques that don't ease my job in class so as not to put myself in a funny situation. (EXPT2, POC-3)

In brief, the results in this section indicated that the teachers' own lack of confidence prevented them from focusing on students' pronunciation problems comfortably. As nonnative teachers, sometimes they doubted whether they could provide students with correct modelling of pronunciation, so they tended to keep their corrections as superficial as possible. The findings also illustrated that their lack of confidence did not allow them to use certain techniques for corrections or to touch upon some aspects of pronunciation such as suprasegmental features. These findings showed that teachers' perception of their own pronunciation had an influence on their cognitions regarding the extent to which pronunciation errors had to be taken seriously and dealt with.

Table 5

Factors	Themes	Key Points
Contextual Factors	Student Profile	Fossilization as a result of advanced age
		Low proficiency level of learners
	Syllabus	Necessity to prioritize reading and writing
		Lack of time due to lengthy content scope
	Supplementary Materials	Need for the more listening practice
	Watenais	No place for pronunciation in materials
Teacher-Related Factors	Previous Learning Experiences	Schooling and informal learning
		Professional education
		Teachers in the past
	Prior Teaching Experiences	Accumulated knowledge of common errors
		Typical use of familiar corrections tools
	Lack of Confidence	Hesitancy caused by being a NNEST
		Ignorance of suprasegmental errors
		Avoidance of certain correction tools

Summary of the Factors Influencing Teachers' Cognitions

RQ3: To what extent are teachers' reported beliefs about correcting pronunciation errors consistent with their observed practices?

In the preceding sections, the participants' beliefs, feelings, and ideas about providing CF on learners' pronunciation as well as the factors contributing to development of them were presented. Their forthright and sometimes polarized views on the efficacy of correcting pronunciation errors, the kinds of pronunciation errors to be corrected and the ways of correcting them were all reported in detail within those sections. They also included the contextual and personal factors that helped shape their perceptions of correcting pronunciation errors as well as their overall attitude towards it. In this section, these reported beliefs and ideas of the experienced teachers' were compared to their actual classroom practices in order to answer the last research question of the study. The goal of the third research question was to find out whether the experienced teachers' cognitions of providing CF on pronunciation were congruent with their observed classroom practices. That is, this research question aimed to reveal whether the participants managed to put their beliefs into practice through the analysis of the findings obtained from classroom observations. With the aim of portraying how their beliefs matched and mismatched with their practices, this section was divided into two main parts designed in accordance with the emerging themes named as consistencies and inconsistencies. In each part, first the findings belonging to the first participant (EXPT1) were reported and then the findings from the second participant (EXPT2) were presented.

Consistencies

Although there were a couple of inconsistencies, both experienced teachers were found to be highly consistent in terms of putting their beliefs into practice. During the classroom observations, it was seen that the participants' instructional practices reflected their cognitions about making corrections on pronunciation to a great extent. Despite a few exceptions, the audio recordings of the observed classes and the researcher's field notes revealed that they were being fairly realistic and quite truthful when delineating their classroom behavior in the interviews.

As previously explained, both experienced teachers were observed in 6 class periods which lasted 40-minutes each. EXPT1 opted to use the in-house supplementary speaking materials during the first two set of classroom observations but chose to do a reading task from the coursebook during the last set of observations. In her lessons, she seemed to have adopted a student-centered, communicative approach since she promoted pair work and group work activities almost all the time, which she monitored carefully without interrupting for error correction. She seemed to be very mindful of the level of language production in the classroom, so she constantly tried to involve them in speaking activities and kept her TTT (i.e., teacher talking time) at the minimum. This approach of EXPT1 was very much in alignment with the views she previously reported regarding the role of providing CF on pronunciation in her teaching philosophy. She said that her main aim while teaching English was to make students speak English comfortably in the classroom and feel a sense of achievement without feeling concerned about their pronunciation errors.

Regarding her attitude particularly towards correcting pronunciation errors, EXPT1 formerly indicated that she belived error correction never worked on pronunciation errors, so she intentionally stopped correcting pronunciation errors for the most part. She also said that pronunciation corrections were not like corrections made on written work since they would disappear in the air. For this reason, she told that she would avoid dealing with pronunciation problems unless there was a distinctive error. During the classroom observations, it was seen that she meant what she said because there were only 13 correction episodes in total. 2 of these were grammatical and lexical corrections whereas the remaining 11 corrections were made on pronunciation errors. The pronunciation errors on which she provided CF were all at word level. She was also seen to ignore 7 other word-level pronunciation errors (see Figure 4).

The classroom observations took place mostly in speaking-oriented lessons. Although the last set of classroom observations occurred in a reading lesson, it also included pair and group work activities. In such classes, teachers are expected to have much more spoken data than usual, so they make more corrections. However, this was not the case in the observed classes of EXPT1. As she did not believe in the effectiveness of error correction on improving learners' pronunciation, she never set out with the aim of identifying and correcting pronunciation errors. This was easily understood from her monitoring behaviour because she did not intend to take any notes while monitoring to bring students' pronunciation errors into focus later on. In the first SSI, she said that she cut down on the time spent on pronunciation corrections, which was proved to be true by the observational data.

Figure 4

Provision and Ignorance of CF

The Particiapants' Provision and Ignorance of CF

The findings from the classroom observations revealed that EXPT1 stayed away from dealing with students' pronunciation problems on purpose, which resulted in a very limited number of correction episodes during the observed classes. As mentioned before, there were also some ignored pronunciation errors, one of which can be seen in the excerpt below:

Excerpt 1:

S: Teacher, I read something. Sometimes people eat <u>died</u> people to survive (wrong word form).

T: They eat <u>dead</u> people? (writes the word on the board)

S: Yes teacher. They eat <u>dead</u> (mispronounced as /di:d/) people to live. Like mountain climbers. [ignored pronunciation error]

T: Hmm. I see. Actually, there is a movie about it called 'Alive'. We have only 3 minutes. Shall we watch the trailer?

Ss: Yes!

As for the nature of the corrected pronunciation errors, it was seen that they were common, essential words that all intermediate-level students would need such as 'comfortable', 'vegetable', and 'liveable'. On the other hand, the ones which were ignored were mostly less common words when compared to the corrected ones such as 'Jupiter', 'cereal', and 'digest'. These findings were in parallel with her views expressed in the first SSI. She said that she did not aim to correct every single pronunciation error but only the ones which were common and more useful for intermediate level students. For instance, during the second set of classroom observations, she was seen to be selective about which pronunciation errors to correct just as she reported previously. EXPT1 was observed to be correcting the pronunciation of some words such as 'vegetable' while ignoring others such as the mispronunciation of the word 'Jupiter'. Upon being asked to elaborate more on her criteria in deciding which errors to correct and which ones to ignore in the POC, she justified her approach in the same way she did in the first SSI and admitted intentionally ignoring certain pronunciation errors:

How many times might a student need to use the word 'Jupiter'? I mean it's not a common word. However, this is not the case for the word 'vegetable'. It's a word which students may come across and use more often. This is my criteria while choosing which words to correct first. I prioritize common, essential words and lay more emphasis on the correct pronunciation of them. (EXPT1, POC-2)

Regarding how to correct pronunciation errors, EXPT1 previously told that she would try to correct students' pronunciation errors as implicitly as possible thinking that it would be disturbing for them to be corrected directly. During the classroom observations, it was seen that her views were congruent with her practices because she made almost all corrections on pronunciation using implicit recasts. An example episode from the second set of classroom observations can be seen below:

Excerpt 2:

T: Who's next?

S: Me.

T: OK, go on.

S: Pluto is more <u>comfortable</u> (mispronounced as /kʌmfərteɪbl/) than Saturn.

T: Pluto is more <u>comfortable</u> (corrected as /'kʌmfərtəbl/) than ... [recast]

S: Saturn.

When she was asked about why she chose to use recast more frequently than other techniques in POC-2, she explicated that there was no point in allotting time to use other techniques and wasting her time since she believed what really mattered was students' own effort and selective attention. This was consistent with her beliefs reported in SSI-1 in which she told that she mainly cared about modelling and expected students to pick up on the corrections she made implicitly:

Most probably they'll continue to mispronounce the word 'comfortable' which I corrected not only in the lesson you observed but also in many other lessons before. They will only be able to correct it themselves on the condition that they improve their noticing abilities as they hear it from me or recordings. Therefore, there is no need to waste time with other techniques. I could have used drilling after the correction, but I didn't want to use it for this word, to be honest. It's also another time-consuming practice. (EXPT1, POC-2)

In SSI-1, she said that drilling was something she rarely used since it was not a favored tool by her. This comment of hers was also corroborated by the data derived from classroom observations since she hardly ever utilized drilling and she made students repeat the mispronounced words individually rather than making everyone repeat them at the same time. Moreover, EXPT1 had formerly said that she was not in favor of giving metalinguistic feedback, using repetition of error, comparing words, promoting peer correction, or making use of phonemic symbols and articulatory descriptions to correct pronunciation errors. These remarks were also seen to be consistent with her classroom practices. In all sets of classroom observations, she never used these techniques.

For instance, data from the second set of classroom observations added further confirmation, showing that EXPT1 intentionally avoided comparing words for correcting pronunciation errors just as she had reported prior to the observations. At some point during the second set of observations, she was seen to write the word 'language' /'læŋgwɪdʒ/ on the board, but she deleted it later. Upon being asked about what she was planning to do with that word, she indicated that she was going to use it as a reference point to correct the mispronunciation of the /dʒ/ sound in words such as 'Jupiter' /'dʒu:pɪtər/ and 'jungle' /'dʒʌŋgl/; however, she said that she changed her mind, thinking that it would be confusing for students. Instead, she chose to focus on correcting mispronunciations connected to only one sound which was the /w/ sound:

I heard them mispronouncing the word 'Jupiter'. They also mispronounced the word 'jungle'. I am aware that they have a problem with the /dʒ/ sound, but they could have felt overwhelmed if I mentioned the word 'language' for comparison as well. Therefore, I thought I'd deal with it in a different way on a different day. There were

only two mistakes related to the /dʒ/ sound, so I chose to work on the /w/ sound only. I don't think it's a good idea to compare words or correct everything at the same time while correcting pronunciation errors because it might cause confusion preventing them from keeping the correct uses in their mind. (EXPT1, POC-2)

In SSI-1, EXPT1 also said that whole class feedback would always be her first choice when compared to correcting learners' errors individually in order not to cause students stress. This reported belief of hers was also found to be in parallel with her practices. EXPT1 used recast most of the time as previously stated, but there was also an occasion in which she thought everyone had a problem in pronouncing a sound, so she chose to give whole-class feedback on the board at the end of the lesson. During the second set of classroom observations, she felt the need to explicitly focus students' attention on how to pronounce the /w/ sound correctly after a group work activity because she heard that everyone pronounced it as if it was the /v/ sound. She wrote three words including this sound (*water*, *war*, and *want*) on the board at the end of the activity, provided corrective instruction and then asked everyone to repeat them:

Excerpt 3:

T: We're going to move on to a different activity, but now please look at these three words on the board? It's water /'wo:tər/, it's not /vɒtər/. It's war /wo:r/, not /vɒr/. This is want /wɒnt/, not /vɒnt/. We don't have the /w/ sound in Turkish, so I know that it's not easy, but can you show me how you pronounce these words again?

Ss: /wɔːtər/.

Ss: /wɔːr/.

Ss: /wont/.

T: OK. Much better.

In SSI-1, she said that she would resort to explicit correction if students kept making the same error, which was proved to be true by the observational data. She was also asked to reflect on this practice in POC-2 again, and she said that she would prefer to give explicit, whole class feedback on frequent mistakes, corroborating her comments from the first SSI:

If I consider something as a frequent mistake, I might choose to correct it explicitly on the board. For example, I did this at the end of the first lesson by laying emphasis on the difference between the /w/ sound and /v/ sound. I know from my experience that speakers of Turkish have difficulty in pronouncing these sounds correctly, which enabled me to catch mispronunciations of these sounds easily. When I heard them mispronouncing the words 'war', 'water', and 'want' more than once, I immediately wrote them on the board to give delayed feedback because I didn't hear those mistakes from only one student or pair. (EXPT1, POC-2)

Unlike EXPT1, EXPT2 preferred to use in-house writing materials as well as the reading passages and the vocabulary parts from the coursebook in the observed classes. While doing the writing materials, she did not make students write an essay during the lesson. Instead, she did the lead-in parts of the materials which included reading and video-watching exercises aiming to activate students' schemata and brainstorm ideas on the topic so that they can generate ideas more easily while writing their essays later on. In addition to this, she also mentioned some fixed phrases and structures needed to write topic sentences. While she was doing the exercises from the book, she also focused on vocabulary more rather than getting students to do mainly silent reading. She also attracted students' attention to the linkers in the reading texts so that they could use them in their essays.

In her lessons, contrary to EXPT1, EXPT2 adopted a teacher-centered approach and there were almost no pair or group work activity encouraging students to produce the language. Her TTT was also high, which she herself admitted off the record as well just after the first set of classroom observations. However, despite the teacher-centered approach and the absence of a speaking material in the lessons, the number of error correction episodes in the observed classes of EXPT2 was much higher when compared to the number of corrections made in EXPT1's classes. There were 48 correction episodes in total, 11 of which were grammatical and lexical corrections, and the remaining 36 corrections were made on pronunciation errors. In addition to these, the observational data also showed that she ignored only 1 pronunciation error, proving that her previous remarks about trying to correct almost every pronunciation error were reflecting the true nature of her correction practices (see Figure 4). In SSI-1, she said that as a language teacher, she would try to correct as many pronunciation errors as possible so as to teach the target language properly. She added that it was in her job description to provide students with the correct pronunciations even though she did not believe in the efficacy of corrections made on pronunciation much, and this comment of hers was in alignment with her classroom behavior since she gave CF feedback almost all pronunciation errors made during observed classes. The excerpt below illustrates the only pronunciation error EXPT2 ignored:

Excerpt 4:

T: Is there anyone coming from a small town in this class?

S1: Marmaris.

S2: Kuşadası.

T: Why are you here? (looks at S2)

S2: Because İzmir has many advantages; for example, <u>educational</u> (mispronounced as /edukeɪʃənl/). [ignored error]

T: (turns back to S1) Same reason? Do you have anything to add?

S1: And big opportunities.

T: Yes. There are also big opportunities in big cities.

As for the kinds of errors to be corrected, EXPT2 formerly reported that she would prioritize word-level errors over the sentence-level ones. She said that phoneme-level issues caused students to pronounce most of the words incorrectly thus to feel frustrated, but she thought that sentence-level errors would not bring about communication breakdowns at all. She also stated she would correct errors related to connected speech at times. These comments of hers were all in parallel with her classroom practices since the majority of pronunciation corrections she made during the classroom observations were at word-level and there was also some correction made on the pronunciation of grammatical contractions (e.g., *I'd*) during the first and last set of classroom observations.

EXPT2 initially said that she would try to use different techniques to correct pronunciation errors, which was in alignment with her classroom practices. She mostly used implicit recasts and corrected students' errors individually as she formerly stated. She also used some other techniques she claimed to be using before, including elicitation and clarification requests. For example, the following four episodes from the first and second set of observations shows how she corrected pronunciation errors using recast:

Excerpt 5:

T: How did they survive?

S: 20 boats and 2 helicopter (mispronounced as /'heliko:pter/)

T: OK. There were 20 boats and 2 <u>helicopters</u> (corrected as /'helikoptərz/). What did they do? [recast]

Excerpt 6:

T: Why did they need to go back to their boat?

S1: They couldn't see well.

T: Why couldn't they see?

S2: The sea was getting rough (mispronounced as /reu/).

T: Yes, because the sea was getting rough (corrected as /rʌf/). [recast]

Excerpt 7:

T: What do you see in the photo?

S1: Vegetables.

T: Fruit, vegetables. Where is this ...

S1: Bazaar.

T: You mean street market. OK. What about the country?

S2: In Japan (mispronounced as /dʒʌpʌn/).

T: You think it's in Japan (corrected as /dʒə pæn/), OK. [recast]

Excerpt 8:

T: Everyone, tell me one cause of climate change. Why do we have this problem?

S: Expression (wrong word choice) of <u>carbon</u> (mispronounced as /kʌrbɒn/).

T: Emission... <u>carbon</u> (corrected as /ˈkɑːrbən/) emissions. [recast] Thank you. What else? (looks at other students in the class)

Besides, there were several occasions in which she promoted self-correction and peer-correction just as she reported in the SSIs. In SSI-1, she indicated that making a clarification request was her favorite correction technique since it enabled her to make a smooth transition to peer correction. For example, the following episodes from the first and

third set of classroom observations show how EXPT2 used peer correction together with a clarification request or elicitation for not only pronunciation errors but also lexical ones at times:

Excerpt 9:

T: What is culture shock?

S1: I live in <u>Turkey</u> (mispronounced as /turkeɪ/).

T: You live in where? Say it again. [clarification request]

S1: I live in <u>Turkey</u> (mispronounced again as /turkeɪ/).

T: How do we say it? (looks at the student next to her) [prompting peer correction]

S2: <u>Turkey</u> (corrected as /'tɜːrki/). [peer correction]

T: (looks at the student making the error)

S1: OK. I live in <u>Turkey</u> (pronounced correctly as /'tɜːrki/), but I go to <u>Chinese</u> (wrong word form).

T: You go to....? (looks at other students for correction) [elicitation]

S3: <u>China</u> (another student jumped in for correction). [peer correction]

S1: Ha, OK. China. This is culture shock.

Excerpt 10:

T: What were you good at when you were in high school?

S1: <u>Chemistry</u> (mispronounced as /tfemistri/).

T: Sorry? Say it again. [clarification request]

S1: Chemistry (mispronounced again as /tfemIstri/).

T: She was good at ... (looks at another student) [elicitation/prompting peer correction]

S2: <u>Chemistry</u> (corrected as /'kemistri/). [peer correction]

T: *I* was good at ... (turns to the student making the mistake)

S1: I was good at chemistry (pronounced correctly as /'kemIstri/).

In addition to these, she formerly indicated that while correcting pronunciation errors, she would benefit from other tools such as making use of online dictionaries. This comment of EXPT2 were also justified by her instructional practices since she was observed to be using this tool in her classes. For example, during the second set of classroom observations, students had to learn some new words before a video-watching exercise. While pre-teaching the words, EXPT2 used a word-definition matching exercise, and when the students mispronounced two of the words during answer checking (viz. *phenomenon* and *asthma*), the teacher made them listen to the correct pronunciations from an online dictionary via the computer instead of modelling the correct pronunciations herself.

Aside from the use of an online dictionary, EXPT2's comments about drilling were also consistent with her practices since there were also many occasions in which EXPT2 did drilling in various ways (i.e., *individual drilling*, *choral drilling*, and *peer drilling*). For instance, during the first set of classroom observations, a student mispronounced the word 'Indonesia' and EXPT2 used recast to correct the error and made only that student drill the word. In POC-1, she was asked to elaborate more on the different drilling patterns she followed during the first set of classroom observations. In her response, she reported that she utilized individual drilling for mispronounced uncommon words but peer or choral drilling for mispronounced common words:

I chose to use peer or choral drilling for common word-level errors such as 'wear', 'foreign', etc. If I hear the same error all the time and get bored of it, I do choral drilling. However, the word 'Indonesia' was not a must for students. It's not a common word or a common error. Also, it was not like everyone was mispronouncing it, only one student! That's why I used individual drilling there. (EXPT2, POC-1)

The following three episodes from the first and second set of classroom observations proved her point and showed how EXPT2 also utilized peer and choral drilling depending on the situation:

Excerpt 11:

T: Let's say that you're a grandma. Would you live with your grandchildren or away from them?

S1: Away from them.

T: So, how would you feel?

S1: Very sad.

S2: Loneliness (mispronounced as /leunlaines/).

T: Say it again, Cemre. [clarification request]

S2: Loneliness (mispronounced again as /leunlaɪnəs/).

T: (writes the word on the board and asks everyone) How do you say it?

Ss: Loneliness (pronounced correctly as /'leunlines/).

T: (chooses one of the students) Çağla, say it again. (and instructs the rest of the class) Please repeat after Çağla. [prompting peer drilling]

S3: Loneliness /'leunlines/ (initiates drilling).

Ss: Loneliness /'leunlines/ (everyone repeats).

S3: Loneliness /ˈləʊnlinəs/.

Ss: Loneliness /'ləʊnlinəs/.

Excerpt 12:

T: What is the topic? How do we say this word? (points at the word 'climate' in the phrase 'climate change' on the board)

S1: Climate (mispronounced as /klimeit/).

T: Excuse me? [Clarification Request]

S2: <u>Climate</u> (mispronounced as /klaɪmeɪt/).

T: Excuse me? [clarification request]

S3: <u>Climate</u> (pronounced correctly as /'klaɪmət/).

T: OK. Mürsel, say it again.

S3: <u>Climate /'klaɪmət/</u> change.

T: Everyone, please repeat after Mürsel. [prompting peer drilling]

S3: <u>Climate / klaɪmət/</u> change (initiates drilling).

Ss: <u>Climate /'klaɪmət/</u> change (everyone repeats).

S3: <u>Climate /'klaɪmət/</u> change.

Ss: <u>Climate /'klaɪmət/</u> change.

Excerpt 13:

T: What does Eren know about?

S1: <u>Climate</u> (mispronounced as /klimeit/) change.

T: Excuse me? [clarification request]

S1: <u>Climate</u> (corrected as /'klaɪmət/) change.

T: What does he know about climate change?

S2: <u>Causes</u> (mispronounced as /kausis/) of climate change.

T: The ... [elicitation]

S3: <u>Causes</u> (another student jumped in and corrected it as /'kɔːzɪz/)

T: Yes, <u>causes /'kɔːzɪz/</u>. Everyone, please repeat after me, <u>causes /'kɔːzɪz/</u>. [choral drilling]

Ss: <u>Causes /'kɔːzɪz/</u> (everyone repeats).

T: <u>Causes /ˈkɔːzɪz/</u>.

Ss: Causes / ko:ziz/.

Lastly, she initially told that she would not provide metalinguistic feedback or repeat students' errors. She also said that she would never use phonemic symbols or provide students with articulatory descriptions with the aim of fixing the pronunciation issues. All of these comments were also corroborated by the observational data since she never utilized these techniques in her observed classes.

In brief, the results clearly indicated the participants' cognitions were mostly in parallel with their classroom practices. The observational data illustrated that the experienced teachers' cognitions of correcting pronunciation errors and their instructional decisions were interrelated for the most part. Their reported beliefs regarding whether to correct pronunciation errors or not, which ones to correct, and which techniques to use for corrections were corroborated by the observational data to a large extent.

Inconsistencies

The data analysis revealed that the participants' reported beliefs and ideas mostly matched their actual classroom practices. Nevertheless, there were also mismatches even though they were very low in number. Both experienced teachers were occasionally observed to have deviated from what they told to be doing initially.

At the beginning of the module, EXPT1 stated that she prioritized errors connected to the suprasegmental features of pronunciation since she believed they damaged the natural flow of the communication more. Besides, she indicated that suprasegmental errors were much easier to detect during pair or group work activities, which she used a lot in her lessons. She added that segmental errors needed to be corrected in isolation, and this was not something she preferred to do. However, all of these views and ideas turned out to be inconsistent with her instructional practices. For instance, during the first set of observations, EXPT1 was observed to be doing a lot pair and group work activities, but she never provided students with CF on their use of suprasegmental features. Instead, she chose to work on segmental pronunciation errors and while doing this, she did not mention anything about accurate stress placement on those words as well. When she was asked about this in the POC-1, she expressed views which were the exact opposite of what she said previously. She pointed out that she paid attention to pronunciation mistakes but not to the ones regarding suprasegmental features since she did not have such high expectations. She noted that she did not make any plans regarding intonation or other suprasegmental features before the classes:

I mean no matter how much we try, at the end of the day, our students will speak English like a Turk, using the same intonational patterns that an average Turk uses while speaking Turkish. I think it's very difficult to change this foreign intonation since I am not a native speaker of English as well. Of course, we expect them to use good intonation at least while forming questions and they are more or less capable of doing this. However, I don't care about the intonation mistakes in affirmative sentences formed during group work activities. In these activities, what is important for me is that they understand each other. (EXPT1, POC-1) Upon being asked about not dealing with word stress problems in POC-1, EXPT1 also argued that word stress was unteachable in the classroom, and it was something students could acquire only through lots of exposure:

Maybe it's just pointless to work on word stress. Classroom is the only place in which they get exposed to the language, and I don't think features like word stress are teachable in the classroom. Students can only acquire it through lots of exposure. In my opinion, viewing word stress as something teachable is a very high expectation. (EXPT1, POC-1)

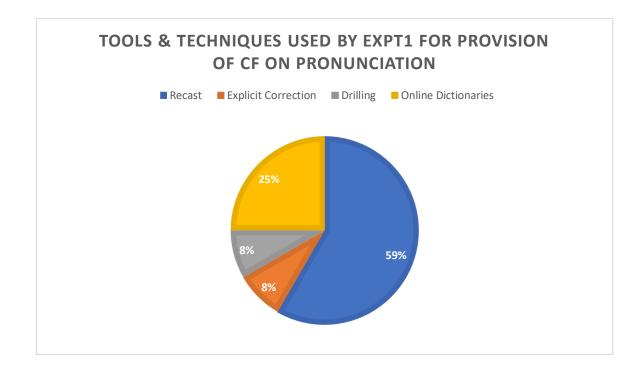
Moreover, EXPT1 previously said that she would want her students to recognize Standard English when they heard it because this sort of recognition would also encourage them to use the language more naturally. She also added that it was the correct use of suprasegmental features which contributed this natural-sounding speech the most. Nonetheless, when she was directly asked about neglecting suprasegmental problems in POC-1, she expressed a totally different point of view and said that it was not a grave problem to ignore those errors:

Standard English is not the dominant variety anymore. I don't expect my students to speak the language with native-like intonation patterns, word stress, etc. because these 'ideal' categories don't exist in every variety. When I take this fact into consideration, I don't care about pronunciation mistakes a lot unless I hear completely incorrect uses. (EXPT1, POC-1)

In the second POC, she was asked again about her attitude towards treating pronunciation errors during communicative activities so as to confirm the inconsistency identified in the previous POC. She confirmed it by saying that it was demanding to hear both segmental and suprasegmental pronunciation errors while monitoring everyone talking at the same time and said that the POCs helped her notice her negligence in focusing on pronunciation errors while doing such activities:

It's a little bit more difficult to identify pronunciation errors in communicative activities because during those activities, the source is not the teacher but the students themselves. If there're mispronounced words or incorrect intonation patterns during pair or group work activities, it's difficult to monitor and correct them both, so I generally focus on fluency only during such activities. Your questions have made me realize that I don't attach very much importance to pronunciation, especially suprasegmental features. Unless I hear words which are distinctively mispronounced, I don't do anything related to pronunciation. (EXPT1, POC-2) Moreover, in SSI-1, while talking about correction techniques she generally used, EXPT1 reported that she would also use elicitation, clarification requests and self-correction in her classes. Nevertheless, there was not any occasion in which she attempted to vary her correction techniques during the classroom observations. Instead, she corrected all the errors through implicit recasts, sometimes drilling, and rarely explicit correction (see Figure 5).

Figure 5

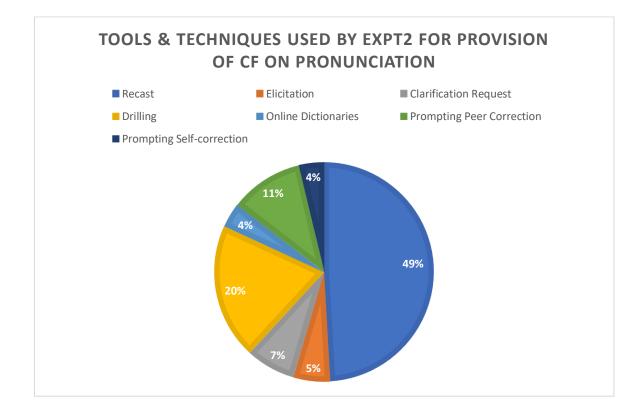


Correction Methods Used by EXPT1 in Observed Classes

In the observed classes of EXPT2, it was seen that she dealt with pronunciation errors through various techniques but explicit correction although she initially reported that she had no concerns regarding the use of explicit correction in her lessons. Quite the contrary, she seemed to put an effort to stay away from correcting the errors herself through explicit correction and instead, she usually encouraged other students to make the correction. Also, she was never seen to compare words including similar sounds, which might also be considered as a way of correcting pronunciation errors explicitly. These findings revealed the mismatch between her actual practices and her reported beliefs regarding these two ways of correction. She used all the other tools and techniques she claimed to be using previously in the interviews, but she never corrected a pronunciation error through making an explicit correction or comparing words (See Figure 6).

Figure 6

Correction Methods Used by EXPT2 in Observed Classes



Another inconsistency observed in the lessons of EXPT2 was that she was not willing to deal with word stress problems although she previously said that it was an important aspect of correcting word-level errors. She formerly indicated that just as she cared about word stress in vocabulary teaching, she also cared about word stress problems affecting the accurate pronunciation of words. When she was asked about not touching upon word stress errors in the first POC, she admitted that she stopped showing word stress on the board long ago and preferred to use recast to model the correct pronunciation:

I haven't worked much on word stress this year, but I used to mark stressed syllables in the past. For example, the word 'hotel' was mispronounced in one of my lessons today, but I just used the recasting technique to correct it and that was all. In the past, I used to write the word on the board and draw a vertical stroke before the second syllable to denote the stress. But now, I just repeat the word to model it myself. (EXPT2, POC-1) After she made this comment in POC-1, EXPT2 attempted to work on word stress on mispronounced words for the first time during the second set of classroom observations. While doing the writing material in the lesson, she tried to attract the students' attention to how she placed the stress on mispronounced words although she did not use the board to show it. However, she stopped doing it after few words and failed to treat all the mispronounced words this way. Upon being asked about this in POC-2, she said that she did not keep working on word stress since she thought it turned out to be a monotonous practice. Also, she noted that she felt 'panicked' a little bit because she had to hurry so as to finish the tasks included in the material. Furthermore, she pointed out that she did not believe focusing on word stress would help improve students' pronunciation, contradicting her previous remarks. Commenting on this more, she said:

They don't even understand what a stressed syllable is. I think it requires some linguistic knowledge to determine the stressed syllable in a word. That's probably one of the reasons why I stopped working on it. I thought everything was fine as long as they knew how to pronounce the words correctly. Also, I think the markings wouldn't have made any sense to them while studying outside the class even if I had shown the stressed syllables using them on the board. (EXPT2, POC-2)

In the SSI-2, EXPT2 was asked to elaborate more on working on words stress problems in order to verify the inconsistency identified before. In the interview, she maintained that students were unable to comprehend what word stress was, which caused her to feel frustrated and the corrections related to word stress to be 'a waste of time':

Word stress is a somewhat abstract concept for them. You previously asked me about a practice which turned out to be waste of time. I can tell that it's the corrections made on word stress for me. They don't have a conscious awareness about word stress, so I feel like I cannot achieve my intended goal no matter which tool I use for correction. (EXPT2, SSI-2)

In sum, the findings showed that both participants found it hard to put their beliefs into practice with respect to providing CF on the suprasegmental features of pronunciation. Regardless of whether it was a speaking-oriented lesson or not, it was challenging for both of them to cope with suprasegmental issues. The data analysis also revealed that the other inconsistency concerned how the pronunciation corrections were made. Both participants seemed to fail to use certain correction tools and techniques they initially told to be using. The table below shows the number correction episodes delivered by both participants during classroom observations and the how they were corrected:

Table 6

The Number and Ways of Corrections Made on Pronunciation

Tools and Techniques	EXPT1	EXPT2
Recast	in 7 episodes	in 27 episodes
Explicit Correction	in 1 episode	-
Elicitation	-	in 3 episodes
Metalinguistic Feedback	-	-
Clarification Request	-	in 4 episodes
Repetition of Error	-	-
Prompting Self-Correction	-	in 2 episodes
Prompting Peer Correction	-	in 6 episodes
Drilling Corrected Errors	in 1 episode	in 11 episodes
Comparing Words	-	-
Online Dictionaries	in 3 episodes	in 2 episodes
Phonemic Symbols	-	-
Articulatory Descriptions	-	-

Chapter 5

Discussion, Suggestions and Conclusion

In this final chapter, an overview of the study is provided along with the summary of the findings. Then the findings of the study are discussed around key themes in the light of the relevant literature. Following that, pedagogical implications as well as suggestions for further research are presented. The chapter ends with a brief conclusion.

A Summary of the Study

In this investigation, the aim was to assess the degree of teacher cognition of providing CF on pronunciation. More specifically, this study examined two experienced EFL teachers' beliefs, thoughts, feelings, and experiences regarding correcting students' pronunciation errors as well as the factors that played a determining role in the development of their cognitions. The study also set out to explore the influence of their cognitions on their classroom practices and determine the extent to which their cognitions matched their classroom practices.

The participants of the study were two experienced teachers with more than fifteen years of teaching experience. The data collection took place at the preparatory school of a private university and lasted over an 8-week module. The data was collected through semi-structured interviews, classroom observations, and post-observation conferences. The data analysis was guided by grounded theory, so all the data was analysed qualitatively. The steps of the data collection included pre-coding (verbatim transcription of data; emergence of first categories), coding (segregating, grouping, and regrouping the codes; organizing the codes into categories; merging or refining the categories; theming the data) and theorizing (developing theories; making inferences).

This study found that generally the participants' cognitions were concentrated on three main points. First, it turned out that they seriously doubted the efficacy of corrections made on pronunciation due to the frustration they felt during the process of dealing with persistent pronunciation errors. Both of them believed that students were the major determining factors in this process and the success of the pronunciation corrections depended mainly on their noticing abilities, selective attention, and effort. Secondly, the participants held divergent views about the kinds of pronunciation errors to be corrected. Although both of them prioritized intelligibility over accuracy, they had opposing views as to which errors damaged intelligibility the most. First participant teacher thought suprasegmental errors mattered more and more easier to deal with in communicative lessons whereas the second participant teacher cared mostly about segmental, word-level ones because they were easier to correct in isolation. Lastly, the participants had both convergent and divergent views about the tools and techniques that can be used to correct pronunciation errors. For both of them, recast was the most convenient technique and online dictionaries were useful tools, but using phonemic symbols and articulatory descriptions for pronunciation corrections was old-fashioned. The also did not like to give metalinguistic feedback or repeat students' errors while correcting their pronunciation errors in order not to create confusion. However, their views about other tools and techniques differed. The first participant was very conscious of the affective needs and demands of students, so she disliked correcting pronunciation errors explicitly and did not opt for tools such as comparing similar sounding words. She also preferred to avoid tools such as peer correction or peer drilling during the correction process to prevent them from getting shy with each other. The second participant, on the other hand, was not concerned about upsetting students since she thought students did not have a problem with receiving corrections on their pronunciation. Therefore, she was in favour of using a variety of techniques including explicit correction and tools such as comparing similar sounding words and prompting peer correction or peer drilling depending on the situation.

The results of this investigation also showed that the participants' cognitions were influenced by certain contextual and personal factors. The first contextual factor was student profile. Both participants thought students' advanced age and fossilization brought by it was a hurdle on the way of improving their pronunciation. Students' low proficiency level was also a source of discouragement for the participants owing to turning pronunciation corrections into time-wasting practices. The second contextual factor was the syllabus. Since the participants had to cover speaking objectives within a reading/writing lesson, they suffered from lack of time. This lengthy content scope also necessitated them to prioritize reading and writing skills over speaking as well as pronunciation. Supplementary materials came up as the last contextual factor since the participants were displeased with the lack of pronunciation practice in the speaking materials. They believed materials did not ease their job in terms of correcting pronunciation errors since they also lacked necessary listening practice enabling them to make a smooth transition to pronunciation work. As for personal factors, the participants' previous learning experiences seemed to have influenced their cognitions. Different aspects of their learning such their schooling, professional education and their teachers in the past were found to have an impact on their present instructional choices. The participants' prior teaching experiences emerged as the second personal factor. It was revealed that their accumulated knowledge of common errors made them tend to correct certain pronunciation errors more frequently. Besides, it was found that their long years of experience resulted in automatized correction behaviours and typical use of familiar corrections tools. Finally, lack of confidence was also a factor affecting the

experienced teachers' decisions regarding pronunciation corrections. It was seen that the hesitancy caused by being a NNEST made them feel anxious about providing CF on certain aspects of pronunciation such as intonation and word stress and using certain correction tools such as phonemic symbols.

Last but not least, the findings clearly indicated that it was challenging for the participants to translate some of their reported beliefs into practice although their classroom practices mostly reflected their cognitions of providing CF on pronunciation. Both participants were aware of the significance of correcting suprasegmental errors, yet they failed to address and treat them in their classes. They could not allot enough time to work on prosodic issues such as intonation and word stress although they initially said they would. Besides, they did not utilize a number of correction tools and techniques which they told to be using and they could not manage to vary their tools and techniques as much as they initially reported. For example, EXPT1 said she would use elicitation, clarification requests and self-correction in her classes, but she never employed them. Similarly, EXPT2 said she would make use of explicit correction and benefit from comparing similar sounding words to correct pronunciation errors, but she never utilized them. Other than these points, their previously reported beliefs were mostly consistent with their classroom behaviour.

Discussion

This study set out with the aim of investigating two experienced teachers' cognitions as to providing CF on learners' pronunciation errors and a number of important findings emerged from the data analysis. One striking finding was that both participants doubted the efficacy of corrections made on pronunciation irrespective of how much time they allocated for correcting pronunciation errors. Both of them reported that they felt discouraged and frustrated about dealing with pronunciation issues owing to the persistent errors putting them in a loop. Besides, they both indicated that they were unable to reach their goal of meeting students' pronunciational needs at the end of the 8-week instructional period. The participants believed that this issue could be resolved only through students' own noticing abilities and selective attention. Both of them thought students were the major determinants in the process and it was not possible to achieve success in the area of pronunciation unless students had an intention to put an effort to solve their own pronunciation problems inside and outside the classroom. These results are in accord with previously developed theories indicating that the majority of the issues related to pronunciation do not occur due to physical, articulatory causes, rather they usually result from cognitive causes. As also mentioned in the literature review, Fraser (2001) argues that pronunciation errors can be dealt with provided that students are able to "conceptualize the sounds appropriately -

discriminate them, organize them in their minds, and manipulate them as required for the sound system of English" (p. 20). Also, these findings broadly support the work of some studies in this area linking perception accuracy with production accuracy. Lee and Lyster (2017) put forward that there is a strong connection between improved perception accuracy and enhanced speech production. That is, learners produce the language more accurately when they possess improved perceptual abilities. Therefore, it can be concluded that the participants' arguments have a solid basis in literature since their tendency to view pronunciation corrections as inefficient practices may really be based on learners' failure of using their cognitive abilities to notice incorrect uses of pronunciation, distinguish them from the correct ones and figure out how to fix them. Nonetheless, giving up on working on pronunciation altogether or waiting for learners to have a flash of insight might not be the best solution to this problem since there are also studies in the literature suggesting that the process of making learners aware of their pronunciation could be fostered greatly by giving feedback and providing explicit instruction (Couper, 2006). In general, therefore, it seems that no matter how much experience they have, the participants may still need guidance and training on various ways of increasing their students' awareness of their pronunciation errors and encouraging them to employ the appropriate strategies enabling them to consistently pay attention to those errors.

The current study also captured detailed data regarding what kind of pronunciation errors the experienced teachers tended to correct. There was a huge gap between the number of correction episodes occurred in the observed classes of the participants. EXPT1 said she intentionally avoided correcting most of the pronunciation errors and her reported beliefs were in alignment with her classroom practices. The findings showed that EXPT1 seemed to be rather selective and have some criteria when deciding which errors to correct because, as previously mentioned, she believed error correction did not work. It turned out that she usually took certain qualities of errors into consideration such as the frequency and prevalence of them as well as the degree to which they damaged intelligibility and the natural flow of communication. Her classroom experiences were consistent with these views of her as she did not correct every single pronunciation error. This finding is consistent with that of Couper (2019) who found that the teachers in his study also tended to correct pronunciation errors having those qualities. However, EXPT2 did not have such criteria and held the view that it was her responsibility to correct students' errors, so she said she tried to correct their pronunciation errors as long as she heard them. Her beliefs were also in parallel with instructional practices since she corrected almost all the pronunciation errors in her classes. This brought about a discrepancy in the number of pronunciation corrections made by the two experienced teachers. This inference cannot be extrapolated to all teachers, but it may be suggested that sometimes teachers' general attitude towards

correcting pronunciation errors might pose some limitations on the number of corrections and the amount of time allocated for pronunciation work in classes. This, in return, may lead some learners who are likely to benefit from corrections to be neglected. Therefore, it might be a good idea to prioritize students' needs regardless of what we personally think about the efficacy of corrections.

The study also found that the pronunciation errors corrected by both participants were usually at phoneme level or word-level although they initially said they touched upon suprasegmental problems in varying degree. EXPT1 said she cared about all suprasegmental errors because she thought they impeded natural communication more and were easier to determine during communicative activities which she used in her classes a lot. Levis and Grant (2003) support this view and offer "three principles for instructors in communicative classrooms to follow: they suggest focusing primarily on suprasegmentals (e.g., thought groups, intonation, contrastive stress) with some attention to segmentals; ensuring that speaking is the main focus in the class" (as cited in Derwing and Munro, 2015, p. 97). However, the classroom behaviour of EXPT1 was not in alignment with her classroom practices since she never provided CF on suprasegmental errors despite the principal communicative focus in her lessons. On the other hand, EXPT1 told she generally did not care about sentence-level suprasegmental errors such as intonation or sentence stress, but she stated that she worked on word stress issues, thinking that it was an essential part of word-level pronunciation corrections. Nevertheless, the observational data revealed that her reported beliefs regarding word stress errors were inconsistent with her actual practices since she usually worked on issues like problematic sounds or mispronounced syllables. These results are in agreement with those obtained by Buss (2016) and Couper (2019). In those studies, it was also seen that the teachers mostly tended focus on the mispronunciation of word-level features such as individual sounds, syllables, and suffixes. Foote et al. (2016) also obtained a similar result and indicated that teachers usually targeted segmental problems more when compared to suprasegmental ones. According to Foote et al. (2016), there are several possible explanations for this. A possible explanation might be that segmental errors are more salient and easier to correct because they are connected to a single lexical item and do not span several words, phrases, or clauses. Therefore, they point out that that teachers may simply be unable to notice errors related to suprasegmental errors. Another explanation is that teachers may lack knowledge and confidence about focusing on suprasegmental features (Burgess & Spencer, 2000; Derwing, 2003; Foote et al., 2011 as cited in Foote et al., 2016) because addressing those features usually requires the use of a specialized terminology. However, it may not be reasonable to use these explanations to justify teachers' tendency to neglect suprasegmental problems because there also studies proving the significance of

suprasegmental features for both intelligibility (Derwing, 1998) and comprehensibility (Saito & Saito, 2017; Dlaska and Krekeler, 2013). These may suggest that it is crucial to inform teachers about the key role of attending to suprasegmental problems in their classes. It is also of great importance that teachers equip themselves with necessary knowledge and skills so that they can feel confident about focusing on problems linked to suprasegmental features.

Another important finding was that there were similarities and differences between the participants in terms of the way they treated pronunciation errors. There were also consistencies and inconsistencies between their beliefs and practices regarding the tools and techniques they used for corrections. EXPT1 mainly used reformulations, namely implicit recast and explicit correction and never used prompts although she initially said she employed elicitation and clarification request. EXPT2, on the other hand, used reformulations in the form of implicit recast and prompts in the form of elicitation and clarification request, which was in parallel with her initial comments. Implicit recast was by far the most commonly used technique by both participants, which was also the case in other studies investigating the use of oral CF in second language classrooms (Lyster, Saito & Sato, 2013) and the ones examining teachers' cognition of providing CF particularly on pronunciation (Couper, 2019). However, some previous studies suggested that the excessive use of implicit recast failed to improve learners' pronunciation unless it was used in combination with an explicit cue (Lyster, 1998) or a prior form-focused instruction (Saito & Lyster, 2012). According to Loewen and Philp (2006), recasts can be both implicit and explicit, and they argue that the more explicit recasts are, the more effective they are. That is, they claim that learners' uptake and subsequent use may be enhanced with the phrasal, prosodic, and discoursal cues provided by the teacher while recasting. For example, when teachers recast by stressing the words or syllables, or by using a declarative intonation, this helps successful uptake. Similarly, Sheen (2006) propose that it is more likely to see uptake and repair when recasts are made linguistically and pragmatically salient to learners. Although neither of the teachers employed recasts in this way in their observed classes, both of them constantly complained about seeing no repair after the corrections. These findings may suggest that the participants might consider changing the way they use recasts, leaving their concerns about learner anxiety or time management aside. They might start using recasts along with explicit cues to increase the probability of successful repair because some students may be unable to recognize recasts. They may also fail to notice which aspect of pronunciation the teacher is targeting or even whether she is providing CF or not in a certain situation because it has been reported that it is much easier to point out learners' errors when the "recasting technique involve[s] an initial attention getting phase" (Doughty, 1999, p. 59). In order to reap the potential benefits of recasts, they may also get informed about different characteristics of recasts and learn about various ways of making recasts salient to students such as stressing or emphasizing the corrected phonological forms in order to get their attention.

Besides, what is surprising is that although the participants expressed polarized views about utilizing explicit correction for pronunciation errors, they exhibited similar classroom behaviour, and stayed away from using it as much as possible. EXPT1 formerly said that she rarely made explicit corrections considering learners' affective needs while EXPT2 thought that students had no problems with being corrected explicitly, so she told she frequently used it. Unlike EXPT1, EXPT2 added that she also corrected pronunciation errors through comparing similar sounding words explicitly. In the observed classes, it was seen that EXPT1 hardly ever used explicit correction, which was in alignment with what she previously said, but EXPT2 neither made a single explicit correction nor overtly compared similar sounding words. However, according to Mackey et al. (2007), learners perceive explicit correction more accurately when compared to recasts. In a research study, they found that learners were able to understand teachers' intentions more easily when CF was provided explicitly, especially when the linguistic target of the CF was phonological. In the light of this, it is possible that some students may need explicit correction to understand teacher's intention; that is, they need to be aware that she is making a correction on their pronunciation. Otherwise, they keep making the same error again and again. Moreover, it is suggested that recasts might be perceived as a confirmation of meaning when the instructional focus is not on the analysis of language but on the negotiation of meaning in a classroom (Nicholas, Lightbown, & Spada, 2001). This might be another reason for the persistent errors which the participants constantly complained of because they usually prioritized the conversational function of negotiation and mutual comprehension in their classes. In order to facilitate repair, they may also use explicit correction and subsequently encourage students to negotiate problems related to phonological forms and the nature of their errors because it has been reported that when the feedback includes negotiation, this "might place a demand on the learner directly involved in the utterance, requiring them to modify their utterances" (Mackey et al., 2007, p. 147). Therefore, the participants should not hesitate to utilize explicit correction, especially when faced with persistent errors.

Notwithstanding these, it is not implied that the participants should never benefit from implicit corrections. Alternatively, Pawlak (2013), depending on the results of his own study, argued that it was not quite apparent whether explicit correction was more effective than implicit correction despite the greater gains brought by the former in total. He noted that there might be other variables influencing the effectiveness of each way of correction such as the nature of the error or the individual profile of the learner receiving the correction. Considering these variables mentioned by Pawlak (2013), it might be suggested that the informants of this study may have failed to consider individual differences when correcting their students' pronunciation errors. Some students may really dislike receiving explicit correction owing to its distressing effect whereas others might fail to perceive implicit corrections thus prefer explicit ones. Therefore, the most reasonable decision for these teachers to make is to carefully pick either explicit or implicit correction depending on the situation or to mix the use of both in order to make sure their corrections appeal to all the students in their classes.

As stated before, EXPT1 never made use of prompts to correct pronunciation errors, yet EXPT2 used prompts proportionally more in the form of elicitation and clarification requests. However, studies which examined the effectiveness of CF types in classroom settings found that prompts were much more effective than recasts (Lyster & Saito, 2010). The reason behind this might be that the corrective purpose of recasts might cause ambiguity since they can both implicit and explicit. They can provide both positive and negative evidence, which may cause confusion on the part of learners (Nicholas, Lightbown & Spada, 2001). Recasting involves introducing more target-like forms to learners, which "may be perceived by the learner as another way to say the same thing (Long, 1996 as cited in Mackey, Gass, & McDonough, 2000, p. 491). This makes them fail to notice the modification, which consequently causes learners not to make an effort to modify their output after recasts. On the other hand, prompts such as elicitation and clarification requests provide only negative evidence and encourage students to produce modified output more (Sheen, 2004 as cited in Ellis, 2006a). Besides, when prompts are used, ambiguity is eliminated "by allowing students themselves to either self-correct or to correct their peers" (Lyster & Ranta, 1997, p. 57). That is, these types of CF help promote self- and peer correction by means of active engagement in the correction process. When studentgenerated repair is initiated through the use of prompts, this "provides opportunities for learners to proceduralize target-language knowledge that has already been internalized in declarative form" (Lyster, 1998, p. 58). This quality of prompts was mentioned by EXP2 in the interviews. She said she liked to use elicitation and clarification requests because they made it easier for her to make a transition to peer and self-correction, which was corroborated by the observational data. Unfortunately, prompts were never used by EXPT1, which perhaps led to lack of opportunities in terms of self- or peer correction in her classes. Even though EXPT1 adopted a student-centred approach and conducted mainly speakingoriented lessons, she was unable to promote neither peer nor self-correction in any of her observed classes although she formerly said that she liked to involve students in selfcorrection. This inconsistency occurred probably because she never attempted to employ prompts and used implicit recasts to correct most of the pronunciation errors. Nonetheless, Lyster and Saito (2010) indicate that teachers help students to draw on their own resources

for self-repair through prompting, but when teachers recast or provide explicit correction, the initiation and completion of a repair are performed by teachers themselves within a single move. The present study confirms the association between the use of prompts and peer and self-correction because the data showed that despite the teacher-centred approach and the major focus on reading and writing in her lessons, EXPT2 occasionally managed to involve the students in peer and self-correction through prompting elicitation and clarification requests while correcting their pronunciation errors. At times when she attempted to vary her correction techniques, not only the student receiving the correction but also the other students in the classroom actively engaged in the correction processes and they were encouraged to think critically about the pronunciation issues at hand.

Unfortunately, the other two CF techniques from the category of prompts, namely repetition of error and provision of metalinguistic clues, were never used by the participants, which was consistent with their initially reported beliefs. As for repetition of error, they were concerned about the probability that students could internalize the repeated incorrect phonological forms. Nevertheless, repetition of error has been found to be an effective technique leading to repair when it is used in combination with other correction techniques (Lyster, 1998). The participants were also worried that students could get confused when provided with metalinguistic clues. However, this is not necessarily the case. As introduced in the literature review, prompts include a range of different techniques. While clarification requests and repetition are categorized as implicit, elicitation and metalinguistic clues are on the explicit end of the continuum, and Ellis et al. (2006) argue that "metalinguistic explanation and recasts constitute best exemplars of explicit and implicit corrective feedback, as both are supported by previous research that shows them to be effective in promoting learning" (p. 355). All of these suggest that the participants' limited or no use of prompts for pronunciation corrections may bring about challenges since they have been proved to be much more effective than recasts in terms of achieving successful student repair. Not using prompts might also pose some restrictions on teachers in terms of initiating negotiation of form and promoting situations in which students themselves put an effort to work on their pronunciation problems through using their own resources. Therefore, they might need to keep an open mind about mixing and matching different techniques and vary the use of CF techniques at their disposal as much as possible according to their students' needs.

In addition to the six techniques in Lyster and Ranta's (1997) taxonomy of CF, the data analysis revealed that the participants also held certain views on some other tools used in the process of correcting pronunciation errors. These tools include the use of online dictionaries, phonemic symbols, and articulatory descriptions as well as drilling. They both expressed that they were in favour of benefiting from online dictionaries to correct

pronunciation errors, and their classroom practices were in alignment with their reported beliefs. It is true that online dictionaries are convenient as they speed up the search process and enables access to various features of words such as their definition, parts of speech, idioms including these words as well as their pronunciation. As Kent (2001) points out, "multimedia CD, Internet, and PC-based dictionaries allow students the experience of listening to a real native speaker, providing an appropriate language learning audio cue from which students may practice drill pronunciation" (p. 76). Keeping the relationship between pronunciation and orthography, seeing the shape of the words may be helpful in developing some visual awareness, which might sometimes be remembered more easily than auditory feedback (Acton, 1984). However, utilizing online dictionaries in the classroom may be risky and have some disadvantages. First, it may distract students, so they may lose their concentration and engage in irrelevant activities using their mobile phones. For example, when EXPT1 asked students to check the pronunciation of some words during her first set of classroom observations, one of the students started to play a football game on his mobile phone. Besides, she made this request in the middle of a speaking activity, which seemed to damage the flow of the communication. Second, it may not be applicable in every lesson. For instance, EXPT2 got help from online dictionaries while correcting pronunciation errors herself during the second set of classroom observations. However, she could not correct every pronunciation error in this way due to time constraints. These may suggest that making students use online dictionaries for erroneous words or utterances requires close monitoring and attention on the part of teachers. It also requires teachers to give training on which dictionaries to use and how to use them. Students may not know which dictionaries are high quality, so they may face some words pronounced artificially or incorrectly. They should also be trained on how to use online dictionaries not only for receptive tasks such as checking the meanings of words but also for productive tasks such as drilling the words using the audio pronunciation feature. This may help students overcome their "absorbing sponge syndrome" (Weschlet & Pitts, 2000). Besides, adopting online dictionary use as a systematic approach to correct pronunciation errors may not be a good idea. Instead, it might be a better solution to encourage students to use it mostly as a self-study tool.

For both teachers, it was unnecessary to use phonemic symbols or to make articulatory descriptions because they thought employing online dictionaries with that purpose was much more effective and timesaving. Correspondingly, they never used these tools in the observed classes. However, Bai & Yuan (2019) reported that most of the teachers in their study viewed IPA as a useful and handy tool that their students could make use of to eliminate the negative effects of their local accent on their pronunciation and "reach the standard" (p. 138). They added that IPA could help students to become more

autonomous in the long run thanks to being able to employ dictionaries independently instead of relying on their teachers for correct pronunciations. As these teachers suggest, learning about the basic phonemic symbols might contribute to better acquisition of English sounds by learners, especially visual ones, and it may also enable them to be more self-reliant in terms of working on their pronunciation issues. Gordon (2020) also suggests that, as previously stated in the literature review, it might actually be useful for teachers to use phonetic transcription and terminology and to create a common metalanguage of English pronunciation, which may help ease the pronunciation work in the class. Therefore, teachers might consider making use of their own phonemic charts in their classrooms without waiting it to be a school policy and they can refer to it when there is a pronunciation error. This might help students easily learn the symbols in time and can be much more beneficial than one can imagine in the long run.

Although the participants held opposing views about drilling the corrected words, both of them indicated that they would make use of it at varying degrees, which was also consistent with their classroom behaviour. As Harmer (2007) states, "the degree to which teachers use repetition and drilling depends to a large extent on their judgement of when it is appropriate and when it is not" (p. 209). For EXPT1, drilling was not a suitable tool to aid the process of correcting pronunciation errors, so she rarely used it. She occasionally used individual drilling so as to ascertain how well certain problematic sounds and words were pronounced by each student. EXPT1 emphasized the importance of noticing in acquiring correct pronunciation forms, but she seemed to be confused about how to make things relevant and noticeable for students. According to Kelly (2000), noticing is indeed a crucial concept for pronunciation, and she argues that although making pronunciation features relevant to students at the presentation stage makes them more noticeable, it is also significant to revise and recycle these features. Therefore, drilling could serve as a great tool for revising and recycling when used immediately after pronunciation corrections and might actually improve retention and recall through making these errors more salient. For EXPT2, on the other hand, drilling was of great importance; therefore, she used it in many different ways (i.e., individual drilling, choral drilling, and peer drilling). When the error was made by a single student, she chose individual drilling. When she did not want to put students on the spot, she preferred to use choral drilling. When she aimed to boost students' motivation, she opted for peer drilling. These different patterns of drilling added a lot of variety to her lessons as well as increasing student engagement. These might suggest that the first participant might be less familiar with various kinds of drilling and the fact that they are actually used with different purposes in different situations. It is also possible that her personal opinions of this technique lead her students be devoid of its potential benefits. For this reason, it might be judicious to learn about and experiment with different ways of drilling to make pronunciation errors recognizable for learners having different learning styles instead of expecting them to realize these errors on their own.

As can be understood, the participants held certain views about which pronunciation errors to correct or how to correct them, and some of these reported beliefs matched their actual classroom practices whereas others did not. Although it is important portray what teachers think and do, it is also of utmost importance to reveal the factors influencing these processes. The current study found that the teachers' cognitions were influenced by certain contextual and personal factors. The contextual factors included student profile, syllabus, and supplementary materials. As for student profile, the participants mentioned being challenged by fossilization brought as a natural outcome of their students' advanced age and their low proficiency of English language. These results are in keeping with previous studies, which stated that age and proficiency level were among the many other factors influencing the efficacy of the CF provided for them by the teacher (Lyster & Ranta, 1997; Lyster & Saito, 2010; Sato, 2011). These studies reported that young learners were more likely to benefit from CF as they were more sensitive to it (Lyster & Saito, 2010), and teachers were able to push students with high level of proficiency more in their output without needing to depend solely on modelling techniques such as recasts (Lyster & Ranta, 1997). Some concerns were also expressed about having students who were reluctant to speak due to their low proficiency level, which made it demanding to identify students' pronunciation errors. According to Guiora (1972), language ego is at the centre of the language learning process, and it affects learners' attainment in pronunciation to a larger degree when compared to other skill areas (as cited in Celce-Murcia et al., 1996). For this reason, these teachers should promote a positive classroom environment where even the students with strong egos will eagerly produce the language instead of keeping their silence with the fear of damaging their self-image. Regarding fossilization, it is usually, although not necessarily, regarded as irreversible and Selinker (1972) defines it as "linguistic items, rules, and subsystems which speakers of a particular NL will tend to keep in their IL relative to a particular TL, no matter what the age of the learner or amount of explanation and instruction he receives in the TL" (p. 2015). This might be seen as a justification for the participants' beliefs that it is virtually impossible to fix fossilization, but there might be some things that can be done about the issue. For example, Derwing and Munro (2015) attract the attention to individual variability and advise not to expect learners to make the same pronunciation errors with the same frequency. Some learners may have no idea about their own pronunciation problems at all (Derwing, 2003); therefore, the teachers should not be intimidated by persistent fossilized errors, perceive them as a natural constituent of students' interlanguage phonology. They might try out different strategies to deal with individual needs such as getting help from diagnostics (Couper, 2019). In addition to these,

both teachers claimed that their C level students were not actually C level students since they lacked some basic skills and abilities necessary to be intermediate level learners. Darcy, Ewert and Lidster (2012) suggests focusing on segmentals, spelling and basic intonation at beginner level classes where students have little language to work with, and at intermediate level classes, they suggest working on prosodic aspects of pronunciation such as word stress and sentence stress (as cited in Derwing and Munro, 2015). However, the participants were unable to this claiming that their students already had problems with the most basic sounds despite being in an intermediate-level class. This finding may suggest that the end-of-module tests prepared and conducted by the institution might be re-evaluated and adjusted after getting other teachers' feedback at the institution as well.

Course syllabus is the next factor having an impact on the participants cognitions of providing CF on pronunciation. The name of the course they were teaching during the data collection was reading and writing, but as previously mentioned, speaking skill was also included in the course syllabus and the teachers were responsible for working on subskills related to it. However, they were unable to do so due to lack of time caused by the lengthy content scope of the syllabus, which was also an issue for the teachers in previous studies on pronunciation teaching (Baker, 2011; Couper, 2016). They seemed to struggle a lot while trying to incorporate pronunciation into a reading and writing course and expressed their wish for a stand-alone pronunciation or listening and speaking course. However, irrespective of the nature of the course, Derwing and Munro (2015) suggest that "[d]epending on program constraints and the identified needs of the students, teachers should aim to find time each day for some pre-planned activities, as well as regular corrective feedback on aspects of students' pronunciation that are problematic for intelligibility or comprehensibility" (p. 105). That is, the real problem experienced by the participants might be that they do not make any plans regarding how to work on pronunciation errors. Rather, they try to handle pronunciation issues swiftly as they emerge during the lesson. They frankly stated that reading and writing skills were much more important for them, and pronunciation was just a peripheral subskill. Foote et al. (2011, 2016) had also reported that teachers neglected pronunciation thinking that it was not as important as grammar, vocabulary, or skills such as reading or writing. Lack of time was the common excuse of both participants of this research for not being able to work on certain aspects of pronunciation such as suprasegmental features or using different correction tools such as phonemic symbols. Nonetheless, they may be unable to do these owing to the fact that they actually feel intimidated by pronunciation work thus avoid making any plans related to it. Furthermore, some actions might be taken by the institution as well. For instance, clear gains have been reported in Couper's (2003) study, which was designed as an action research project and included implementing a pronunciation sub-syllabus within the overall syllabus of a general English class. This study has produced positive results such as increased pronunciation awareness on the part of learners as well as improved accuracy in their pronunciation. This may suggest that it might be a good idea for the institution to design the syllabus in such a way that it clearly guides teachers about pronunciation instruction and correction. They may also talk to students regarding their pronunciation problems since needs analysis is an integral part of syllabus design. It may not be possible for every institution to have a separate listening and speaking course, but they may try to prevent teachers from neglecting pronunciation by means of making small adjustments on their existing syllabus or prepare new ones.

Supplementary materials emerged as another factor influencing the teachers' cognitions about correcting pronunciation errors. They mentioned that speaking materials did not ease their job of focusing on pronunciation issues because pronunciation did not have a place in them. They expressed a desire for better materials including pronunciation work. This result mirror the findings of the previous studies that have examined teachers' beliefs regarding pronunciation instruction (Breitkreutz et al., 2001; MacDonald, 2002). Teachers in those studies expressed their need and desire for better pronunciation materials with an interactive nature and curriculum development related to pronunciation. The participants in the current study said off-the-record that due to lack of time, they never intended to prepare their own materials to fix the problematic areas in their students' pronunciation. In his study, MacDonald (2002) found that the teachers wanted 'off-the-shelf' materials which they could directly take into their classrooms with little or no adaptation or preparation, and he added that they were unable to integrate pronunciation work regarding its different aspects into their lessons through adapting their existing materials. This also seems to be the case for the participants of this study, so the institution might provide them with some in-house training and guidance on how to exploit existing speaking materials and use them for pronunciation work in different ways.

Besides, the participants expressed their need for more listening practice in materials to be able to work on pronunciation errors more effectively. They pointed out that the lack of sufficient listening practice at the institution was a much serious problem and it had a profound impact on pronunciation since they thought it was not possible to pronounce words or sentences correctly without hearing them in authentic listening materials. In accordance with the participants' views, Nation and Newton (2009) claim that "we often take the importance of listening for granted, and it is arguably the least understood and most overlooked of the four skills (L, S, R and W) in the language classroom" (p.37), yet it is fairly essential for accurate pronunciation because "listening comprehension and pronunciation are interconnected in speech" (Gilbert, 1987, as cited in Baker, 2014, p. 148). Besides, these beliefs of the participants are in agreement with the beliefs of the teachers in Baker's

(2014) study which showed that teachers held strong views about the necessity of listening perception for successful phonological production. They reported that listening discrimination activities were very useful in producing comprehensible speech. This positive link between listening perception and improved phonetic production was also reported in another research as well (Bradlow, Pisoni, Yamada, & Tohkura, 1997 as cited in Baker, 2014). Fraser (2001) also stated that critical listening was of paramount importance since it provided the learners with the opportunity to compare and contrast correct pronunciation with incorrect ones. These may suggest that asking for more listening materials might be a justifiable demand. Therefore, material developers might consider developing listening materials aiming particularly at solving common pronunciation problems through improving learners' listening perception and discrimination abilities. This may also help teachers deal with pronunciation errors more systematically without spending so much time on material search, which is also one of the reasons behind their negligence of pronunciation work.

The participants' cognitions were also found to be influenced by certain personal factors including their previous learning and teaching experiences as well as their lack of confidence. The teachers in the present study have learned English as a second language, so they have their own language learning trajectories which influences their instructional practices in various ways. As such, their decisions regarding correcting pronunciation errors turned out to be made in the light of their schooling, professional education, and their teachers in the past. As Kennedy (1990) states, "[t]eachers acquire seemingly indelible imprints from their own experiences as students and these imprints are tremendously difficult to shake" (p. 17 as cited in Bailey et al., 1996, p. 11). For instance, EXPT1 disliked getting corrections on her pronunciation while learning English, so she avoided providing CF on her students' pronunciation errors as much as possible. EXPT2, on the other hand, remembered corrections made on her pronunciation as positive experiences and viewed them as major contributions to her learning, which made her correct most of her students' pronunciation errors. This finding is consistent with that of Ellis (2006b) who found that "experiential knowledge formed by different kinds of L2 learning (formal, informal, childhood, adult, elective, or circumstantial bilingualism) form[ed] a powerful resource underpinning ESL teachers' professional knowledge and beliefs about language teaching." Besides, both teachers seemed to have influenced by their teachers in the past. Lortie (1975) referred to this influential process as teachers' "apprenticeship of observation" in which they observe their own teachers as students for very long period of time and form powerful imprints (as cited in Ellis, 2006b). EXPT1 used to have a beloved teacher by whom she did not remember being corrected explicitly, which made her feel very comfortable while producing the language. With the hope of evoking such feelings in her learners, she herself adopted a similar approach and usually preferred implicit ways of correcting pronunciation errors.

However, EXPT2's teachers in the past avoided working on pronunciation, which she perceived as a hurdle on the way of developing her pronunciation; therefore, she adopted an opposite approach in her own classrooms and corrected pronunciation errors as much as possible. These also accord with an earlier study, which examined an experienced EFL teacher's narratives about her positive and negative learning experiences with her teachers in the past and illustrated how these stories and the emotions tied to them continued to affect her present instructional practices in diverse and complex ways after 19 years of teaching (Davin, Chavoshan & Donato, 2018). In a similar vein, the language learning memories of the teachers in the current study also seem to have become a significant element of their identity as a teacher. Obviously, they use these memories as a reference point for themselves and make instructional decisions based on the feelings and thoughts provoked by them.

The present study also produced results regarding how participants' professional education helped shape their cognitions of providing CF on pronunciations. Previous studies have already shown that beliefs play a crucial role in teacher education and professional development (Borg, 2006, 2011) and beliefs "may be the clearest measure of a teacher's professional growth" (Kagan, 1992, p. 85). Just like beliefs regarding other aspects of L2 instruction, CF beliefs may also be influenced by teacher education activities and teachers' reflections on them (Mackey, Polio, & McDonough, 2004). For instance, Ha and Murray (2021) investigated the impact of a 14-week professional development program on teachers' beliefs about giving oral CF and found that although their beliefs as to the importance, targets and sources of CF did not change much, there were major changes in their beliefs related to CF types and timing. Teachers showed more willingness to use different types of CF and eagerness to provide immediate CF more often. The findings of the current study, like those of Ha and Murray's (2021) study, confirm the association between teachers' learning and their beliefs. The knowledge EXPT1 gained on the ineffectiveness of pronunciation corrections during her doctoral studies resonated with her a lot, so she decided to keep the number of pronunciation corrections at bare minimum. EXPT2, on the other hand, attended a professional development activity linked to phonology, but she never attempted to utilize CF types requiring phonological knowledge in her classes since she herself never got help from them to improve her own pronunciation. A possible explanation for these findings might be that when the things they learned matched with their own language learning experiences, they decided to re-evaluate and alter their practices accordingly, but when they did not, they kept using the very same techniques and methods which were beneficial for themselves as a language learner. All these findings related to the participants' learning experiences may suggest that their cognitions include emotional and evaluative elements, which lead them to categorize certain correction techniques or the whole concept of 'correction' as positive or negative depending on their interpretation of them. These experiences do not function as static entities but dynamic ones, which come into play and are reconstructed every time these teachers need to take an action in class. Therefore, teachers should be encouraged to involve in objective self-reflection to make sure their instructional decisions based on personal implicit theories do not run counter to their students' needs. Just as Feiman-Nemser (1983) puts forward, "[u]nless future teachers get some cognitive control over prior school experiences, it may influence their teaching unconsciously and contribute to the perpetuation of conservative school practices" (p. 11).

Another personal factor affecting the participants' cognitions was their prior teaching experiences. It was seen that they tended to correct certain pronunciation errors more often due to their accumulated knowledge of common errors. According to Gatbonton (2008), this result may be explained by the fact that experienced teachers' way of thinking and classroom performance tend to be more stable and do not show much variability when compared to novice teachers since "they already have had ample opportunities to deal with recurring issues and, consequently, have had occasions to retain what works and eliminate what does not" (p. 162). Typical use of familiar corrections tools such as comparing similar sounding words also emerged as an impact of their experience on their classroom behaviour. This finding could be attributed to the fact that "expert teachers have better improvisational skills: They have established a repertoire of routines that they can draw on in response to unpredicted events, and they can generate examples, illustrations, and explanations with automaticity and effortlessness" (Tsui, 2009, p.193). However, teachers' actions and their observable effects on student learning is not linear and unidirectional but rather cyclical or circular (Fang, 1996). That is, teachers' actions influence students' behaviour, which in turn influences teacher behaviour. In fact, teachers' instructional decision-making processes are influenced by students' reaction to the task or activity or their display of target language knowledge (Li, 2017), and it is likely that the most frequently made decisions based on students' tendencies are accumulated by teachers and added to their pedagogical knowledge base over the years, shaping their cognitions at the same time. The participants of the current study were also under the influence of the usual student behaviour they had seen in their classrooms before while making decisions as to correcting pronunciation errors concerning prosodic aspects of pronunciation such as word stress. They had previously experienced and seen that word stress was a rather 'abstract' concept for students and they could not benefit from corrections made on it, so they were reluctant to work on word stress and usually ignored errors linked to it. These may suggest that it might be a good idea for the teachers to make sure their experiences work in favour of them, not against them. As they are the ones who are supposed to do the 'leading', it might be better not to let learners' preferences or inabilities indirectly influence how they should ideally be addressing and treating pronunciation errors, regardless of students' reaction to it.

The participants' lack of confidence emerged as the last personal factor influencing their cognitions of providing CF on pronunciation. The experienced teachers in the present study were also hesitant to work on pronunciation errors due to being a NNEST. Non-native teachers might be concerned about teaching pronunciation because they do not perceive themselves as good models for pronunciation owing to their foreign accent (Golombek & Jordon, 2005). This confidence issue had already been reported in other studies examining teachers' cognitions about teaching pronunciation (Baker, 2011; Foote et al., 2011; Couper, 2016), and there is also research in which teachers referred to their non-native statues as an explanation for their lack of confidence as well (Huensch, 2019). The problem seems to persist when it comes to working on pronunciation errors, especially suprasegmental ones. Both experienced teachers were anxious about dealing with suprasegmental errors and using certain correction tools such as using the phonemic symbols. These results agree with the findings of other studies in which teachers indicated that they avoided teaching features of pronunciation such as stress or intonation due to being uncertain about their own pronunciation or lacking necessary knowledge to work on them (Couper, 2016, 2017). It might be suggested that the participants' lack of knowledge as to certain aspects of pronunciation is perhaps the biggest reason for their lack of confidence since it is a problem faced even by experienced and well-trained teachers (Foote et al., 2011). Thus, the participants may need to equip themselves with necessary knowledge and practical skills to be able act more comfortably and confidently while working on pronunciation errors in the classroom. In addition, they should leave their concerns about their NNEST status because it has been shown that knowledgeable teaching practices are much more important than native-like pronunciation in terms of developing comprehensibility in learners' speech (Levis et al., 2016).

Pedagogical Implications

The findings of the current research provide valuable insights into experienced teachers' cognitions of providing CF on pronunciation. They also have significant implications for the understanding of how EFL teachers' pronunciation-related CF practices might be improved. First and foremost, teachers should seriously consider teaching the key aspects of pronunciation systematically in their general language classes if they expect to benefit from their CF practices since it forms the basis for the efficacy of CF (Couper, 2019). They need to make sure that pronunciation is not put at the backburner and try to integrate

it into their lessons as much as possible. Allocating time to teach pronunciation through its own terminology and concepts may help learners to have a better grasp of the pronunciation system of English and make more sense of the corrections made on their own pronunciation. It is also significant for them to be aware that it is all right to address pronunciation issues both in accuracy and fluency activities. Teachers first need to clear up their misunderstandings about pronunciation through research instead of taking up a negative stance towards providing CF on pronunciation.

Also, learner profile is crucial while choosing the most appropriate CF feedback technique for our learners. Teachers should take individual differences into consideration such as learners' age, proficiency level, perceptual abilities, affective needs, and attitudes towards pronunciation. Teachers might be well-aware of the relationship between learners' perception and production and its crucial role in increasing the effectiveness of CF, yet they may not know how to guide the learners on how to improve their noticing abilities. Therefore, teachers might need to get informed about different learning strategies increasing learners' recognition of pronunciation corrections and pass this knowledge to their students, explaining them the importance of intelligible pronunciation for both comprehension and production.

In addition, it might be useful for teachers to be aware of different characteristics and qualities of each CF technique. When they lack knowledge about these qualities, they may tend to categorize some of these techniques as disadvantageous despite the potential gains they may bring. This causes them to rely on certain correction techniques more than necessary. With regard to perceptual enhancement, teachers may also need to learn about various ways of making implicit CF techniques more explicit to learners so that they do not miss any of the corrections. Therefore, teachers should be encouraged to vary their correction techniques while working on pronunciation issues to meet learners' needs, keeping in mind that a technique that does not work in a situation might work in another one.

Moreover, the evidence from this study suggests that no matter how much experience teachers have, they may still lack knowledge in certain areas of pronunciation. It is essential for teachers to involve in regular self-reflection to find out these areas and work on them because this study strengthens the idea that prosodic issues are usually ignored by teachers due to lack of confidence brought by lack of knowledge. Therefore, teachers should increase their knowledge linked to this aspect of pronunciation, and if necessary, they should get guidance and support regarding how to deal with suprasegmental problems of their learners so that they are no longer neglected.

Finally, curriculum developers and syllabus writers at tertiary level institutions may consider adjusting their programs in such a way that it allows teachers to work on pronunciation more comfortably. Having a separate listening/speaking lesson might be a good idea since teachers may experience time management problems when trying to deal with many skills and subskills at the same time. If this is not possible, they may increase the number of contact hours per week and clearly indicate the pronunciation-related work that teachers are supposed to do in the syllabus. This systematic and standardized way of teaching pronunciation may also lead learners to take their pronunciation problems more seriously and increase their awareness of pronunciation corrections.

Suggestions for Further Research

Despite these promising results, questions remain. Further research should be undertaken to investigate the factors influencing the efficacy of CF. The crucial role played by learners' noticing abilities in the process has already been acknowledged in the literature, but more research is needed to identify other determining factors since sometimes even the efficacy of CF provided in the same classroom may change. Besides, most of the studies conducted on teachers' cognitions of CF concerned oral CF, including corrections made on all aspects of the language such as grammar and vocabulary. A further study with more focus on teachers' cognitions of providing CF specifically on pronunciation is therefore suggested. In this way, teachers' concerns and issues related particularly to pronunciation may be revealed.

There is also abundant room for further progress in determining the possible benefits and drawbacks of CF techniques at teachers' disposal. Most of the previous CF research conducted in the literature has been on either recast or explicit correction. However, there are still many unanswered questions about other techniques such as repetition of error or provision of metalinguistic feedback and the efficiency of these on different skills or subskills such as pronunciation. Such research may also help teachers to make more informed decisions in the classroom.

Conclusion

This qualitative study was undertaken to investigate the development of experienced EFL teachers' cognition as to providing CF on pronunciation. The findings reported here may shed new light on this line of inquiry examining teachers' beliefs, attitudes, and feelings about correcting pronunciation errors and the influence of these on their actual teaching practices. This research is important in furthering our understanding of the role of EFL teachers' cognitions in determining their instructional decisions. Throughout the study, the factors which contributed to the construction of teachers' cognitions were also examined. The present study offered a framework for the exploration of issues and concerns

experienced by teachers related to how to deal with learners' pronunciation problems. Although the findings cannot be generalized to all language teachers, they add to the growing body of research in pronunciation teaching and may be useful for both teachers, teacher educators and curriculum designers.

References

- Acton, W. (1984). Changing Fossilized Pronunciation. *TESOL Quarterly, 18*(1), 71–85. https://doi.org/10.2307/3586336
- Bai, B., & Yuan, R. (2019). EFL teachers' beliefs and practices about pronunciation teaching. *ELT Journal, 73*(2), 134-143.
- Baker, A. A. (2011). *Pronunciation pedagogy: Second language teacher cognition and practice.* Unpublished PhD dissertation. Georgia State University, GA.
- Baker, A. (2014). Exploring teachers' knowledge of second language pronunciation techniques: Teacher cognitions, observed classroom practices, and student perceptions. *TESOL Quarterly*, 48, 136-163.
- Baker, A., & Burri, M. (2016). Feedback on second language pronunciation: A case study of EAP teachers' beliefs and practices. *Australian Journal of Teacher Education*, 41(6), 1-19.
- Basturkmen, H., Loewen, S. & Ellis, R. (2004). Teachers' stated beliefs about incidental focus on form and their classroom practices. *Applied Linguistics*, *25*(2), 243-272.
- Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods.* Boston: Pearson Allyn & Bacon.
- Borg, S. (1999). Teachers' theories in grammar teaching. *ELT Journal, 53,* 157-167.
- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, *36* (2), 81-109.
- Borg, S. (2006). *Teacher cognition and language education: Research and practice.* London: Bloomsbury.
- Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System, 39*(3), 370-380.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77-101.
- Breitkreutz, J., Derwing, T.M., & Rossiter, M.J. (2001). Pronunciation teaching practices in Canada. *TESL Canada Journal, 19,* 51-61.
- Brooks, N. (1960). *Language and Language Learning: Theory and Practice*. New York: Harcourt Brace Jovanovich, Inc
- Brown, D. (2016). Type and linguistic foci of oral corrective feedback in the L2 classroom: A meta-analysis. *Language Teaching Research*, *20*(4), 436-458.

- Burri, M. (2016). "It's been a real eye-opener": Learning to teach English pronunciation from a teacher cognition perspective. PhD thesis. NSW, Australia: University of Wollongong.
- Burns, A. (2006). Integrating research and professional development on pronunciation teaching in a national adult ESL program. *TESL Reporter, 39*(2), 34-41.
- Burns, A., Freeman, D., & Edwards, E. (2015). Theorizing and studying the languageteaching mind: Mapping research on language teacher cognition. *Modern Language Journal, 99*, 585-601.
- Buss, L. (2016). Beliefs and practices of Brazilian EFL teachers regarding pronunciation. *Language Teaching Research*, *20*(5), 619–637.
- Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D. C. Berliner (Ed.), *Handbook of educational psychology* (pp. 709-725). New York: Macmillan.
- Celce-Murcia, M., Brinton, D., & Goodwin, J. (1996). *Teaching Pronunciation: A Reference for Teachers of English to Speakers of Other Languages.* Cambridge: Cambridge University Press.
- Chamberlin, C. R. (2000). TESL degree candidates' perceptions of trust in supervisors. *TESOL Quarterly*, *34*(4), 653–672.
- Clandinin, J. D., & Connelly, M. F. (1987). Teachers' personal knowledge: What counts as personal in studies of the personal. *Journal of Curriculum Studies, 19*(6), 487-500.
- Clark, C. M. & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (ed.), Handbook of research on teaching (3rd ed., pp. 255-96). New York: Macmillan.
- Clark, C. M., & Yinger, R. J. (1977). Research on teacher thinking. *Curriculum Inquiry, 7*(4), 279-304.
- Cohen, L., Manion, L. & Morrison, K. (2000). *Research methods in education* (5th ed.). London: Routledge Falmer.
- Corder, S. P. (1967). The significance of learner's errors. *International Review of Applied Linguistics, 5,* 161-170.
- Couper, G. (2003). The value of an explicit pronunciation syllabus in ESOL teaching. *Prospect, 18,* 53-70.
- Couper, G. (2006). The short and long-term effects of pronunciation instruction. *Prospect, 21*(1), 46-66.

- Couper, G. (2016). Teacher cognition of pronunciation teaching amongst English language teachers in Uruguay. *Journal of Second Language Pronunciation, 2*(1), 29–55.
- Couper, G. (2017). Teacher cognition of pronunciation teaching: Teachers' concerns and issues. *TESOL Quarterly*, *51*(4), 820-843.
- Couper, G. (2019). Teachers' cognitions of corrective feedback on pronunciation: their beliefs, perceptions and practices. *System, 84,* 41–52.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (2nd ed.). Thousand Oaks, CA: SAGE.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approach* (5th ed.). Los Angeles: SAGE.
- Çapan, S. A. (2014). Pre-service English as a foreign language teachers' belief development about grammar instruction. *Australian Journal of Teacher Education*, 39(12), 131–152.
- Davin, K. J., Chavoshan, I., & Donato, R. (2018). Images of past teachers: Present when you teach. *System, 72,* 139-150.
- Derwing, T. (2003). What Do ESL Students Say About Their Accents? *Canadian Modern Language Review, 59*(4), 547–567.
- Derwing, T. M. & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly, 39,* 379–97.
- Derwing, T., & Munro, M. (2015). *Pronunciation fundamentals: Evidence-based perspectives for L2 teaching and research.* Amsterdam, The Netherlands: John Benjamins.
- Derwing, T., Munro, M., & Wiebe, G. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning, 48,* 393-410.
- Dlaska, A., & Krekeler, C. (2013). The short-term effects of individual corrective feedback on L2 pronunciation. *System, 41,* 25-37.
- Doughty, C. (1999). The cognitive underpinnings of focus on form. *University of Hawai'i* Working Papers in ESL, 18,1–69.
- Dörnyei, Z. (2007). Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies. Oxford: Oxford University Press.
- Duff, P. A. (2008). Case study research in applied linguistics. New York: Lawrence Erlbaum.

- Elbaz, F. (1983). *Teaching thinking: A study of practical knowledge.* New York: Nichols Publishing Company.
- Ellis, R. (2006a). Researching the effects of form-focused instruction on L2 acquisition. *AILA Review, 19,* 18–41.
- Ellis, E. M. (2006b). Language learning experience as a contributor to ESOL teacher cognition. *TESL-EJ*, *10*(1), 1-20.
- Ellis, R. (2009). Implicit and explicit learning, knowledge, and instruction. In R. Ellis, & S. Loewen (Eds.), *Implicit and explicit knowledge in second language learning, testing, and teaching* (pp. 3-25). Clevedon, UK: Channel View Publications.
- Ellis, R., Basturkmen, H., & Loewen, S. (2001). Learner uptake in communicative ESL lessons. *Language Learning*, *51*, 281–318.
- Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. Studies in Second Language Acquisition, 28(3), 339– 368.
- Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research, 38* (1), 47–65.
- Farrell, T. S. C., & Lim, P. C. P. (2005). Conceptions of grammar teaching: A case study of teachers' beliefs and classroom practices. *TESL-EJ*, 9 (2), 1–13.
- Feiman-Nemser, S. (1983). *Learning to teach.* East Lansing: Institute for Research on Teaching, Michigan State University.
- Fenstermacher, G. D. (1994). The knower and the known: The nature of knowledge in research on teaching. *Review of research in Education, 20,* 1-54.
- Flege, J.E. (1995). Second-language speech learning: Theory, findings, and problems. In
 W. Strange (Ed.), Speech perception and linguistic experience: Theoretical and methodological issues (pp. 233–277). Timonium, MD: York Press.
- Foote, J. A., Holtby, A. K., & Derwing, T. M. (2011). Survey of the teaching of pronunciation in adult ESL programs in Canada, 2010. *TESL Canada Journal, 29*(1), 1-22.
- Foote, J., Trofimovich, P., Collins, L., & Soler Urzúa, F. (2016). Pronunciation teaching practices in communicative second language classes. *Language Learning Journal*, 44(2), 181-196.
- Fraser, H. (2001). *Teaching pronunciation: A handbook for teachers and trainers.* Sydney, Australia: TAFE NSW Access Division.

- Gass, S. M. (1991). Grammar instruction, selective attention, and learning. In R. Phillipson,
 E. Kellerman, L. Selinker, M. Sharwood Smith, & M. Swain (Eds.), *Foreign/second language pedagogy research* (pp. 124-141). Clevedon, UK: Multilingual Matters.
- Gass, S. (1997). *Input, interaction, and the second language learner.* Mahwah, NJ: Lawrence Erlbaum.
- Gatbonton, E. (2008). Looking beyond teachers' classroom behaviour: novice and experienced ESL teachers' pedagogical knowledge. *Language Teaching Research, 12*(2), 161–182.
- Gooch, R., Saito, K., & Lyster, R. (2016). Effects of recasts and prompts on L2 pronunciation development: Teaching English /r/ to Korean adult EFL learners. System, 60, 117-127.
- Golombek, P., & Jordan, S. (2005). Becoming 'black lambs' not 'parrots': A post-structuralist orientation to intelligibility and identity. *TESOL Quarterly, 39,* 513–533.
- Golombek, P.R. (2011). Dynamic assessment in teacher education: Using dialogic video protocols to intervene in teacher thinking and activity. In: K.E. Johnson, & P.R. Golombek (Eds.). Research on second language teacher education: A sociocultural perspective on professional development (pp. 121–135). New York: Routledge
- Gordon, J. (2020). Implementing explicit pronunciation instruction: The case of a non-native English-speaking teacher. *Language Teaching Research.* EPUB ahead of print on August 20, 2020. <u>https://doi.org/10.1177/1362168820941991</u>
- Ha, X. V., & Murray, J. C. (2021). The impact of a professional development program on EFL teachers' beliefs about corrective feedback. System, 96, 1-14. <u>https://doi.org/10.1016/j.system.2020.102405</u>
- Harmer, J. (2007). The Practice of English Language Teaching (4th ed.). Harlow: Longman.
- Heigham, J., & Croker, R. A. (2009). *Qualitative research in applied linguistics: A practical introduction.* Houndmills, Basingstoke, Hampshire [England: Palgrave Macmillan.
- Hendrickson, J. (1978). Error correction in foreign language teaching: Recent theory, research, and practice. *Modern Language Journal, 62,* 387-398.
- Johansson, R., (2007). On Case Study Methodology. [Online] retrieved from: https://www.emerald.com/insight/content/doi/10.1108/OHI-03-2007-B0006/full/pdf
- Kagan, D. M., (1992). Implications of research on teacher belief. *Educational Psychologist,* 27, 65-90.
- Kelly, G. (2000). How to teach pronunciation. Essex: Longman.

- Kelly, L. G. (1969). 25 centuries of language teaching: An inquiry into the science, art, and development of language teaching methodology, 500 B.C.-1969. Rowley, MA: Newbury House.
- Kennedy, S., Blanchet, J., & Trofimovich, P. (2014). Learner pronunciation, awareness, and instruction in French as a second language. *Foreign Language Annals*, 47(1), 79-96.
- Kent, D. (2001) Korean university freshmens' dictionary use and perceptions regarding dictionaries. *The Korea TESOL Journal, 4,* 73-92.
- Kern, R. G. (1995). Students' and teachers' beliefs about language learning. *Foreign Language Annals, 28*(1), 71–92.
- Krashen, S. (1982). *Principles and practice in second language acquisition.* Oxford: Pergamon Press.
- Kvale, S. (1996). Interviews: An Introduction to Qualitative Research Interviewing. Thousand Oaks, CA: SAGE.
- Lee, J., Jang, J., & Plonsky, L. (2015). The effectiveness of second language pronunciation instruction: A meta-analysis. *Applied Linguistics, 36,* 345–366.
- Lee, A., & Lyster, R. (2017). Can corrective feedback on second language speech perception errors affect production accuracy? *Applied Psycholinguistics*, 38(2), 371-393. https://doi.org/10.1017/S0142716416000254
- Levis, J. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly, 39,* 367–377.
- Levis, J. M. (2018). *Intelligibility, oral communication, and the teaching of pronunciation.* Cambridge: Cambridge University Press.
- Levis, J.M., Sonsaat, S., Link, S., & Barriuso, T. (2016). Native and nonnative teachers of L2 pronunciation: Effects on learner performance. *TESOL Quarterly*, 50, 894–931.
- Li, L. (2017). Social Interaction and Teacher Cognition. Edinburgh University Press.
- Li, L. (2020). *Language Teacher Cognition: A Sociocultural Perspective*. London: Palgrave Macmillan.
- Loewen, S., & Philp, J. (2006). Recasts in the adult English L2 classroom: Characteristics, explicitness, and effectiveness. *Modern Language Journal, 90,* 536–556.

- Long, M. (1996). The role of the linguistic environment in second language acquisition. In
 W. Ritchie, & T. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego, CA: Academic Press.
- Lyster, R. (1998). Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning, 48,* 183–218.
- Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in Second Language Acquisition, 19,* 37–66.
- Lyster, R., & Saito, K. (2010). Oral feedback in classroom SLA. *Studies in Second Language Acquisition, 32*(2), 265-302.
- Lyster, R., Saito, K., & Sato, M. (2013). Oral corrective feedback in second language classrooms. *Language Teaching, 46,* 1-40.
- MacDonald, S. (2002). Pronunciation—Views and practices of reluctant teachers. *Prospect, 17,* 3-18.
- Mackey, A., Al-Khalil, M., Atanassova, G., Hama, M., Logan-Terry, A., & Nakatsukasa, K. (2007). Teachers' intentions and learners' perceptions about corrective feedback in the L2 classroom. *Innovation in Language Learning and Teaching*, *1*, 129–152.
- Mackey, A., & Gass, S. M. (2016). Second language research: Methodology and design (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Mackey, A., Gass, S., & McDonough, K. (2000). How do learners perceive interactional feedback? *Studies in Second Language Acquisition, 22,* 471-497.
- Mackey, A., Polio, C. and McDonough, K. (2004). The relationship between experience, education and teachers' use of incidental focus-on-form techniques. *Language Teaching Research*, 8(3), 301–327.
- Mattheoudakis, M. (2007). Tracking changes in pre-service EFL teacher beliefs in Greece: A longitudinal study. *Teaching and Teacher Education, 23*(8), 1272–1288.
- Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education.* San Francisco: Jossey-Bass Publishers.
- Murphy, D. (2011). An investigation of English pronunciation teaching in Ireland. *English Today*, *27*(4), 10-18.
- Murphy, J., & Baker, A. (2015). History of ESL pronunciation teaching. In M. Reed, & J. Levis (Eds.), *The handbook of English pronunciation* (pp. 36-65). Hoboken, NJ: John Wiley & Sons, Inc.

- Nation, I.S., & Newton, J. (2009). *Teaching ESL/EFL listening and speaking.* London: Routledge.
- Nicholas, H., Lightbown, P. & Spada, N. (2002). Recasts as Feedback to Language Learning, *51*, 719 758.
- Nunan, D. (1992). The teacher as decision-maker. In J. Flowerdew, M. Brock and S. Hsia (eds), *Perspectives on Second Language Teacher Education* (pp. 135-65). Hong Kong: City Polytechnic.
- Ohta, A. S. (2001). Second language acquisition processes in the classroom: Learning Japanese. Mahwah, NJ: Lawrence Erlbaum.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62*(3), 307-332.
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice: the definitive text of qualitative inquiry frameworks and options. Thousand Oaks, Calif: SAGE Publications, Inc.
- Pawlak, M. (2013). The Effect of Explicit and Implicit Corrective Feedback on Eliminating Pronunciation Errors. In: Waniek-Klimczak, E., Shockey, L. (eds) *Teaching and Researching English Accents in Native and Non-native Speakers. Second Language Learning and Teaching.* Springer, Berlin, Heidelberg. <u>https://doi.org/10.1007/978-3-642-24019-5_7</u>
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (*3rd ed.*). Cambridge University Press.
- Saito, K., & Lyster, R. (2012). Effects of form-focused instruction and corrective feedback on L2 pronunciation development of /r/ by Japanese learners of English. *Language Learning*, *62*, 595-683.
- Saito, Y., & Saito, K. (2017). Differential effects of instruction on the development of second language comprehensibility, word stress, rhythm, and intonation: The case of inexperienced Japanese EFL learners. *Language Teaching Research*, 21(5), 589-608.
- Saldana, J. (2013). *The Coding Manual for Qualitative Researchers* (2nd ed.). London: Sage.
- Sato, M. (2011). Constitution of form-orientation: Contributions of context and explicit knowledge to learning from recasts. *Canadian Journal of Applied Linguistics*, *14*(1), 1–28.

- Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3-32). Cambridge, UK: Cambridge University Press.
- Selinker, L. (1972). Interlanguage. International Review of Applied Linguistics in *Language Teaching*, *10*, 209-241.
- Sheen, Y. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research*, *8*(3), 263-300.
- Sheen, Y. (2006). Exploring the relationship between characteristics of recasts and learner uptake. *Language Teaching Research, 10,* 361–392.
- Sheen, Y. & R. Ellis (2011). Corrective feedback in language teaching. In E. Hinkel (ed.), Handbook of research in second language teaching and learning, Vol. 2. New York: Routledge, 593–610.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, *57*(1), 1-23.
- Spada, N. (1997). Form-focused instruction and second language acquisition: A review of classroom and laboratory research. *Language Teaching, 30*, 73-87.
- Spada, N. (2011). Beyond form-focused instruction: Reflections on past, present and future research. *Language Teaching, 44,* 225–236.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: SAGE.
- Strauss, A., & Corbin, J. (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, CA: Sage Publications, Inc.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook, & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honor of H.G. Widdowson* (pp. 125-144). Oxford, UK: Oxford University Press.
- Trofimovich, P., & Gatbonton, E. (2006). Repetition and focus on form in processing L2 Spanish words: Implications for pronunciation instruction. *The Modern Language Journal, 90,* 519–535.
- Tsui, A. B. M. (2009). Teaching expertise: approaches, perspectives, and characterizations.
 In A. Burns and J. Richards (Eds) Second language teacher education (pp. 190– 198). Cambridge: Cambridge University Press.
- Ur, P. (1996). A course in language teaching. Cambridge: Cambridge University Press.

- Watson, A. (2015). The problem of grammar teaching: A case study of the relationship between a teacher's beliefs and pedagogical practice. *Language and Education, 29,* 332–346.
- VanPatten, B. (2003). From input to output: A teacher's guide to second language acquisition. Mahwah, MJ: Erlbaum.
- VanPatten, B. (2004). Input processing and grammar instruction in second language acquisition. Norwood, NJ: Ablex.
- Verloop, N., Van Driel, J. and Meijer, P. C. (2001). Teacher knowledge and the knowledge base of teaching. *International Journal of Educational Research*, *35*, 441-61.
- Weschler R. & Pitts C. (2000) An experiment using electronic dictionaries with EFL Students. The Internet TESL Journal, 6. Retrieved from <u>http://iteslj.org/Articles/Weschler-ElectroDict.html</u>
- Yin, R. K. (2018). Case Study Research and Applications: Design and Methods (6th ed.). Thousand Oaks, CA: SAGE.
- Yoshida, R. (2010). How do teachers and learners perceive corrective feedback in the Japanese language classroom? *Modern Language Journal, 94*(2), 293-314. https://doi.org/10.1111/j.1540-4781.2010.01022.x.

APPENDIX-A: Semi-Structured Interview Questions

Interview Protocol

I am Tuğçe Erkmen. I am currently doing my master's degree in English Language Teaching at Hacettepe University. This research study intends to investigate teacher cognition of providing corrective feedback on learner pronunciation. I would like to hear your views about the topic, which will enhance the understanding of the topic and be highly appreciated. This interview is mainly concerned with your beliefs, thoughts, feelings, and experiences; therefore, I would like to note that there are no correct answers to the questions.

Before we start the interview, I would like to remind you that the researcher will strictly maintain the confidentiality of your answers. In order to facilitate the transcription process, the interview will be audio-recorded, and the collected data will be analysed only by the researcher and used merely for scientific purposes. There are no questions in the interview that may cause discomfort; however, if you feel uncomfortable for any reason during participation, I can stop recording and you may feel free to quit the interview at any time. I would like to start if you are ready.

Guiding Questions: Semi-Structured Interview I

Part I: Personal Information

- 1. What is your age?
- 2. Which department did you graduate from?
- 3. What is the highest level of education you have completed?
- 4. Do you have any other qualifications such as CELTA or TESOL?
- 5. How many years of teaching experience do you have?

Part II: Previous Language Learning Experiences

- 6. Could you describe your language learning experience? How did you learn English?
 - a) What kind of activities did you find enjoyable?
 - b) Which aspect of English challenged you the most?
 - c) In your lessons, which skills or subskills were practised more?
- 7. Could you please tell me about your teachers? What was the competency level of your English teachers?
 - a) Which techniques and methods did your teachers use? Were they useful?
 - b) Did you have an NS English teacher? How did you feel about (not) having an NS English teacher?

- 8. What was the position of pronunciation in your English lessons?
 - a) How was English pronunciation taught? Which methods were used?
 - b) Do you recall whether you enjoyed lessons with a special focus on pronunciation?
 - c) Were in-class activities enough to master English pronunciation, or did you do anything else to improve your pronunciation by yourself?
 - d) What was your teachers' attitude towards accurate pronunciation?
 - e) How did your teachers correct your pronunciation mistakes? How did these corrections make you feel?
 - f) Do you feel confident about your own English pronunciation now?
 - g) Do you think your past language learning experiences have an influence on the way you teach pronunciation today?

PART III: Teacher Education & Training

- 9. How and why did you become an EFL instructor? Could you tell me about your journey?
- 10. To what extent did your undergraduate/graduate courses contribute to your teaching skills? Were you satisfied with the education in your department?
- 11. How did you learn to teach pronunciation in particular?
 - a) Did you take a course on teaching pronunciation during your undergraduate/graduate education?
 - b) Do you believe your undergraduate/graduate program provided you with sufficient knowledge to teach pronunciation and correct pronunciation errors?
 - c) After graduation, did you get any formal teacher training (e.g., a certificate or workshops) that focused on teaching pronunciation and/or error correction? If yes, did you find them useful?
 - d) Do you think you have enough phonemic and phonological knowledge to teach pronunciation and/or correct pronunciation errors?
 - e) Would you like to receive more training on teaching pronunciation?

Part IV: Teaching General English

- 12. What is your understanding of teaching general English? What are the most basic components of it?
- 13. What are the qualities of a good EFL teacher?
 - a) What are your strengths and weaknesses as an EFL teacher?
- 14. What do you think the most rewarding part of teaching English at tertiary level is, and what is the most discouraging aspect of it?
- 15. Do you allocate equal time to all English language skills and subskills in your classes? If no, which ones are practised more, and which ones are practiced less? Why?

- 16. What is your attitude towards error correction? How important is it in language teaching?
 - a) Which mistakes do you correct the most in your classes? (e.g., grammar, vocabulary, pronunciation, etc.)

Part V: Teaching Pronunciation and Correcting Pronunciation Errors

17. Do you think teaching pronunciation is significant? Why?

- a) How much time do you spend on teaching pronunciation?
- b) Do you teach pronunciation separately or by integrating it with other skills?
- c) Do you think it is possible to teach pronunciation in a communicative way?
- d) Which aspect of pronunciation do you usually work on in your classes: segmental features or suprasegmental features? Which one is the hardest aspect to teach?
- e) Which pronunciation activities do you use in your classes? (e.g., drilling, using minimal pairs exercises or phonetic alphabet, reading aloud, recording learners' English, etc.)

18. Which one do you aim to achieve in your learners' pronunciation: accuracy or intelligibility?

- a) What is the role of accurate pronunciation in effective communication?
- 19. Do you think it is important to correct pronunciation errors? Why?
 - a) Do you correct all the pronunciation errors? If not, which ones do you prioritize?
 - b) How do you deal with pronunciation errors causing communication breakdowns?
 - c) Which pronunciation errors do you usually find yourself correcting: the ones related to segmentals or suprasegmentals? Which ones are more significant for you?
 - d) When do you think pronunciation errors should be corrected? Do you provide delayed or immediate correction? Why?
 - e) What is the ideal amount of class time spent on correcting pronunciation errors? Why?
 - f) How should pronunciation errors be corrected? (e.g., explicitly, implicitly, etc.)
 - g) As you know, there are mainly six types of corrective feedback [To remind them, the researcher gives the participants a leaflet including an example for each type (see Appendix-B)] Which ones do you usually use for correcting pronunciation errors? Why?
- 20. What are your feelings regarding working on pronunciation issues? Do you like and feel confident about it?
 - a) What is the most challenging aspect of correcting pronunciation errors for you?
 - b) Do you see yourself as a good input source for aiding learners' pronunciation errors?
 - c) What is the influence of being an NNS English teacher on your attitude towards teaching pronunciation?
- 21. Do you intentionally assess learners' pronunciation needs and aid their pronunciation problems or, do you correct mispronounced words only on an ad hoc basis?
 - a) Do you assign any homework to identify students' pronunciation problems more systematically?

- b) How do you address these needs to solve students' pronunciation problems?
- c) Is it easier or harder to correct pronunciation errors in classes with the same L1?
- d) Do you observe permanent improvements in your students' pronunciation after receiving corrective feedback or instruction?
- e) Do you think students take getting feedback on their pronunciation errors seriously?
- f) How does learners' level of motivation affect the amount of time you allocate for dealing with pronunciation problems?
- 22. What do you think about making use of self- or peer-correction for pronunciation errors? How often do you use these techniques for pronunciation?
- 23. Do you think it is essential to equip learners with specific metalanguage for pronunciation so that they can benefit from error correction?
- 24. What is the effect of institutional factors such as the syllabus, the curriculum, the textbook, or the materials on the way you address pronunciation errors in the classroom?
- 25. Do you put any effort to get better at providing corrective feedback on pronunciation through researching, sharing with other teachers, developing materials?

Guiding Questions: Semi-Structured Interview II

- 1. What is the level of the students that you are teaching this module?
 - a) Does the level of your students facilitate or hinder the way you address pronunciation errors? How?
- 2. How much time have you been able to allocate for pronunciation errors in your class since the beginning of the module? Are you satisfied with this amount of time?
 - a) Is this amount of time enough to solve your students' all pronunciation problems?
 - b) Do your students ask for more pronunciation practice or feedback? If yes, what are you planning to do about it?
 - c) Are you able to spend enough time on correcting pronunciation errors when compared to other errors (e.g., grammar, vocabulary, etc.)?
 - d) What factors discourages you from correcting pronunciation mistakes more?
- 3. Do you bring extra materials to the class to teach pronunciation, or do you tend to follow the textbook?
 - a) Does your textbook enable you to work on pronunciation effectively? If not, how do you make up for missing pronunciation practice?
 - b) Have you skipped any of the pronunciation activities in your textbook on purpose?
- 4. Up to now, which aspects of English pronunciation have your students found the most problematic? (e.g., vowels, consonants, prominence, word stress, intonation, rhythm, connected speech, etc.)
 - a) How have you dealt with these problems?

- b) Which types of corrective feedback have you used? [To remind them, the researcher gives the participants the leaflet including an example for each type again (see Appendix-B)]
- c) Are there any students who keep making the same pronunciation mistakes? If yes, how are you planning to help those students?
- 5. Which activities do you usually use to address your students' pronunciation problems? (i.e., repetition, drilling, reading aloud, phonetic alphabet, etc.)
 - a) What is the rationale behind choosing these activities?
 - b) Do the students find them useful? How do you know?
 - c) Have you used an activity which turned out to be a waste of time?
 - d) Which activities are more useful to identify and/or solve pronunciation problems: controlled pronunciation-building activities (e.g., drilling, minimal pairs, controlled responses, etc.) or uncontrolled pronunciation-building activities (e.g., group discussions, presentations, role-plays, dialogues, etc.)?
- 6. Are your students confident about their pronunciation? How do you know?
 - a) Do they find their pronunciation accurate and/or intelligible?
 - b) Do they experience pronunciation problems when they are talking to other students?
 - c) Are your students willing to improve their pronunciation outside the classroom? If yes, what do they do about it?
- 7. What is your students' attitude towards getting corrective feedback on pronunciation?
 - a) Do you correct their pronunciation errors even though they dislike it? Why?
 - b) How do they prefer you to correct their pronunciation errors? (i.e., in class or in private)
- 8. Do you give feedback on all of your students' pronunciation errors? Why?
 - a) Were there any pronunciation errors you intentionally avoided correcting? Why?
- 9. Which accent do you think your students want to acquire: British or American? Why?
 - a) Do you consider their preferences while giving corrective feedback?
- 10. Considering the aims of your students in learning English, what do you think the significance of correcting pronunciation errors is?

Guiding Questions: Semi-Structured Interview III

- 1. When you take your students' performance at the end of the module into consideration, do you believe you have achieved your objectives in relation to pronunciation?
- 2. Do you think you have spent sufficient amount of time on addressing students' pronunciation needs throughout the module?
- 3. Have your observed permanent improvements in your students' pronunciation after receiving corrective feedback throughout the module?

- 4. Do you recall a positive or a negative experience that you have had in this module regarding correcting your students' pronunciation?
- 5. Considering how you have dealt with pronunciation errors throughout this module, would you like to change anything if you taught English to a class with the same level of students again? If yes, what would you change?
- 6. What are some potential problems that you might experience in this particular context while correcting pronunciation mistakes in the future?
- 7. Has your viewpoint about correcting pronunciation errors changed or remained the same since the beginning of this module?
- 8. Would you like to take part in more workshops or other teacher training activities focused on giving corrective feedback on pronunciation in the future?
- 9. How do you feel about taking part in this study on teachers' beliefs, thoughts, and practices with regards to correcting pronunciation errors?
- 10. If you were to pass one piece of advice about giving corrective feedback on pronunciation to a teacher, what would it be?

APPENDIX-B: The Leaflet for Corrective Feedback Types

Example Dialogue: Teacher: What are your plans for the weekend?

Student: We are going to listen to <u>live</u> music in a bar.

(In this dialogue, the student pronounces the underlined word as /lɪv/ instead of /laɪv/.)

No	СҒ Туре	Definition	Teacher Response
1	Recast	The teacher repeats what the learner has said, replacing the error with the correct form.	We are going to listen to live / laɪv /music in a bar.
2	Explicit Correction	The teacher explicitly provides the learner with the correct form.	No, not /lɪv/, /laɪv/.
3	Elicitation	The teacher reads the sentence again but strategically pauses to make the learner 'fill in the blank'.	We are going to listen to (pausing)?
4	Metalinguistic Feedback	The teacher provides information, or asks questions, related to an error that the learner has made without explicitly providing the correct form.	You pronounce the word that comes before 'music' wrong.
5	Clarification Request	The teacher asks for repetition or reformulation of what the learner has said.	I'm sorry?
6	Repetition of Error	The teacher repeats the learner's error in isolation, and in most cases, teachers adjust their intonation to highlight the error.	listen to 'LIVE //ɪv/' music? (The teacher stresses the mistake with rising intonation.)

APPENDIX-C: Informed Consent Form

Dear participant,

You are kindly invited to take part in the present study which is carried out by me (Tuğçe Erkmen) to be used as my thesis research supervised by Prof. Dr. İsmail Hakkı Mirici in English Language Teaching Program (MA) at Hacettepe University. This research study aims to examine the beliefs, thoughts, and practices of EFL teachers related to correcting learners' pronunciation at tertiary level, and it is approved by the Ethics Committee at Hacettepe University. The administrators at your institution have also been informed about the study.

Participation in the study is on a voluntary basis and highly appreciated. I would like to indicate that the researcher will strictly maintain the confidentiality of personal information and your answers, and the collected data will be analysed only by the researcher and used merely for scientific purposes. If you agree to participate in the present study, you will volunteer to participate the data collection process which will last for eight weeks. Within the scope of the data collection, you will be interviewed three times, observed for six class hours, and you will also be asked to reflect on your classroom practices in three post-observation conferences.

Your participation in the study will provide us valuable information about teacher cognition of providing corrective feedback on pronunciation. Each phase of the data collection process has been designed carefully in order not to cause any discomfort in participants; however, if you feel uncomfortable for any reason during participation, you may quit at any time. In such a case, you may just inform the researcher about your decision and withdraw from the study. If you have further questions related to the study, please feel free to ask them before signing this consent form.

I would like to thank you in advance for your participation in this study. If you would like to obtain further information during or after participation, you can contact the researcher anytime you want via e-mail or phone.

I have read the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. I am aware that the data will be collected through audio recordings, and this data will be used for scientific purposes only. I agree to participate in this study on my own will.

Participant's:	Researcher's:
Name/Surname:	Name/Surname:
Date:	Date:
Address:	Address:
E-mail:	E-mail:
Phone:	Phone:
Signature:	Signature:

APPENDIX-D: Ethics Committee Approval



T.C. HACETTEPE ÜNİVERSİTESİ REKTÖRLÜĞÜ Rektörlük Tarih: 03/01/2022 Sayı: E-35853172-300-00001949849



3.01.2022

Sayı : E-35853172-300-00001949849 Konu : Tuğçe ERKMEN (Etik Komisyon İzni)

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi: 11.12.2021 tarihli ve E-51944218-300-00001914043 sayılı yazınız.

Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi yüksek lisans programı öğrencilerinden **Tuğce ERKMEN**'in **Prof. Dr. İsmail Hakkı MİRİCİ** danışmanlığında yürüttüğü "**Dil Öğretmeni Bilişi ve Düzeltici Sesletim Dönütleri: Bir Durum Çalışması**" başlıklı tez çalışması Üniversitemiz Senatosu Etik Komisyonunun 28 Aralık 2021 tarihinde yapmış olduğu toplantıda incelenmiş olup, etik açıdan uygun bulunmuştur.

Bilgilerinizi ve gereğini rica ederim.

Prof. Dr. Vural GÖKMEN Rektör Yardımcısı

APPENDIX-E: Declaration of Ethical Conduct

I hereby declare that...

- I have prepared this thesis in accordance with the thesis writing guidelines of the Graduate School of Educational Sciences of Hacettepe University;
- all information and documents in the thesis/dissertation have been obtained in accordance with academic regulations;
- all audio visual and written information and results have been presented in compliance with scientific and ethical standards;
- in case of using other people's work, related studies have been cited in accordance with scientific and ethical standards;
- all cited studies have been fully and decently referenced and included in the list of References;
- I did not do any distortion and/or manipulation on the data set,
- and NO part of this work was presented as a part of any other thesis study at this or any other university.

..../..../....

Tuğçe ERKMEN

APPENDIX-F: Thesis/Dissertation Originality Report

30/09/2022

HACETTEPE UNIVERSITY Graduate School of Educational Sciences To The Department of Foreign Language Education

Thesis Title: EFL TEACHER COGNITION IN CORRECTIVE FEEDBACK ON PRONUNCIATION: A CASE STUDY

The whole thesis that includes the *title page, introduction, main chapters, conclusions and bibliography section* is checked by using **Turnitin** plagiarism detection software take into the consideration requested filtering options. According to the originality report obtained data are as below.

Time Submitted	Page Count	Character Count	Date of Thesis Defense	Similarity Index	Submission ID
30/09/2022	152	300490	17/10 /2022	%6	1912854859

Filtering options applied:

1. Bibliography excluded

2. Quotes included

3. Match size up to 5 words excluded

I declare that I have carefully read Hacettepe University Graduate School of Educational Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

Name Lastname:	Tuğçe ERKMEN			
Student No.:	N20137610			
Department:	Foreign Language Education			
Program:	English Language Teaching			
Status:	Masters	Ph.D.	Integrated Ph.D.	

ADVISOR APPROVAL

APPROVED

Prof. Dr. İsmail Hakkı MİRİCİ

APPENDIX-G: Yayımlama ve Fikrî Mülkiyet Hakları Beyanı

Enstitü tarafından onaylanan lisansüstü tezimin/raporumun tamamını veya herhangi bir kısmını, basılı (kâğıt) ve elektronik formatta arşivleme ve aşağıda verilen koşullarla kullanıma açma iznini Hacettepe Üniversitesine verdiğimi bildiririm. Bu izinle Üniversiteye verilen kullanım hakları dışındaki tüm fikri mülkiyet haklarım bende kalacak, tezimin tamamının ya da bir bölümünün gelecekteki çalışmalarda (makale, kitap, lisans ve patent vb.) kullanım haklan bana ait olacaktır.

Tezin kendi orijinal çalışmam olduğunu, başkalarının haklarını ihlal etmediğimi ve tezimin tek yetkili sahibi olduğumu beyan ve taahhüt ederim. Tezimde yer alan telif hakkı bulunan ve sahiplerinden yazılı izin alınarak kullanılması zorunlu metinlerin yazılı izin alınarak kullandığımı ve istenildiğinde suretlerini Üniversiteye teslim etmeyi taahhüt ederim.

Yükseköğretim Kurulu tarafından yayınlanan "Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına ilişkin Yönerge" kapsamında tezim aşağıda belirtilen koşullar haricince YÖK Ulusal Tez Merkezi / H.Ü. Kütüphaneleri Açık Erişim Sisteminde erişime açılır.

- Enstitü/Fakülte yönetim kurulu kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren 2 yıl ertelenmiştir.⁽¹⁾
- O Enstitü/Fakülte yönetim kurulunun gerekçeli kararı ile tezimin erişime açılması mezuniyet tarihimden itibaren ... ay ertelenmiştir.⁽²⁾
- O Tezimle ilgili gizlilik kararı verilmiştir. (3)

Tuğçe ERKMEN

"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"

- (1) Madde 6. 1. Lisansüstü tezle ilgili patent başvurusu yapılması veya patent alma sürecinin devam etmesi durumunda, tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü Üzerine enstitü veya fakülte yönetim kurulu iki yıl süreile tezinerişime açılmasının ertelenmesine karar verebilir.
- (2) Madde 6.2. Yeni teknik, materyal ve metotların kullanıldığı, henüz makaleye dönüşmemiş veya patent gibi yöntemlerle korunmamış ve internetten paylaşılması durumunda 3.şahıslara veya kurumlara haksız kazanç; imkânı oluşturabilecek bilgi ve bulguları içeren tezler hakkında tez danışmanın önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulunun gerekçeli kararı ile altı ayı aşmamak üzere tezin erişime açılması engellenebilir.
- (3) Madde 7. 1. Ulusal çıkarları veya güvenliği ilgilendiren, emniyet, istihbarat, savunma ve güvenlik, sağlık vb. konulara ilişkin lisansüstü tezlerle ilgili gizlilik kararı, tezin yapıldığı kurum tarafından verilir^{*}. Kurum ve kuruluşlarla yapılan işbirliği protokolü çerçevesinde hazırlanan lisansüstü tezlerle ilişkin gizlilik kararı ise, ilgili kurum ve kuruluşun önerisi ile enstitü veya fakültenin uygun görüşü Üzerine üniversite yönetim kurulu tarafından verilir. Gizlilik kararı verilen tezler Yükseköğretim Kuruluna bildirilir.

Madde 7.2. Gizlilik kararı verilen tezler gizlilik süresince enstitü veya fakülte tarafından gizlilik kuralları çerçevesinde muhafaza edilir, gizlilik kararının kaldırılması halinde Tez Otomasyon Sistemine yüklenir

*Tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu tarafından karar verilir.