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Pronunciation- and accent-related beliefs, attitudes, and pronunciation learning strategies of English language teacher trainees in Hungary

PhD dissertation

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Abstract

Teachers' learning and teaching practices are influenced by their beliefs, prior experience, and education. Research has explored teacher cognition across various skills, particularly grammar. Although L2 pronunciation cognition research has lagged behind cognition research on other skills (Baker & Murphy, 2011), plenty of information is available regarding the aspects that most affect intelligibility and comprehensibility (Munro & Derwing, 2001, 2006; Hahn, 2004). However, research suggests that pronunciation is often neglected in classrooms because of time constraints and teacher insecurity (Burgess & Spencer, 2000; Breitkreutz et al., 2001; Macdonald, 2002). To give pronunciation the same priority as other language skills and fully incorporate it into the language-learning process, it is crucial to (re)evaluate its current standing. This dissertation focuses on the intersection of cognition research and SLA pronunciation learning and teaching research. It aims to address two gaps in applied linguistics research: the lack of research on teacher cognition in L2 pronunciation instruction, more specifically, teachers' attitudes and beliefs regarding pronunciation, and pronunciation instruction and learning, which, after decades of neglect, is gaining increasing attention in international research (Derwing & Munro, 2022) but is still an under-researched topic (Tsang, 2021). Grounded in the theory of teacher cognition, using Borg's (2003) teacher cognition framework, Macalister's (2014) emergent teacher cognition framework, and a growing body of research on SLA pronunciation teaching and learning, the present dissertation aimed to uncover Hungarian teacher trainees' attitudes towards English accents, beliefs about accents, beliefs about pronunciation learning and teaching, experience with formal and informal pronunciation learning, and strategies used to improve pronunciation.

The study involved Hungarian second-year teacher trainees (n=128) who attended Integrated English Language Skills courses taught by the researcher in the spring semesters of 2020, 2021, and 2022. Questionnaires were administered to gather data on the participants' beliefs, attitudes, and experiences. Additionally, diaries were used to collect data on participants' pronunciation learning strategy use, specifically focusing on shadowing. Data were analyzed using qualitative content analysis and quantitative data analysis.

The findings revealed a clear preference for, and desire to imitate, native English accents. They also demonstrated that the participants held various beliefs related to pronunciation teaching and learning, including the importance of having a native-like accent for themselves, but not necessarily for language learners, that a native-like accent is achievable, and that they can control their English accents with concentration and conscious imitation. The findings revealed participants' beliefs regarding the factors affecting pronunciation and their perspectives on the importance of teaching pronunciation in the classroom.

The data also showed general satisfaction among participants regarding their pronunciation skills, albeit with some areas identified for improvement. Although suprasegmentals were considered challenging to master, vowel difficulty was slightly underestimated. The findings regarding students' experiences with pronunciation learning indicate a need for additional and especially more specific feedback on pronunciation in classroom settings and a greater focus on pronunciation in the early years of schooling. The participants' reported pronunciation learning strategies indicated little variation, with a

preference for cognitive strategies, and a strong focus on listening and repetition. Finally, the dissertation disclosed the areas of difficulty and challenges faced by students during shadowing as well as the pronunciation learning strategies used to overcome their problems.

The findings suggest potential implications for teacher education, highlighting the importance of considering trainees' pronunciation beliefs in teacher education, the need for more focus on pronunciation teaching, and the potential of shadowing to improve pronunciation awareness and foster pronunciation learning strategy use.

Dissertation declaration

I declare that all the work presented in my dissertation is the product of my own original research, conducted under the supervision of Associate Professor Dr. Katalin Doró. I confirm that no part of this dissertation has previously been submitted for an award of any other degree or any other qualification in my name, either at this university or any other institution. All the materials that have been previously published or written by others have been appropriately referenced and cited in my dissertation. With the exception of these references, the dissertation is entirely my own work. Some sections of this text have appeared in my recent related publications, which were produced in conjunction with my dissertation (Dupák & T. Balla, 2020; Baranyi-Dupák, 2022a, 2022b, 2022c, 2022d). I hereby grant permission for the final version of my thesis to be made available via the university's research repository, the university, and search engines.

Karina Baranyi-Dupák

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List of abbreviations and acronyms

AE	Academic English
BAK	Beliefs, assumptions and knowledge
BALLI	Beliefs about Language Learning Inventory
CAPT	Computer-assisted Pronunciation Training
CPH	Critical Period Hypothesis
EER	Educational Effectiveness Research
EFL	English as a Foreign Language
EIL	English as an International Language
ELF	English as a Lingua Franca
FL	Foreign Language
FLA	Foreign Language Anxiety
FonFS	Focus on Forms
GA	General American
IATEFL	International Association of Teachers of English as a Foreign Language
ICF	Individual Corrective Feedback
IPA	International Phonetic Alphabet
L2	Second Language
LFC	Lingua Franca Core
LLS	Language Learning Strategies
LOR	Length of Residence
LTKI	L2 Teachers' Knowledge of their Impact
MLAT	Modern Language Aptitude Test
LLAMA	Language Learning and Meaning Acquisition
NEST	Native English-speaking Teacher
NNS	Non-native speaker
non-NEST	Non-native English-speaking Teacher
NS	Native speaker
PCK	Pedagogical Content Knowledge
PLS	Pronunciation Learning Strategies

RP	Received Pronunciation
SLA	Second Language Acquisition
TESOL	Teachers of English to Speakers of Other Languages
WE	World Englishes

1. Introduction

The present dissertation examines Hungarian second-year teacher trainees'[1] pronunciation teaching and learning beliefs, past experiences, and pronunciation learning strategies applied in connection with a specific task. It aims to uncover teacher trainees' views on pronunciation learning and teaching, and to reveal how they see the role of pronunciation in teaching and learning English as a foreign language (EFL).

My interest in this topic was raised as a teacher trainee writing my MA thesis on fluency improvement and pronunciation. Having been raised in a different country than the one in which I currently teach, I became aware of and interested in how different L1s pose unique pronunciation challenges for those learning English as a foreign language. Throughout my years of teaching, I have identified areas of pronunciation that Hungarian learners of English seem to struggle with the most. However, it quickly became clear to me through student feedback during my first few years as a teacher educator that pronunciation is often neglected in language education. Some of my students claimed not to have worked purposefully on their pronunciation before university. I later discovered that this was an experience I shared with educators worldwide (discussed in more detail in Section 2.3.1). Recognizing that mapping out teacher trainees' perceptions of pronunciation learning and teaching is critical for promoting changes in both their education and future teaching practices was my primary motivation for conducting this research.

In this introductory chapter, I present the rationale for the study, its theoretical background, research questions, and methodology, and provide an overview of the contents of this dissertation.

1.1 Rationale for the study

It is recognized that teachers' thought processes, prior experiences, and the context in which they teach affect their teaching. Teaching is a profession in which students begin learning with pre-established beliefs and notions about what teaching entails. As Levin (2014) notes, it is crucial to identify teacher trainees' (mis)conceptions, theories, and beliefs to address them in

[1] Various terms are used within the education literature to describe students enrolled in university-level teacher education programs, including terms such as pre-service teachers, student teachers, and trainee teachers. For the purpose of this dissertation, the term "teacher trainee" will be used, except in cases where a directly quoted source indicates otherwise.

teacher education. Johnson (1994) points out that teacher trainees must be given opportunities to understand themselves and their beliefs about learning and teaching. This can be achieved by providing opportunities for self-reflection and by explicitly discussing potential misbeliefs and biases. If we are to improve teacher education, it is also essential to understand "how preservice teachers conceptualize their initial teaching experiences, interpret new information about second language learning and teaching, and translate this information into classroom practices" (Johnson, 1994, pp. 440-441).

This dissertation aims to address two gaps in applied linguistics research: the lack of research on teacher cognition in second language (L2) pronunciation instruction, more specifically, teachers' attitudes and beliefs regarding pronunciation, and pronunciation instruction and learning, which, after decades of neglect, is gaining increasing attention in international research (Derwing & Munro, 2022) but is still an under-researched topic (Tsang, 2021). Research has explored teacher cognition across various skills, particularly grammar. Although pronunciation cognition research has lagged behind that on other skills (Baker & Murphy, 2011), a wealth of information is available regarding aspects that most affect intelligibility and comprehensibility (e.g., Munro & Derwing, 2001, 2006; Hahn, 2004). However, research suggests that pronunciation is often neglected in classrooms due to time constraints and teacher insecurity (Burgess & Spencer, 2000; Breitkreutz et al., 2001; Macdonald, 2002). This is problematic, because accurate and intelligible pronunciation is crucial for effective communication. In addition, failing to address pronunciation problems in the classroom can lead to students not prioritizing their pronunciation improvement, which perpetuates the problem. To give pronunciation the same priority as other language skills and fully incorporate it into the language-learning process, it is crucial to (re)evaluate its current standing. This can be achieved by identifying the problematic aspects of pronunciation learning and teaching in Hungarian schools and teacher education to emphasize and raise awareness of the significance of pronunciation learning and teaching. Teacher trainees are ideal candidates for this purpose, as they can provide a threefold perspective: experiences from their recent high school years, their current university studies, and their future role as teachers with emergent teacher cognition.

1.2 Theoretical background

The dissertation draws on established and novel frameworks to explore teacher trainees' emergent cognitions of pronunciation teaching and learning in a Hungarian context. The first is Borg's (2003) teacher cognition framework. Teacher cognition is "the unobservable cognitive dimension of teaching – what teachers know, believe, and think" (Borg, 2003, p. 81). Borg's framework builds on mainstream educational research and aims to capture "the complexity of teachers' mental lives" (p. 86). In this framework, teacher cognition is understood as "what second and foreign language teachers, at any stage of their careers, think, know, or believe in relation to various aspects of their work" (p. 86). Teacher cognition is influenced by several factors, including schooling, professional coursework, classroom practice, and contextual elements. Borg's (2003) framework highlights the importance of early experience, the potential effect of professional coursework, and the relationship between cognition and classroom practice. This study also utilized Macalister's (2014) emergent teacher cognition framework, which includes beliefs, assumptions, knowledge, prior knowledge and experience, and contextual factors that impact teacher trainees' cognition. Additionally, given that the primary focus of this dissertation is pronunciation teaching and learning, Burri, Baker and Chen's (2018) framework for preparing pronunciation instructors is also drawn upon. This framework includes *personal-professional*, *teacher preparation*, and *language factors,* along with the contextual factors added by Burri and Baker (2021). As described in the framework, these factors have a reciprocal relationship with the other three factors and impact teacher trainees' cognition, practices, and identity. This framework integrates pedagogical and linguistic perspectives, with a specific focus on pronunciation. Relying on these frameworks, this dissertation aims to provide a comprehensive understanding of teacher trainees' emergent cognitions (more specifically, beliefs and attitudes), as well as past experiences regarding pronunciation teaching and learning, thereby contributing to the development of teacher education programs in Hungary.

When conducting research on the cognition of L2 English pronunciation, it is essential to consider some key aspects of English pronunciation teaching and learning, both globally and in the research context. As Derwing and Munro (2022) highlighted, pronunciation teaching has undergone significant changes over the years. While earlier emphasis was placed on achieving native-like pronunciation, focus shifted to natural input and exposure. However, due to the perceived challenges in achieving native-like pronunciation, there was a decline in both pronunciation instruction and research. Nonetheless, as Derwing and Munro (2022) noted, it is

now recognized that intelligibility and comprehensibility are more important than sounding native-like. The global use of English has resulted in the emergence of various fields to document how English is used, grouped under the broad term Global Englishes (Rose et al., 2020), drawing on the work of scholars of World Englishes (WE) (Kachru et al., 2006), English as a Lingua Franca (ELF) (Jenkins, 2006a; Seidlhofer, 2011), and English as an International Language (EIL) (Matsuda, 2012). According to Rose et al. (2020), ELF research has changed how English language use is perceived in many areas of English as a second language (ESL) and English as a foreign language education. ELF advocates for the importance of intelligibility over native-like pronunciation (Jenkins, 2006b; Saito, 2021), challenging "the way we view the English language as 'owned and ruled' by native speakers" (Rose et al., 2020, p. 1). However, as Tsang (2021) points out, "despite these discussions, it is ultimately the frontline teachers who act as gatekeepers, making the all-important decisions about how pronunciation and listening are to be taught in the EFL classroom. Hence, it is of great significance to understand teachers' cognition" (p. 2).

The Hungarian educational system, the National Core Curriculum and the university entrance and graduation requirements regarding language proficiency, utilize the term "foreign language" and refer to English language teachers in Hungary as EFL instructors. The primary languages of instruction for English teacher education programs at the University of Szeged are English and Hungarian (with Hungarian being a prerequisite for pedagogy and psychology courses), resulting in a less intercultural context for teacher trainees in comparison to other higher education programs (such as the BA or MA programs in English studies or doctoral studies). Furthermore, in the Hungarian National Core Curriculum, there are only subtle and indirect references to "the acceptance and dissemination of the plurality of standard norms in foreign language education," although there is a "general openness to linguistic varieties and dialects" (Huber, 2023, pp. 58-59). Globally used textbooks, many of which are used in Hungary, tend to represent Inner Circle varieties (Tajeddin & Pakzadian, 2020), particularly Received Pronunciation (RP) and General American (GA) (Tsang, 2019), underrepresenting non-standard (Hilliard, 2014) and non-native accents (Kopperoinen, 2011). These factors are relevant to the analysis and discussion of the present research, which was conducted in a foreign language context rather than an ELF context. Although in some school settings, students may come from diverse linguistic backgrounds and use English as a lingua franca, the majority of these students typically grow up in a predominantly monolingual society and learn English through formal instruction. This does not mean that they do not use English outside the classroom or operate in various language-use contexts, which may have an effect on their

perceptions of their identity due to different expectations associated with EFL use at university as opposed to the use of ELF in their free time (Fekete, 2018). Extramural learning, in which a sense of enjoyment is an important aspect, may positively affect students' motivation, reduce their anxiety, and increase their willingness to communicate (Fajt, 2022), making this aspect of their learning crucial, especially given that pronunciation learning may often occur individually.

In the literature on pronunciation, "success in the phonological realm refers to the ability to identify and/or produce L2 sounds on level with a native speaker verified through perceptual or production tasks incorporating contextualized and/or decontextualized formats" (Moyer, 2018, p. 50). As a result, terms such as native, native-like, and non-native cannot be avoided when reviewing and discussing the pronunciation learning and teaching literature. While this dissertation acknowledges the importance of ELF perspectives in the broader context of English language education, presenting them both in its literature review and discussion, it is situated within a foreign language teacher education context. However, it considers the interplay of the EFL and ELF perspectives in shaping learners' beliefs and experiences.

1.3 Research questions and methodology

Building on the theoretical frameworks and background previously outlined, I conducted a study to explore the beliefs, attitudes, and experiences of teacher trainees situated at the intersection of teacher cognition and second language acquisition (SLA) research on pronunciation learning and teaching (Burri et al., 2018; Burri & Baker, 2021). To gain further insights, the study also incorporated perspectives on language learning strategies (LLS) (Oxford, 2017) and individual differences. A parallel mixed-methods design was employed to address the research questions, with qualitative data providing a more comprehensive understanding of numeric data (Dörnyei, 2007). The data collection process involved action research (Mills, 2014) conducted in the classroom, with the researcher and the teacher being the same person. The study seeks to answer the following five research questions:

- RQ1 What are Hungarian English language teacher trainees' attitudes towards various English accents?
- RQ2 What are Hungarian English language teacher trainees' beliefs about accents?
- RQ3: What are Hungarian English language teacher trainees' beliefs about pronunciation learning and teaching?

- RQ4: What is Hungarian English language teacher trainees' experience with formal and informal pronunciation learning?
- RQ5: What strategies and methods have Hungarian English language teacher trainees used to improve their English pronunciation?

Data on participants' beliefs, attitudes, and experiences regarding pronunciation were collected through questionnaires, whereas their pronunciation learning strategy use was tracked through diaries. The resulting data were organized into two larger studies: Part 1 (consisting of Studies 1, 2, and 3) and Part 2 (comprising Study 4). Both studies involved Hungarian second-year teacher trainees (n=128 in Part 1 and n=107 in Part 2) who attended three Integrated English Language Skills courses taught by the researcher in the spring of 2020, 2021, and 2022. The data were analyzed both qualitatively (using inductive coding to detect emerging themes in open-ended questions and diaries) and quantitatively (through descriptive statistics in closed-ended questions). The identified themes were further categorized and quantified to display frequencies.

1.4 Overview of the study

This thesis is divided into five chapters that aim to shed light on the emergent language teacher cognition of pronunciation learning and teaching among English-language teacher trainees in Hungary. Chapter 1 serves as an introduction to the study, outlining its rationale, theoretical background, research questions, and methodology.

Chapter 2 provides an overview of the existing research, with a particular emphasis on three main areas: teacher cognition, language teacher cognition, and the literature on pronunciation teaching and learning. After introducing the emergence and concept of teacher cognition, key questions and concepts related to this area are reviewed. Next, this chapter focuses on the concept of language teacher cognition and its research across various skills. It also addresses methodological issues associated with this field of study and focuses on emergent language teacher cognition. Furthermore, this chapter explores some of the major themes in the literature on pronunciation instruction from the perspective of teachers' beliefs, practices, and challenges. It also includes an overview of the objectives of pronunciation learning and the factors affecting it, as well as pedagogical perspectives and studies of learners' attitudes. Furthermore, it focuses on a general overview of learning strategies, followed by

pronunciation learning strategies in particular and a brief overview of the shadowing literature. concerning specific tasks. Finally, the context in which the study was conducted is described.

Chapter 3 presents the research questions addressed in the study, provides the background of the participants, and offers a detailed account of the data collection process, data analysis, and presentation. The methods employed in this study are also described, including an outline of their respective strengths and limitations.

Chapter 4 presents and discusses the findings in four subsections. Each subchapter is dedicated to the results and discussion of a specific study. In Study 1, Part A presents the results regarding teacher trainees' attitudes towards English accents, whereas Part B focuses on teacher trainees' beliefs about accents. Study 2 focuses on teacher trainees' beliefs about pronunciation, and Study 3 examines their past experiences with formal and informal pronunciation learning. Finally, Study 4 discusses the pronunciation learning strategies employed by students, including both reported strategies and strategies used in connection with the specific task of shadowing.

The final chapter provides a summary of the main findings of this dissertation. It also highlights the potential limitations of the study and discusses its implications for both teacher education and pronunciation research. In addition, possible areas of focus for future research are suggested.

2. Literature Review

2.1 Teacher cognition

2.1.1 Emergence and Development

Teacher cognition, according to Borg (2019), is an umbrella term encompassing the often-hidden aspects of teachers' work, more specifically, "the unobservable cognitive dimension of teaching – what teachers know, believe, and think" (Borg, 2003, p. 81). Studying teacher cognition is a challenging task, "requiring examination of multiple cognitive processes ranging from what some specialists characterize as more objective cognitions of diverse knowledge types (e.g., knowledge about language, knowledge about students) to more subjective cognitions of beliefs, perceptions, and attitudes" (Baker & Murphy, 2011, p. 31). Examining teacher cognition involves understanding what teachers have cognitions about, how these cognitions evolve, and how they impact learning and classroom practice.

The field that paved the way for the emergence of Teacher Cognition was Educational Effectiveness Research (EER), which aimed to determine the factors that directly or indirectly impact student outcomes and explain the differences observed. EER also aimed to uncover "why and how some schools and teachers are more effective than others in promoting better outcomes for students" (Creemers et al., 2010, p. 4). Although EER research shed light on several aspects and behaviors that positively impact student learning and achievement, it heavily relied on quantitative data and frequency, which solely described observable behavior without interpretation. As Freeman and Johnson (1998) observed, this approach "ignores and devalues the individual experiences of teachers" (p. 399). Additionally, it did not factor in teachers' prior knowledge and teaching, nor did it consider the broader context, background, or any previous experience (Freeman, 2002).

However, by the mid-1970s, there was a shift in focus toward teachers' thoughts and decisions that impacted their behavior (e.g., Shavelson & Stern, 1981; Clark & Yinger, 1979), thus placing teachers at the center of the teaching process (Freeman, 2002). Works like *Teacher* by Silvia Ashton Warner (1979), *Life in Classrooms* by Philip Jackson (1968), and *Schoolteacher*: *A Sociological Study* by Dan Lortie (1975) played a crucial role in promoting this view. However, this perspective still did not fully consider teachers' individual experiences and beliefs. Borg (2019) notes that early studies in teacher cognition were "too cognitive and lacked an awareness of the immediate (in the classroom) and more remote (in teachers' lives

more generally, past and present) influences on the instructional choices teachers make" (p. 1153).

By the mid-1980s, a more comprehensive understanding of how teachers see their teaching had emerged. Consequently, research during this period shifted the focus from teacher behavior to teachers' thought processes, within which beliefs and prior experiences also gained focus (Freeman, 2002). According to Freeman and Johnson (1998), the research argued that "what teachers know about teaching is largely socially constructed out of the experiences and classrooms from which teachers have come" (p. 400). Freeman (2002) highlights two significant concepts related to prior experiences: *apprenticeship of observation* by Lortie (1975) and *hidden pedagogy* by Densgombe (1982). *Apprenticeship of observation* refers to the process through which students bring pre-established beliefs, attitudes, and ideas about university education based on their observations of teachers and their experiences as students (to be discussed in more detail in Section 2.2.4). *Hidden pedagogy*, on the other hand, refers to "a set of expectations about behaviour in class including expectations about the appropriate behaviour of teachers—a hidden pedagogy—which, under the conventional circumstances of the closed classroom and in their most rudimentary form, promote teaching geared towards establishing classroom control and maintaining classroom privacy." (Densgombe, 1982, p. 250). As Densgombe explains, hidden pedagogy is influenced by the context and shaped by the physical structure of the classroom, time and material resources, compulsory participation of pupils, and pressure to conform to conventional practices. These constitute an influence that prospective teachers cannot be "trained out of," resulting in "entrenched attitudes on the part of teachers towards matters of control and privacy" (p. 262). These constructs, as Freeman (2002) points out, "provide a sort of core that threads itself through the activity of teaching," where context becomes "more than the physical space of the classroom and school in which teachers practice teaching skills" and "assumes a virtual dimension through the socializing power of the teacher's past and present experiences and communities", connecting theory and practice (p. 7).

In sum, from a focus on observable behaviors and outcomes to a more comprehensive understanding of teachers' thought processes, beliefs, and prior experiences, educational research, as Borg puts it, "has recognised the impact of teacher cognition on teachers' professional lives" (Borg, 2003, p. 81), regarding them as "active, thinking decision-makers who make instructional choices by drawing on complex, practically-oriented, personalized, and context-sensitive networks of knowledge, thoughts and beliefs" (Borg, 2003, p. 81). The factors that contribute to teacher cognition are described in the next section.

2.1.2 Frameworks for Understanding Teacher Cognition

In his 2003 study, Borg provided a comprehensive framework (Figure 1) based on his analysis of educational research to summarize the answers to key questions addressed in teacher cognition research, such as what teachers have cognitions about, how these cognitions develop, how they interact with teacher learning, and how they interact with classroom practice.

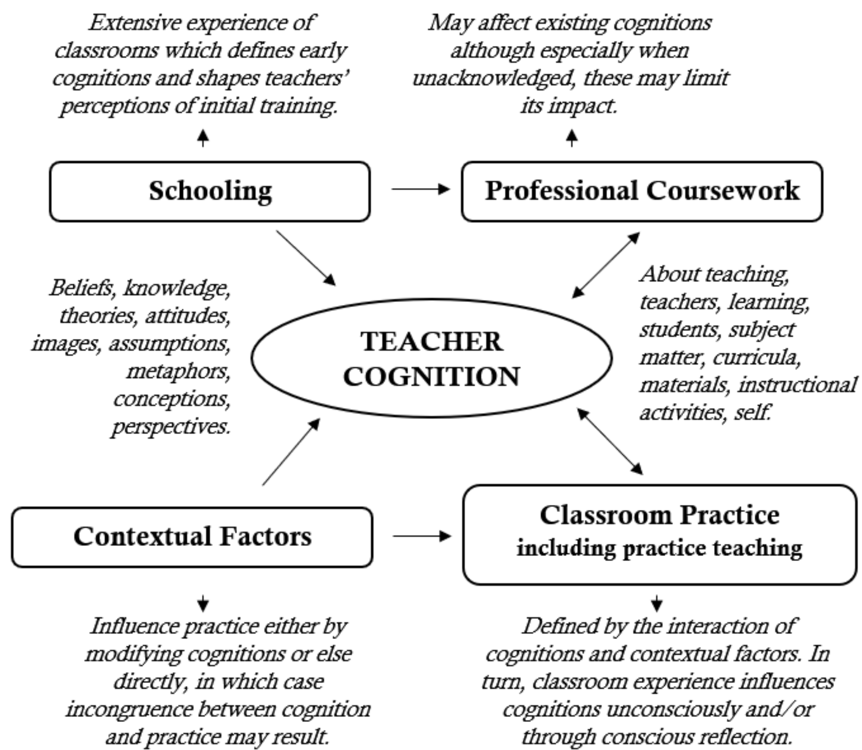

Figure 1. Borg's conceptualization of teacher cognition, schooling, professional education, and classroom practice (based on Borg, 2003, p. 82)

As the framework demonstrates, teachers have cognitions about every aspect of their work, including teaching, teacher learning, students, subject matter, self, and more (see Section 2.1.4). These cognitions are described by constructs such as beliefs, knowledge, theories, attitudes, assumptions, and perspectives and are influenced by various factors such as schooling, professional coursework, classroom practice, and contextual factors. Moreover, the framework highlights that early experiences have a lasting impact on teachers' cognition, and that professional coursework may only have a limited effect on cognition if prior beliefs are not considered. Finally, it also indicates that teacher cognition and practices are interrelated, and

contextual factors can determine how well teachers' cognition and instructional practices align. In later studies, Macalister (2010, 2014) expanded the framework proposed by Borg and highlighted the concept of BAK (which encompasses beliefs, assumptions, and knowledge). While these constructs are often discussed in teacher cognition literature, as described in the next section, they can be challenging to define and separate. However, rather than making a distinction between them, Woods (1996) proposed the notion of BAK as a way to emphasize that "rather than being distinct concepts, beliefs, assumptions, and knowledge are points on a spectrum of meaning" (Borg, 2003, p. 96). Macalister (2010) noted that BAK can be further affected by two factors: prior knowledge and experience and professional coursework (see Figure 2).

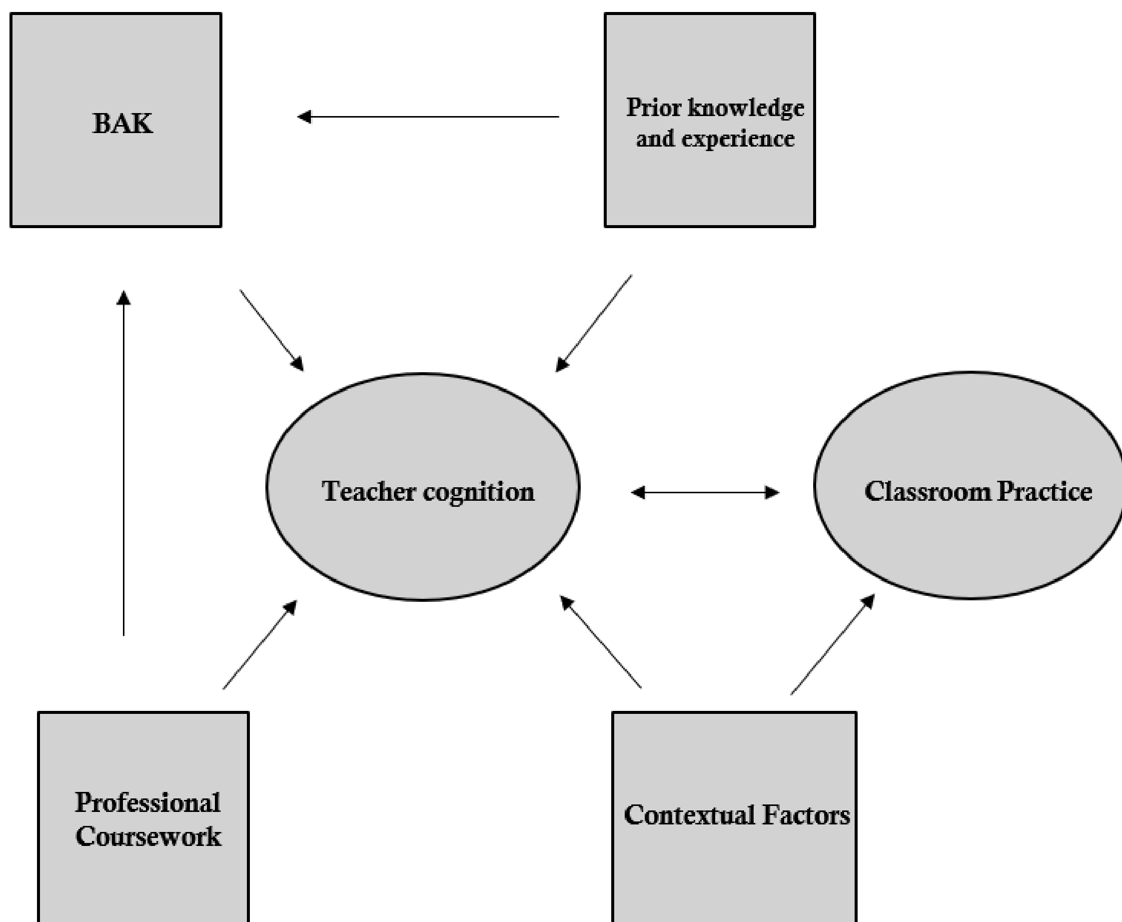

Figure 2. Macalister's (2014) framework of the dynamic nature of teacher cognition (Macalister 2010, p. 62)

Both frameworks highlight the relationship between teacher cognition and classroom practice, emphasizing the role of contextual factors and professional coursework, making them

suitable for investigating the cognition of teachers who have already started their professional journey in the classroom. However, for novice teachers or teacher trainees who have yet to gain practical experience in teaching, it is not feasible to discuss teacher cognition from every aspect that existing literature focuses on. In this regard, Macalister's framework, published in a later study (2014), contains elements of what he referred to as Emergent Teacher Cognition (Figure 3).

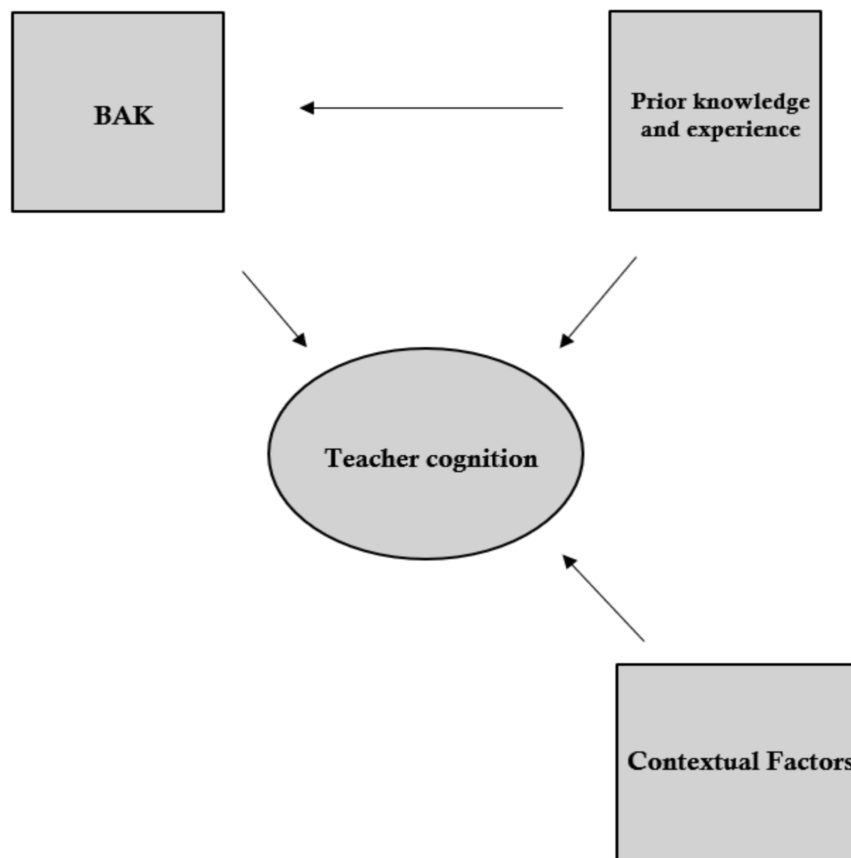

Figure 3. Macalister's (2014) Emergent Teacher Cognition

The Macalister framework introduced in 2014 includes concepts that interact with each other and greatly influence teacher trainees' academic careers. These concepts include BAK, prior knowledge and experience, and contextual factors.

A more recent framework that deserves mention due to its focus on preparing pronunciation instructors is the one proposed by Burri, Baker, and Chen (2018), later modified by Burri and Baker (2021) (see Figure 4).

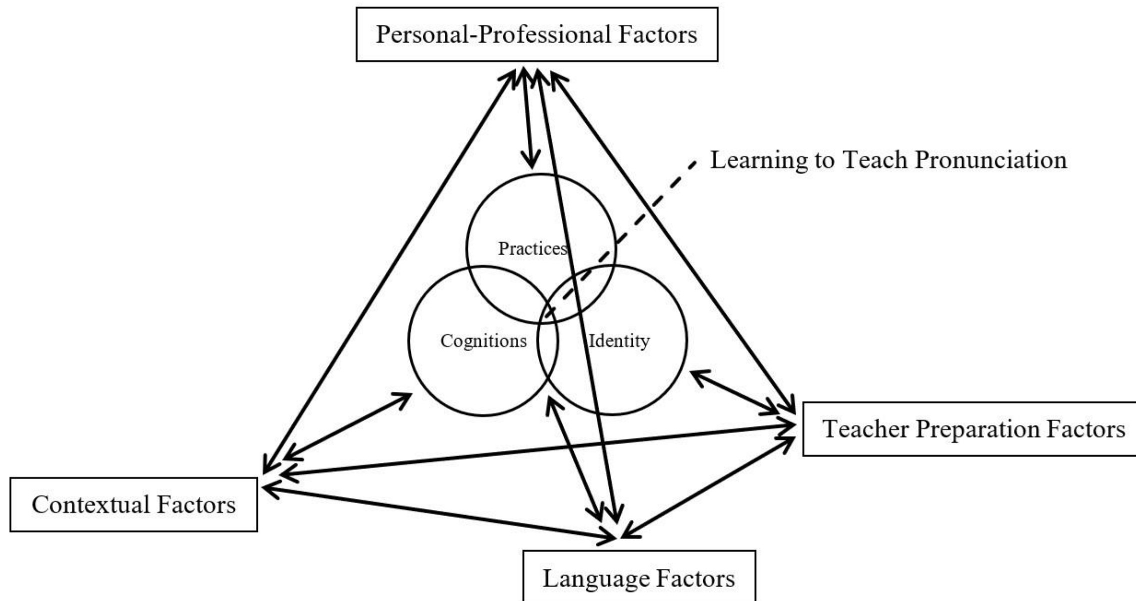

Figure 4. Extended framework for preparing pronunciation instructors (Burri & Baker, 2021. p. 15)

Based on longitudinal research, Burri, Baker, and Chen (2018) identified three factors that had an impact on participants' learning to teach pronunciation by either contributing to it or restricting it: *personal-professional factors*, *teacher preparation factors*, and *language factors*. The first factor includes aspects related to teacher trainees' interests, emotions, awareness of spoken language, own pronunciation, imagination of self and others, language background, and teaching experience. The second group of factors, teacher preparation factors, refers to learning components and opportunities in the pronunciation course taught to participants, such as group work and discussion, classroom observations, training sessions, non-native-native collaborations, assessment tasks, professional literature, and course content. The final group of factors, language factors, includes aspects of the language covered in their course, including accents, varieties, and phonological ambiguity/complexity. Burri and Baker (2021) added a fourth factor, contextual factors, indicating that participants' teaching context influences the development of their practices and cognitions. As the figure suggests, these factors have a reciprocal relationship with the other three factors and impact teacher trainees' cognitions, practices, and identity. Although the framework, as the authors indicate, still requires further refinement and replication of their studies, its specificity to pronunciation and teacher education makes it particularly useful for the purposes of the present dissertation, which aims to map teacher trainees' emergent cognitions regarding pronunciation teaching and learning in a Hungarian context. This research addresses two relatively under-researched areas: teacher

cognition in EFL contexts (Borg, 2003) and pronunciation teaching and learning in teacher preparation programs (Baker & Murphy, 2011).

The first part of the forthcoming review (Section 2.1.3) covers the most frequently discussed concepts in teacher cognition: beliefs, attitudes, and knowledge, followed by a more focused discussion on teacher beliefs (Section 2.1.4) and language teacher cognition (Section 2.2).

2.1.3 Knowledge, beliefs, and attitudes

Borg (2019) noted the emergence of teacher cognition as a concept necessitated the clarification of the concepts relevant to describing teachers' minds, such as *beliefs*, *knowledge*, and *attitudes*. However, the literature indicates that the distinction between knowledge and beliefs, and understanding how they relate, is complex. In the subsequent sections, the research pertaining to these three terms is reviewed.

2.1.3.1 Beliefs

According to Pajares (1992), beliefs can be defined as "an individual's judgement of the truth or falsity or a proposition" (p. 316). Harvey (1986) defines beliefs as "a set of conceptual representations which signify to its holder a reality or given state of affairs of sufficient validity, truth or trustworthiness to warrant reliance upon it as a guide to personal thought and action" (p. 660). Skott (2014) identified some core concepts that many definitions share. First, beliefs are considered subjectively true ideas. Second, they have both cognitive and affective characteristics. Third, they are stable results of substantial social experiences. Finally, they influence practice.

Rokeach (1968) proposed that the coreness or centrality of a belief is determined by its connection to other beliefs. He stated that "the more a given belief is functionally connected or in communication with other beliefs, the more implications and consequences it has for other beliefs and, therefore, the more central the belief" (p. 5). Based on this, Green (1971), as referenced in Schutz et al. (2020), described the organization of belief systems as a three-dimensional structure with three key aspects: quasi-logical structure, psychological strength, and belief clusters. The quasi-logical structure of beliefs implies that they are interconnected, consisting of primary, basic beliefs derived from interactions with the world, personal experiences, and ideologies stemming from actions in various contexts, with derivative beliefs

stemming from these primary beliefs. The psychological strength of beliefs refers to how strongly a belief is held, determining its resistance to change, with core beliefs being more strongly held and peripheral beliefs less so. The third dimension, belief clusters, refers to the organization of beliefs to "provide protection and support," allowing for the coexistence of incompatible beliefs (Schutz et al., 2020, pp. 30-31). Green (1971) categorized beliefs as primary and derivative based on structure and core and peripheral based on strength. Furthermore, other classifications of beliefs distinguish between explicit or conscious and implicit or subconscious or tacit beliefs (Kagan, 1992), as well as between professed or espoused and enacted or attributed beliefs. Professed beliefs refer to what individuals claim to believe, while enacted beliefs are inferred from their actions (Borg, 2018). As Rokeach (1960) emphasizes, beliefs must be inferred not only from verbal statements but also from "behavior, for example, from a slip of the tongue, a compulsive act, an expressive gesture" (p. 32), thereby distinguishing between professed or and enacted beliefs.

Schutz et al. (2020) explored the social construction of beliefs using the theory of habitus and the concept of communities of practice. Habitus, according to Bourdieu, refers to "a system of schemes of perception and discrimination embodied as dispositions reflecting the entire history of the group and acquired through the formative experiences of childhood" (Nash, 1999, p. 177). Over time, these dispositions become ideologies, which "serve as the framework around which our habitus is organized and through which we perceive our reality, find meaning, and situate ourselves within our communities and the wider society" (Schutz et al., 2020, p. 34). As individuals interact with a growing number of communities throughout their lives, they form networks with and participate in the activities of many of these communities to varying degrees. Wenger (1998) describes these communities as communities of practice, which are groups of people who mutually engage in particular practices, possess common goals, tasks, or purposes, and a shared repertoire. As Wenger-Trayner and Wenger-Trayner (2015) later described, these are "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (2015, p. 1).

Teachers can be viewed as a community of practice, and according to Schutz et al. (2020), students aspiring to become teachers gradually become members of these communities. They start by observing and then by participating in teaching practices, which allows them to adopt the way of interacting and communicating the beliefs and actions of these communities. As they point out, "this transition from novice to expert necessitates being guided through the community's practices through involvement in authentic tasks and being supported in developing new understandings that are at the core of the identity of the community" (Schutz

et al. 2020, p. 35). At the beginning of this process, the present dissertation examines teacher trainees before they enter the novice stage to assess what type of guidance would still be necessary to provide better support for their learning and later teaching practice.

2.1.3.2 Knowledge

The objective of the educational research (outlined in Section 2.1.1) was to establish a knowledge base for teaching. Initially, this research aimed to observe effective teaching behaviors that led to higher student achievement. However, due to criticism, the focus shifted from observing behavior to examining teacher cognition, beliefs, and their interaction. How teachers approach and respond to specific situations in the teaching context and how they draw conclusions and insights was also highlighted, placing teachers in the center of observation (Verloop et al., 2001). As knowledge and beliefs became more important, it was necessary to "identify the place of this teacher knowledge in the total knowledge base of teaching," defined as "all profession-related insights that are potentially relevant to teacher activities" (Verloop et al. 2001 p. 443.) The most well-known conceptual framework of teachers' knowledge base is Shulman's (1987, p. 8), who lists seven categories of teachers' knowledge:

- content knowledge;
- general pedagogical knowledge;
- curriculum knowledge;
- pedagogical content knowledge;
- knowledge of learners and their characteristics;
- knowledge of educational contexts;
- knowledge of educational ends, purposes, and values, and their philosophical and historical grounds.

The knowledge base is founded on a range of diverse sources: scholarship in content disciplines, educational materials and settings, formal educational scholarship, and wisdom of practice. The first source alludes to the knowledge of the literature and research within a given subject area, which not only encompasses the subject matter and its organization but also the flexibility and ability to provide alternative explanations of the same concepts or principles. According to Shulman (1987), teachers also bear the responsibility of influencing their students' understanding of the truth of a field. The second source implies the materials and structures that teachers employ in their teaching practices, such as curricula, tests, and institutions. These tools

and contexts can either assist or inhibit teachers' work. The third source includes philosophical, critical, and empirical perspectives that define good education. Shulman emphasized the importance of these perspectives alongside empirical research on teaching and learning. Finally, wisdom of practice refers to the practical wisdom of experienced teachers, which guides their teaching practices and provides a foundation for research to create representations of this knowledge. Although Shulman acknowledges that the knowledge base is not exhaustive, he posits that it represents the belief that "scholars and expert teachers are able to define, describe, and reproduce good teaching" (Shulman, 1987, p. 12).

Baker and Murphy (2011) explain that teacher cognition research, alongside other fields that utilize this framework, "analyze[s] components of teachers' knowledge and how they develop," and researchers "believe that much of value can be learned by direct exploration of teachers' thinking and reasoning processes through interviews; questionnaires; stimulated-recall procedures; and tests of declarative knowledge about language, students, and educational contexts" (p. 32). This teacher knowledge, as Verloop et al. (2001) observed, is an "inclusive concept, summarizing a large variety of cognitions, from conscious and well-balanced opinions to unconscious and unreflected intuitions" (p. 446). They highlighted the challenge of balancing individual experiences with shared components of teachers' knowledge but conclude that due to its embeddedness in a personal context, research in this field should focus on shared teacher knowledge among teachers who are similar in some respects. They also pointed out that given the domain- and context-specificity of teacher knowledge, mapping its aspects on various topics and in several contexts is a task that requires considerable attention. However, they called for exploring tacit and unconscious elements of teacher knowledge, subject-specific aspects of teacher knowledge, and more investigation into the environments and circumstances that trigger changes and development in teacher knowledge. A Hungarian study worth mentioning in this respect is the one conducted by Farkas (2019), which explored the knowledge that L2 teachers rely on when they are involved in and reflect upon L2 learning-teaching, during which teachers' actions influence students' engagement in learning and the learning process. This study analyzed reflective-narrative data from three qualitative studies involving Hungarian in-service L2 teachers, Hungarian and Turkish EFL teacher trainees, and Austrian and Hungarian L2 learners. The study suggests the construct of *L2 teachers' knowledge of their impact* (LTKI) as a way to describe the knowledge that enables L2 teachers to have a more favorable impact and be more effective in the classroom. The study suggests that LTKI is a specific area of L2 teachers' knowledge, a combination of propositional procedural knowledge that teachers at all levels use when engaging in L2 learning-teaching as a relational activity.

In investigating pronunciation-related beliefs, attitudes, and knowledge, this dissertation aims to contribute to the body of research exploring elements of teacher trainees' already existing knowledge in an EFL context.

2.1.3.3 Knowledge and beliefs

To describe "the analogous interactions between knowledge, beliefs and practices," as Levin (2014, p. 49) put it, researchers used terms such as *personal practical knowledge*, *practical theory*, *practical philosophy*, or *theory of action.* However, attempts have been made to clarify the distinction between knowledge and beliefs (Abelson, 1979; Nespor, 1987; Pajares, 1992; Calderhead, 1996; Richardson, 1996). For instance, Abelson (1979) distinguished beliefs from knowledge in the following manner:

1) The elements (concepts, propositions, rules, etc.) of a belief system are not consensual.
2) Belief systems are in part concerned with existence or nonexistence of certain conceptual entities.
3) Belief systems often include representations of "alternative worlds", typically the world as it is and the world as it should be.
4) Belief systems rely heavily on evaluative and affective components.
5) Belief system are likely to include a substantial amount of episodic material from either personal experience or (for cultural belief systems) from folklore or (for political doctrines) from propaganda.
6) The content set to be included in a belief system is usually highly "open".
7) Beliefs can be held with varying degrees of certitude.

(pp. 356-360)

Nespor (1987) outlined four features that can distinguish beliefs from knowledge based partly on Abelson's (1979) work. These factors include *existential presumption* (unwavering beliefs about the existence or non-existence of something), *alternativity* (conceptualizing realities or situations different from a present state, with beliefs helping to define goals as opposed to knowledge systems used when the goals are clearly defined), and *affective* and *evaluative loading* (for example, beliefs can influence teachers' expectations of students or their approach to teaching specific content, but they do not influence knowledge of rules). Pajares (1992) noted that beliefs and knowledge are "inextricably intertwined" and that the "filtering effect of belief structures ultimately screens, redefines, distorts, or reshapes subsequent thinking

and information processing" (p. 325). Despite Pajares' attempt to clarify the complex nature of beliefs, their intricacies persist. This is also the case for differentiating between beliefs and attitudes, as discussed in the next section.

2.1.3.4 Attitudes

In the *Handbook of Attitudes*, Albarracín et al. (2005) cite Eagly and Chaiken's (1993) definition of attitude as the most conventional contemporary definition: "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (p. 4). Attitudes can be held towards a multitude of entities: things, other people, and ideas. The multi-component model of attitudes suggests that they are rooted in three sources: cognitive, affective, and behavioral. The cognitive source pertains to beliefs about the attitudinal object, the affective source relates to feelings and emotions connected to it, and behavioral information concerns past behaviors connected to the attitudinal object (Haddock & Huskinson, 2004). While attitudes were initially regarded as the strongest predictors of behavior, their influence became more moderate when other factors were recognized. Nevertheless, attitudes remain a vital component in determining behavior. It is worth noting, however, that ambivalence can arise, that is, "uncertainty, inconsistency or conflict between attitude components" (McKenzie, 2010, p. 24). As Perloff (2003) points out, people with strong attitudes tend to be passionate and caring individuals, but the main reason why scholars consider it important to measure their intensity is that strong attitudes have more potent effects on behavior and the potential to lead to troublesome or violent actions in some instances, which is why they underscore the importance of understanding these attitudes. Strong attitudes can endure over time, impact judgments, guide behavior, and may be difficult to change.

Attitudes and beliefs often go hand-in-hand, making it difficult to distinguish between them. According to Pajares, "clusters of beliefs around a particular object or situation form attitudes that become action agendas." (p. 319). Wang Erber et al. (1995) also suggest that strong attitudes are rooted in other beliefs and values, and if these beliefs were to change, the attitudes related to them would also change. However, Eagly and Chaiken (1993) (cited in Albarracín et al., 2005) note that the main difference between beliefs and attitudes is that beliefs can be verified with objective criteria, whereas attitudes cannot. When they "exhibit a high degree of social consensus," attitudes might seem to represent social reality, but "even among the most agreed-upon attitudes we would find notable exceptions" (Albarracín et al., 2005, p. 5).

When discussing attitudes in the context of second language acquisition, Gardner (1985) distinguished between two types: attitudes toward learning the language and attitudes toward the target language community. He noted that the former correlates with achievement, whereas the latter exhibits more variable relationships. Gardner illustrated the complexity of classifying attitudes in SLA by describing two dimensions. The first is specificity or generality, where specific attitudes differ from more general attitudes in having a clearly described object. The second is the relevance of the attitude to second language learning, which can be reflected in the correlations between attitude measures and indices of achievement. Gardner further discussed the differences in relevance between educational attitudes (towards the teacher, course, or language learning) and social attitudes (e.g., towards social groups), claiming that, although both play a role in second language learning, attitudes toward learning the language and achievement seem to be more highly related than attitudes toward the language community. Some aspects highlighted as influential in achievement in learning the second language include sex differences, the geographical area the student grew up in, parents' attitudes towards learning the language, and age. In terms of attitudes towards the second language community, some studies ((Mueller & Miller, 1970; Jacobsen & Imhoof, 1974; Spolsky, 1969) have suggested that positive attitudes toward the language, language community, and perceived cultural similarity can contribute to successful language learning outcomes. Research also indicates that success in language acquisition can strengthen positive attitudes, whereas a lack of progress can reinforce negative attitudes (Ellis, 1994).

Baker (1992) (as cited in McKenzie, 2010, p. 26) identified eight major areas of language attitudes:

1) attitudes towards language variation, dialect and speech style
2) attitude towards learning a new language
3) attitude towards a specific minority language
4) attitude towards language groups, communities and minorities
5) attitude towards language lessons
6) attitude of parents towards language lessons
7) attitude towards the uses of a specific language
8) attitude towards language preference

As the present dissertation focuses on attitudes towards native and non-native varieties of English, the categories relevant to the present dissertation are the first and eighth categories and will be explored further in Section 2.3.5. Although the above overview has sporadically touched

upon the topic of teaching within the discussion of the concepts of beliefs, attitudes, and knowledge, the next section will delve into teacher beliefs in more detail because, as Nespor (1987) notes, "*To understand teaching from teachers' perspectives, we have to understand the beliefs with which they define their work*" (p. 323, emphasis original).

2.1.4 Teacher beliefs and their impact on teaching

Richards (1998) defined teacher beliefs as "the information, attitudes, values, expectations, theories, and assumptions about teaching and learning that teachers build up over time and bring with them to the classroom" (p. 66). Johnson (1994) notes that these beliefs shape teachers' perceptions, judgment, and actions, impacting how they understand information, use it in practice, and teach.

Teacher beliefs in education research have gained a more prominent role following the move away from process product studies and toward greater emphasis on teachers' thinking and their central role in teaching (Skott, 2014). Skott explains that this shift in focus was triggered by reforms in sciences and mathematics, where instead of merely accumulating knowledge, the goal was to foster engagement and involvement in tasks and processes, with a stronger focus on student learning. Consequently, the teacher's role became more central, as they were now expected to consider students' prior experiences, interpret their suggestions, and tailor support to individual or group needs. This required the confident handling of processes, an understanding of outcomes, and their relationships. Therefore, research concentrated on beliefs, as it was essential to comprehend how teachers' perspectives influenced the implementation of reforms. According to Buehl and Beck (2014), teachers rely on beliefs "(1) to filter and interpret information, (2) frame a specific problem or task (e.g., lesson planning), and (3) guide immediate action" (p. 67). As Shutz et al. (2020) explain, this filter, through which they view their professional reality, can either enhance outcomes or negatively affect student learning. The framing effect shapes how teachers perceive problems or address situations and its guiding function determines their actions.

Teachers hold beliefs about various aspects of their profession, including themselves (Caprara et al., 2006; Liljedahl & Oesterle, 2020), their competences (Lauermann & ten Hagen, 2021; Song & Zhou, 2021), their professional and personal identity (Volkmann & Anderson, 1998; Hong, 2010; O'Sullivan, 2014), knowledge (Chan, 2004; Maggioni & Parkinson, 2008), their specific subject (Kouritzin et al., 2007; Busch, 2010; Alexander, 2012), the context in which they work (He & Levin, 2008; Deemer, 2004), and students (Pettit, 2011; Harrison &

Lakin, 2018). Their beliefs stem from different sources (e.g., Levin & He, 2008; Levin et al., 2013). For instance, Levin and He (2008) found that teacher trainees draw their pedagogical beliefs from their families and personal experiences, teacher education, and classroom observation in equal measure, while in-service teachers with one–six years of experience cite their teacher education program as the most influential source, followed by family values and experiences, teaching experience, professional development, and observing other teachers (Levin et al., 2013). Doró's (2022a, 2022b) research in Hungary also revealed that teacher trainees' early initial views were influenced by their families, first teaching experiences, and previous school experiences. The present dissertation will add to the existing research on teacher beliefs about knowledge of their specific subject and some aspects of their professional and personal identity.

Pajares (1992) highlighted the challenge of changing early beliefs as they can shape how new information is perceived and prior information is recalled. However, it is not just early beliefs that resist change. In general, beliefs are replaced only when they no longer fit into existing conceptions. Nespor (1987) suggests that belief change "is more likely to be a matter of a conversion or gestalt shift than the result of argumentation" (p. 321). Consequently, as Schutz et al. (2020) explain Green's recommendation, "It bodes well for teaching to target the formulation of belief systems that minimize the number of belief clusters (systems of disconnected or loosely connected beliefs) and core beliefs (beliefs that are strongly held) but maximize the connections among beliefs so they are organized in ways that cohere" (p. 32). As they pointed out, reducing the number of change-resistant beliefs makes transformation easier when facing contrasting evidence. In their overviews, Ashton (2014) and Levin (2014) both emphasized that observing belief changes is a lengthy and complex process that requires longitudinal research designs.

In their review, Buehl and Beck (2014) listed four types of relationships between beliefs and practices: beliefs can either influence practice or vice versa, they may have no connection at all, or they may mutually influence each other. Indeed, some studies (e.g., Wilkins, 2008; Tsangaridou, 2008; Song & Looi, 2012; Fives & Buehl, 2012) have shown that beliefs guide action, and there are instances where there may be a conflict between belief systems or a mismatch between teacher beliefs and practices (Lim & Chai, 2008; Jorgensen et al., 2010). As highlighted by Buehl and Beck (2014), the potential consequences of discrepancies between beliefs and practices are significant. The obligation to teach in a manner incongruent with teachers' beliefs may have detrimental effects on both satisfaction and well-being. Even if teachers' practices align with policies and school guidelines, they may leave the profession or

ineffectively implement practices if they conflict with their beliefs. Moreover, as they pointed out, congruence between beliefs and practices is not necessarily desirable if the beliefs themselves are unsuitable for the purposes of the teaching situation and the context in which teachers find themselves. However, as Schutz et al. (2020) concluded (referring to Green, 1971; Op't Eynde et al., 2002; Leatham, 2006), although people can have conflicting belief systems, they aspire to coherence within it, and their belief system is sensible to them. As they point out, these are all essential points for researchers to consider before asserting a mismatch between teachers' beliefs and behaviors: "A researcher or an observer is unlikely to (…) see how (…) clustering makes sense. Irrespective of the observer's perception, this does not make [beliefs] less coherent to the individual" (Schutz et al., 2020, p. 40).

Regarding Buehl and Beck's (2014) study on the relationships between beliefs and practices, Borg (2018) notes that although there has been much focus on the four primary forms of the beliefs-practice relationship, the reciprocal influence perspective "captures most appropriately the complex manner in which beliefs and practices interact over the course of a teacher's professional life" (p. 79). Although most research designs are cross-sectional analyses, this relationship, as Borg points out, could best be studied using longitudinal research designs, which are scarce in the literature. This is one of the methodological issues discussed in more detail in Section 2.2.2.

2.2 Language Teacher Cognition

2.2.1 Overview

During the second half of the 1990s, studies on language teacher cognition began to emerge (Borg, 2003). Borg (2019) highlighted *Teacher Cognition in Language Teaching* (Woods, 1996) and *Teacher Learning in Language Teaching* (Freeman & Richards, 1996) as significant studies that brought teacher cognition at the forefront of theoretical inquiry. However, owing to its roots in educational research, the diversity of terms characterizing it has resulted in a lack of unified terminology (Borg, 2003).

The advancements in educational research also impacted language teaching and learning research, with the principles and practices characteristic of the process-product paradigm manifesting themselves in language teaching as well. Learning to teach languages entailed learning to convey the linguistic and meta-linguistic content through a variety of methods and techniques (processes) that were considered the best practice in their time (from

grammar translation to communicative language teaching), complemented by theories and empirical data (from cognitive psychology and second language acquisition) (Freeman, 2002). During the 80s, however, a more integrated view of content and teaching processes emerged, leading to Shulman's (1987) concept of *pedagogical content knowledge* (PCK) in teaching. However, as Freeman (2002) argues, this concept is not functional when it comes to language teaching because teachers' ability to convey their PCK relies heavily on language itself. Therefore, an alternative concept was suggested by Elbaz (1983) and Clandinin (1985), "personal, practical knowledge", involving personal and professional experiences, expressed through narrative "images" that teachers use in their classroom teaching, which combine past experiences, current activities, and future goals (Freeman, 2002). The importance of prior knowledge in teacher learning also emphasizes the concepts of *apprenticeship of observation* and *hidden pedagogy* (discussed in Section 2.1.1). As concluded by Freeman and Johnson (1998), this research argues that "what teachers know about teaching is largely socially constructed out of the experiences and classrooms from which teachers have come" (p. 400).

The field of EFL teaching was also interested in exploring the nature of teacher learning, and this objective was clearly articulated, as per Freeman (2002), by professional associations like International Association of Teachers of English as a Foreign Language (IATEFL) and Teachers of English to Speakers of Other Languages (TESOL), as well as in the preface of the book *Second Language Teacher Education* (1990), edited by Richards and Nunan. Despite variations in their approaches, both endeavors aimed to chart the territory of teacher learning, promoting diverse perspectives.

Freeman and Johnson (1998) argued for the reconceptualization of the knowledge base of ESOL teacher education, proposing a broader epistemological framework "grounded in teachers' classroom practice, their learning and professional lives, and the sociocultural contexts in which they work" (p. 412). Their proposal recognized that teachers' knowledge is built through interactions and experiences with students, parents, and other professionals. It also acknowledged the importance of previous experiences and that what works in one context may not work in another. Their proposed knowledge base (Figure 5) for language teacher education covers three broad areas: the nature of *the teacher-learner*, the nature of schools and schooling (i.e., *social context*), and the nature of language teaching (including pedagogical thinking and activity, subject matter and content, and language learning, i.e., *pedagogical process*).

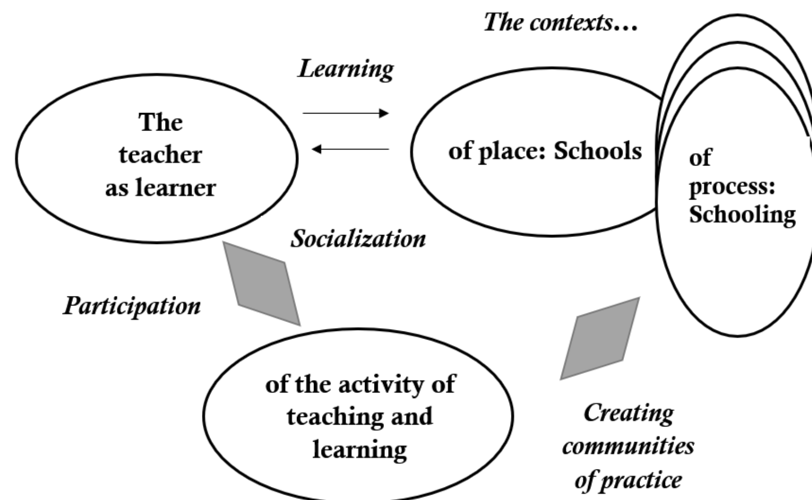

Figure 5. Framework for the knowledge-base of language teacher education (Freeman & Johnson, 1998, p. 406)

The first domain highlights the significance of viewing teachers as learners of teaching. Freeman and Johnson stress that "teachers are not empty vessels waiting to be filled with theoretical and pedagogical knowledge" (p. 401). Instead, it is crucial to consider various factors and processes that affect their learning, such as their prior knowledge and beliefs, how this knowledge evolves over time, the context, and how teacher education can change and transform these beliefs. The second domain, social context, focuses on the role of schools and schooling. Schools are understood as physical and sociocultural environments in which teaching and learning occur, while schooling encompasses broader sociocultural and historical processes such as hidden curricula, community expectations, and historical norms. The former is synchronic, whereas the latter is diachronic. Furthermore, schools and classrooms are seen as "frameworks of value and interpretation in which language teachers must learn to work effectively" (p. 409), providing a "sociocultural terrain" where teachers think about, carry out, and evaluate their teaching and where they navigate the power dynamics. This view of schools and schooling acknowledges the interconnectedness of language teaching, its sociocultural context, and the political nature of teacher education. The third domain focuses the teaching activity itself, including pedagogical thinking and activity, subject matter and content, and language learning. As Freeman and Johnson (1998) argue, all three domains are interrelated and allow for a comprehensive examination of teacher-learners from the beginning of their careers. This knowledge base allows for a better understanding of how schools, as a context both at a given moment and over time, affect the teaching and learning process. Although

initially controversial, this framework and its proposed understanding of L2 teaching and teachers are now widely accepted, referred to by Lee et al. (2015) "as a foundational article for the professional practice of language teaching" (p. 18).

Language teacher cognition research studies "highlight the personal nature of teacher cognition, the role of experience in the development of these cognitions, and the way in which instructional practice and cognition are mutually informing" (Borg, 2003, p. 83). In his 2003 review of teacher cognition in foreign and second language teaching, Borg identified gaps and suggested future directions for this research. This review article focuses on three themes: teacher cognition and prior learning experience; cognition and teacher education; and cognition and classroom practice.

Regarding the first theme, Borg's (2003) overview concluded that similar to the findings of mainstream educational research (cf. Lortie's (1975) *apprenticeship of observation*), teachers' previous experiences with language learning impact their thoughts and beliefs about language learning, influencing their early approach to teaching second languages during their college years and possibly also later on in their careers.

As for the theme of cognition and teacher education, Borg (2003) highlighted the parallels between the findings of mainstream educational and language teacher research regarding students having unrealistic ideas about teaching and learning despite receiving training. Research suggests that "teacher education did impact trainees' cognitions, though the precise nature of this impact varied across studies and indeed even amongst different trainees in the same study" (Borg, 2003, p. 89). Moreover, changes in cognition did not automatically translate into changes in behavior, and vice versa. The author noted that the most commonly used data collection methods may not fully capture potential cognitive changes and called for more research to explore the relationship between behavioral and cognitive changes, as well as the processes or structure of cognitive development during training.

Finally, Borg (2003) suggested several emerging issues to consider in terms of classroom practice. These include the reasons behind teachers' decisions, departures from the lesson plan, the impact of context, and experience. For instance, teachers' "perceptions of the instructional context, particularly of the students, at any particular time" (Borg, 2003, p. 94) can influence whether they depart from the lesson plan, potentially leading to a way of teaching that does not necessarily reflect teachers' beliefs. Additionally, external factors like "parents, principals' requirements, the school, society, curriculum mandates, classroom and school layout, school policies, colleagues, standarised tests and the availability of resources" (Borg, 2003, p. 94) may also prevent teachers from teaching in a way that reflects their beliefs.

Based on the research discussed previously, what is relevant for the present dissertation is the need for further research on factors such as prior learning, professional experience (preferably in longitudinal studies, focusing on the changes that occur as teachers become more experienced), and the context in which teachers work (including of contexts where, for example, non-native teachers teach). While including non-native teachers is already noticeable in the literature, further research is necessary, as highlighted in Borg's (2012) methodological review.

2.2.2 Methodological issues in teacher cognition research

As previous research has suggested, beliefs can influence teachers' judgment, interpretation, and actions, influencing their teaching, and, ultimately, students' learning outcomes. This is why Levin (2014) suggests that beliefs are "a central concern of teaching and teacher education" (p. 49). Several studies have examined the difficulties, challenges, and shortcomings of teacher cognition and teacher belief research. Some of these findings are presented below.

In his analysis of teacher cognition research, Borg (2012) analyzed trends and methodological issues within the field based on 25 empirical papers published in 2011 alone. His findings indicated that the studies were international and involved non-native speaker teachers, employed non-probability samples and mixed or qualitative methods, and interviews were the most commonly utilized techniques, followed by questionnaires, document analyses, and observations. However, Borg also noted that teachers of foreign languages other than English were underrepresented in the studies; there was limited use of visual methods in the data collection process and there was room for more quantitative methods. He also stressed the importance of discussing the methodological challenges in studying this area.

Levin (2014) highlighted the limitations of teacher belief research, including the need to specify the type of observed belief, challenges of comparing results across different contexts, the limited scope of small-scale studies, the absence of surveys with open-ended questions that could elicit further explanation, the lack of follow-up observations, and a lack of diversity among participants. As per Levin, teacher educators play a critical role in helping teachers understand, articulate, and become more aware of their beliefs, which enables them to "justify the reasons behind their practices with peers, administrators and parents; (…) question mandates or policies that run counter to what they believe is best for children in significant and socially just ways (…), mentor others, share their perspectives with university-based teacher educators, and provide examples of how practice can inform theory" (2014, p. 61). Skott (2014) listed three main reasons why investigating teacher beliefs might prove challenging: the difficulty of distinguishing beliefs from attitudes, values, knowledge, goals, and emotions; problematic research methods; and the fact that beliefs may not always account for practice.

In a subsequent article, Borg (2018) explored the prevailing patterns in teacher cognition research and problematized certain aspects. He noted that many studies have investigated teachers' beliefs and the relationship between teachers' beliefs and actions. He also pointed out that beliefs and practices tend to be inconsistent, especially when considering only stated beliefs

(as opposed to professed or enacted beliefs, which could differ from what is stated). Thus, in any study, clarifying the type of belief being observed and the rationale for examining the relationship between teachers' beliefs and practices is crucial. Borg underscored that the need to study the relationship mentioned above should never be taken for granted, and that research in this area must be justified. He identified several possible justifications, but for the present dissertation, two are particularly relevant:

> "Where teachers' practices are considered ineffective, studying their beliefs can help understand the reasons for these practices. For example, if teachers spend most of their lessons explaining grammar explicitly (and this is considered an ineffective strategy for teaching a foreign language) then an analysis of the beliefs underpinning such behavior could provide a starting point in beginning to promote change in what teachers do."
> (Borg 2018, p. 78)

> "An appreciation of the relationship between beliefs and practices has implications for the design of pre-service teacher education programmes. For example, if we know that teachers avoid teaching pronunciation explicitly because they have limited confidence (i.e. a belief about self) in their own pronunciation, then that would suggest greater attention be paid at pre-service level in developing appropriate level of teacher confidence in specific areas of language awareness."
> (Borg 2018, p. 78)

Although this dissertation does not directly examine the relationship between teachers' beliefs and practices, the above quotes are still applicable when analyzing beliefs alone. Both quotes stress the importance of understanding the motivations behind a teacher's classroom behavior, such as choosing a particular strategy or avoiding another, by exploring their underlying beliefs. Research has shown that teachers may avoid teaching pronunciation for various reasons (discussed in more detail in Section 2.3.1), and it is crucial to investigate their beliefs when issues arise. However, if we acknowledge that teachers are influenced by their early experiences in the educational system, it is necessary to identify the underlying reasons for these issues as early as possible, ideally during teacher education. This could involve examining what teacher trainees bring with them from their prior educational experiences and exploring their beliefs in the first phase of their studies. By doing so, we can interrupt the cycle that leads them to neglect pronunciation teaching and empower future teachers to become more successful in the classroom.

2.2.3 Language teacher cognition research across skills

Research on language teacher cognition has explored various areas and contexts with different foci including reading, vocabulary teaching, and speaking instruction. While grammar has been the skill most emphasized, this section first covers studies on other skills, such as reading, vocabulary, and speaking, followed by an overview of grammar-related studies and findings.

Regarding teacher cognition of reading, Tercanlioglu's study (2001) investigated the teacher trainees' self-perceptions as readers and future teachers of EFL reading, revealing that Turkish teacher trainees lacked confidence in their own reading competence and motivation to teach reading in the future. However, they believed that teachers who teach reading should be good readers who read with their students. El-Okda (2005) conducted a study with Omani teacher trainees to investigate their implicit beliefs about teaching reading. They were asked to react to three vignettes depicting problematic situations regarding teaching reading skills by selecting and/or spelling out their practical arguments. The study found that teacher trainees believed in the importance of teaching the English alphabet to young children early, as delaying literacy instruction could negatively impact their FL learning. Teacher trainees also believed that reading aloud could aid pronunciation. El-Okda emphasized the importance of considering teacher trainees' beliefs in designing methodology courses. In a Lithuanian context, Kuzborska (2011) found that EAP teachers' beliefs in a skill-based approach to reading instruction, emphasizing the importance of vocabulary, translation, reading aloud, and whole-class discussion of texts, were congruent with their practices. However, she noted the need for a more strategic approach to reading instruction and a greater exposure to alternative instructional practices. Finally, Sa'adah et al. (2018) examined the cognition and practices of experienced Indonesian EFL teachers in teaching reading strategies. This study found that teachers believed in the importance of teaching all types of metacognitive, cognitive, and social reading strategies. However, classroom practices showed that only some were implemented because of factors such as context, teaching materials, student motivation, or teachers' training. This indicates that their cognition and practices were not aligned.

The dearth of research on teacher cognition concerning teaching and learning vocabulary is comparable to that on reading. For example, Macalister's study (2012) investigated trainee teachers' beliefs concerning vocabulary teaching in Malaysia and found that they had difficulty clearly articulating their beliefs through descriptions. For this reason, Macalister suggested that teacher education should place more emphasis on trainees'

developing knowledge of language-teaching practices rather than their beliefs. Zhang's (2008) study on teacher beliefs about vocabulary learning and teaching, the sources of their knowledge and the relationship between their knowledge and practices regarding vocabulary instruction reported that Chinese EFL university teachers support communicative language teaching through an inductive approach while integrating traditional methods and combining incidental learning with explicit teaching. According to the study, teachers' beliefs and practices regarding vocabulary teaching were generally consistent, with individual differences (such as academic background or research interests) affecting their beliefs. In another study carried out in China, Niu and Andrews (2012) found that university teachers shared a multitude of beliefs about vocabulary teaching, such as the importance of explicit vocabulary instruction, the need for vocabulary instruction through communication and communicative tasks, the promotion of word meaning guessing in the classroom, and the use of L1 Chinese to facilitate understanding. Nevertheless, discrepancies were found in other beliefs, such as the type of word knowledge necessary, learner factors influencing vocabulary instruction, dictionary checking, and how teachers teach vocabulary. Beliefs and practices were found to be consistent with some exceptions. The authors suggested that while the similarities can be attributed to the Chinese EFL learning culture, the discrepancies and inconsistencies between beliefs and practices stem from the classroom culture in which they are situated. On the other hand, Alsayed's study (2021) explored the beliefs and practices of first-grade EFL teachers in teaching L2 vocabulary in Norway. The findings indicated that teachers' practices align with the curriculum aims and research on teaching vocabulary to young learners. They considered songs, games, and visual aids to be effective tools for teaching vocabulary, and they favored teaching through practice and the use of games and visual aids while promoting incidental learning.

As far as teaching speaking is concerned, in a study of Saudi EFL university teachers' beliefs on speaking teaching, Gandeel (2016) found that their teaching was primarily course-book based, teacher-centered, and accuracy-oriented, with little emphasis on fluency and an absence of contemporary views on teaching speaking. While Mexican teachers held slightly different beliefs, Garcia-Ponce and Tagg (2020) found that their practices were quite similar. They explored the interactional features of university EFL teachers in Mexico with their learners during speaking practice and interviewed them to gain insight into their beliefs about speaking practice and to see how these beliefs impacted their interactions with students. Teachers' pedagogical beliefs in communicative language teaching contrasted with perceived local needs and limitations such as the importance of traditional grammar teaching, time constraints, and class size. Therefore, they modified their practices accordingly, leading them

to rely on the use of display questions, grammar- and vocabulary-focused speaking, and dominating classroom discourse.

More than any other skill, teacher cognition in teaching grammar has received considerable attention regarding teachers' knowledge, beliefs, and grammar instruction practices. For example, Berry (1997) highlighted that teachers overestimated their students' knowledge of grammatical terminology. Concerning beliefs about grammar and teaching practices among students and teachers, research has shown discrepancies between how teachers and students view the necessity of error correction in class: while students desired grammatical errors to be corrected more frequently, teachers saw it as less necessary (Schulz, 1996) A later study conducted with Canadian and Russian learners of English also reinforced the results that learners expressed a desire to be corrected more often (Kartchava, 2016). However, regarding the necessity of the formal study of grammar for mastering the language, there was a discrepancy between students' and teachers' views in the US and Colombia regarding the role of grammar, with students being more convinced than teachers about its necessity in mastering the language (Schulz, 1996, 2001). Upon investigating teachers' and learners' opinions on the timing of grammatical instruction (integrated form-focused instruction or isolated form-focused instruction), Valeo and Spada (2016) found a preference for integrated FFI over isolated FFI across all the groups. In a survey by Graus and Coppen (2016), EFL teacher trainees preferred form-focused, explicit, inductive instruction, and focus on forms (FonFs), while higher-level undergraduates and postgraduates leaned towards implicit instruction, meaning-focused instruction, and FonF. Traditional form-focused methods were deemed superior to these other approaches for higher-level language learners. The literature stresses the importance of understanding students' perspectives on issues of grammar teaching, as teachers' misconceptions of these perspectives can impact teaching quality. As Borg (2003) pointed out, "studies where cognitions are explored with direct reference to what teachers do in classrooms and to teachers' commentaries on their work (…) [are] required in a greater range of language teaching contexts" (p. 102).

As noted above, few studies have focused on teacher cognition of specific skills other than grammar, many of which are theses or doctoral dissertations. The small number of studies on teacher cognition is also characteristic of pronunciation teaching. However, as cognition regarding pronunciation teaching and learning is the focus of the present dissertation, it is explored in more detail in Section 2.3.1

2.2.4 Emergent language teacher cognition

The frameworks presented in Section 2.1.2 indicate that emergent teacher cognition is affected by trainee teachers' beliefs, attitudes, and knowledge about the nature of teaching and learning, prior knowledge and experiences (gained through the apprenticeship of observation), and contextual factors. In our case, future English teachers arrive at teacher education programs with concepts about what language, language learning, and teaching mean (Johnson, 2015). The nature and effects of prior beliefs and experiences are reviewed in the following two sections.

2.2.4.1 The influence of prior experiences and beliefs

Prior experiences gained in education in the form of many hours spent in the classroom as students form teacher trainees' values, beliefs, and practices. Observing their own teachers while working can lead them to believe that they have thorough knowledge of what the job entails. However, the observation process only reveals the in-class aspects of the job, not those that remain hidden from the student, so they enter the profession with a somewhat simplified idea of what teaching entails (Rust, 1994). What they accumulate in this way is what Buchmann (1987) refers to as *folkways of teaching,* that is, "ready-made recipes for action and interpretation that do not require testing or analysis while promising familiar, safe results in normal situations" (p. 161). Their initial beliefs are not necessarily tested or changed, preventing students from internalizing the information presented to them during a teacher education program (Weinstein, 1990; McDiarmid, 1990; Calderhead & Robson, 1991). If unsupervised, classroom observation can lead them to reinforce existing misconceptions rather than replace them (McDiarmid, 1990; Kagan, 1992).

Although their beliefs about teaching may be well established by the time they begin their teaching practice, classroom practice knowledge at this stage tends to be insufficient and disorganized. They are more focused on content, organization of the environment, and classroom management compared to experts' more organized and specific classroom context-related knowledge and routine-focused organization (Leinhardt & Greeno, 1986; Rust, 1994). In evaluating videotaped lessons, Kagan and Tippins (1992) found that teacher trainees focused more on teacher behavior and less on function, whereas in-service teachers focused on the functional interpretation of teaching behavior. In his article, McDiarmid (1990) summarized findings on common beliefs and assumptions held by pre-service teachers, including the belief that every child is unique and this requires differentiation in education, that some children are

not capable of learning basic skills, that they are responsible for their failures, or that learning is remembering and practicing rules, procedures, and facts. He also mentioned the perceived simplicity of the subject matter (Ball, 1988 in connection with elementary-level mathematics), the belief that existing knowledge is enough to be able to teach, and missing knowledge will be obtained during practice. McDiarmid also pointed out that these beliefs may remain unchallenged during teacher education programs, and in-service teachers' emphasis on the importance of practical field experience may lead to their views and assumptions never being questioned or critically examined. For this reason, as Johnson (1994) notes, it is crucial to focus on the "cognitive dimensions of how second language teachers' thoughts, judgments, and decisions influence the nature of second language instruction […] to establish insight into the unique filter through which second language teachers make instructional decisions, choose instructional materials, and select certain instructional practices over others." (p. 440).

2.2.4.2 Teacher trainees' beliefs regarding language teaching

In 1985, Horwitz conducted a study utilizing the BALLI (Beliefs about Language Learning Inventory) to examine the language learning beliefs of teacher trainees. The author reported that completing the questionnaire appeared to help raise students' awareness of their beliefs, although the changes in these beliefs were not monitored. Subsequent research employing the inventory explored the beliefs of language learners rather than those of teachers (Peacock, 2001). Empirical research focusing on the beliefs of preservice teachers was conducted by Brown and McGannon (1998) (as cited in Peacock (2001)), who surveyed 35 trainee teachers' beliefs pre- and post-practicum in Australia. The study concluded that the apprenticeship of observation had a strong impact on teaching. In a longitudinal study, Peacock (2001) also explored changes in beliefs about second language learning among 146 first-year teacher trainees in Hong Kong as a result of studying TESL methodology. The study revealed no significant changes in beliefs after three years of study. An instruction package was then administered, during which teacher trainees were told that there was a difference between their beliefs and those of experienced teachers; they were shown their BALLI results compared to those of experienced ESL teachers, and they were also assigned five readings on the advantages of communicative approaches to teaching ESL, discussed what they had read in groups, and were shown videos of two lessons that successfully utilized communicative approaches. Although providing quantitative evidence of the changes was not feasible, the author concluded that these steps successfully increased awareness of and appreciation for the communicative

approach. Peacock also emphasized the importance of changing beliefs about language learning that could negatively impact future learners at the start of a teacher education program, pointing out that learners should be made aware of how strongly the apprenticeship of observation can influence beliefs. A similar lack of change in beliefs during teacher education was reported by Kunt and Özdemir (2010) in Cyprus. In contrast, Mattheoudakis (2007) reported significant changes in the majority of the beliefs among Greek teacher trainees between their first and final years, but a low impact of teaching practice on the further development of their beliefs.

A study by Johnson (1994) among ESL teacher trainees found that even when they recognized a discrepancy between their preferred teaching method and actual teaching behavior, they lacked the alternatives necessary to make a change. For this reason, as Johnson notes, it is essential to provide opportunities for teacher trainees to understand themselves and their beliefs about learning and teaching and to identify and reflect on the differences between their classroom practices and their ideal teaching methods.

Teacher beliefs are considered resistant to change by some (Nisbett & Ross, 1980; Silvernail & Costello, 1983; Kagan, 1992; Richardson, 2003) and changeable by others (La Paro et al., 2009). For example, some studies claim that the effects of university training can fade away from the beginning of student teaching and onwards, whereas others claim that university training and teaching practice reinforce each other (Tabachnick & Zeichner, 1984). Busch (2010) conducted a mixed-methods study to investigate the impact of an SLA course on the beliefs of 381 teacher trainees in California. Administering the BALLI survey, Busch observed significant changes in participants' beliefs concerning the duration and difficulty of language acquisition, the role of culture and error correction, the importance of grammar, and the efficacy of audio-lingual learning strategies. These changes were attributed to the course and supplementary activities, such as tutoring an ESL student, which aided teacher trainees in recognizing the complexity of the factors involved in language teaching. Despite the increased awareness of their beliefs, students may still struggle to apply them in their teaching practices.

Brousseau and Freeman (1988) identified two potential obstacles to teacher trainers' efforts in shaping teacher trainees' educational beliefs during teacher education programs. These include "(a) a frequent lack of consensus among program faculty as to the ways in which beliefs should be shaped, and/or (b) faculty's collective failure to challenge inappropriate prevailing beliefs or to encourage students to form their own positions regarding educational issues faculty classify as open-ended" (Brousseau & Freeman, 1988, p. 273). As Johnson (2015) aptly put it, teacher education could be viewed as a way of bridging the gap between previous beliefs and what ultimately becomes teaching expertise:

> “In essence, teacher education is designed to enable teachers to overcome their everyday notions of what it means to be a teacher, how to teach, and how to support student learning [and] may be the only occasion when the learning of teaching is the result of systematic intentional, well-organized instruction. And while development is not guaranteed, the quality and character of the mediation that emerges in formal schooling explicates the essential role that teacher education plays in the dialectic between everyday and academic concepts that work in consort to foster the development of teaching expertise.” (Johnson 2015, p. 517)

During their training, teachers need to gain “an expert’s understanding of the subject matter content being taught and the instructional resources to teach it”, a thorough understanding of the subject matter and the related academic concepts – in the case of language teaching, for example, what language, linguistics or SLA mean. (Johnson, 2015, p. 518). To change teacher trainees’ beliefs, it is crucial to bring these beliefs to the surface and question their adequacy, while simultaneously offering the opportunity to integrate new information into teacher trainees’ belief systems after thorough examination and elaboration. This is important because changing students’ personal beliefs is key for university programs to transform teacher trainees’ teaching behaviors (Calderhead & Robson, 1991; Kagan, 1992). Self-reflection (Manning & Payne, 1989) is an effective technique for achieving this. Richards et al. (2001) and Farkas (2020) also underscore the importance of reflection, including narratives, discussions, and review of student feedback. Other ways of influencing beliefs include tutor feedback on teaching and coursework, reading, and reflective writing (Borg, 2011).

2.3 Pronunciation instruction and learning

Baker and Murphy's (2011) review of teacher cognition literature on ESL/EFL pronunciation instruction highlights the dearth of research focusing on pronunciation-related beliefs and instructional behaviors. This is possibly due to a lack of attention to pronunciation instruction in the past decades, both in the classroom and research settings. However, various aspects of teachers' attitudes and beliefs about pronunciation teaching have been studied, with a particular focus on the instructional objectives (whether to sound native-like or be intelligible), their attitudes towards native and non-native accents, the challenges associated with pronunciation teaching (such as inadequate preparation and training), and their preferred teaching strategies and techniques (Jarosz, 2023). As the present study focused on teacher trainees' perceptions of pronunciation learning and teaching, the following section summarizes the main findings and current issues in pronunciation learning and teaching research.

2.3.1 Teachers' pronunciation teaching beliefs, practices, and challenges across global contexts

Sifakis and Sougari (2005) examined teachers' beliefs regarding the importance of native speaker (NS) accents and their impact on pronunciation norms. They also studied teachers' preferred communication and pronunciation learning methods in specific teaching contexts and whether they adopted an EIL perspective concerning English ownership or harbored stereotypical attitudes towards inner-circle varieties. Data were collected through a questionnaire completed by 421 teachers in Greece teaching at the primary, lower secondary, or upper secondary levels. The results indicated that, although most teachers prioritized successful communication over accuracy, primary- and lower-secondary-level teachers tended to focus more on pronunciation accuracy. In particular, primary-level teachers seemed to give more consistent feedback as they believed that in their early schooling, "learners are much more sensitive auditorily and when vocal-tract articulation has more plasticity" (p. 479). Most participants associated English ownership with native speakers or those with NS competence. The study also revealed contradictory perspectives regarding pronunciation practices in that standard native speaker models were prioritized because teachers believed "they are expected to represent a NS norm" (Sifakis & Sougari, 2005, p. 479). The study concluded that teachers in Greece view themselves as guardians of the English language, associate it with its native

speakers, and appear to have limited awareness of broader issues related to the global spread of English.

Timmis (2002) conducted a comprehensive survey of students' and teachers' attitudes towards native-like English, involving over 180 teachers from 45 different countries and 400 students from 14 countries. The study aimed to determine whether participants preferred to pronounce English like a native speaker or pronounce it in a way that was mutually intelligible to both native-speakers and non-native speakers. Teachers had the third option of "no preference." The study found that students preferred sounding like a native speaker, whereas teachers were more inclined towards the mutually intelligible option. The study noted, however, that teachers often chose the option that they viewed as more realistic rather than what they found desirable.

Buss (2016) conducted a survey of 60 Brazilian teachers to gain insight into their beliefs and practices concerning pronunciation teaching. Most respondents considered teaching pronunciation necessary at all levels, with over half considering it extremely important. Further responses revealed that most teachers considered intelligibility as the primary goal of pronunciation teaching, enjoyed pronunciation teaching, and did not find it difficult. However, the study also revealed that although research seems to influence teacher beliefs, teachers tend to use traditional practices focused on individual sounds, which, as they agreed, calls for more training regarding suprasegmentals and more varied approaches and tools in pronunciation teaching.

Nguyen and Newton (2020) examined the beliefs and pronunciation teaching practices of six EFL teachers at a university in Vietnam through classroom observation and interviews, including general questions regarding pronunciation-related beliefs and stimulated recall. The findings indicated a lack of training in pronunciation pedagogy, with pronunciation teaching restricted to error correction, and no opportunities to practice problematic pronunciation features. This practice indicates a mismatch between their beliefs about providing explicit pronunciation explanations to students and the lack thereof in their teaching practice. The study also indicated that teachers consider feedback in the form of recasts and prompts an effective way of improving pronunciation skills, which is in contrast with the findings of other studies (e.g., Couper, 2019) reporting teachers' negative views of this type of error correction in the case of pronunciation errors. Finally, the study reported on teachers' beliefs that the goal of L2 pronunciation teaching should be intelligibility.

Observing and analyzing an experienced NNST's classes in Costa Rica, in a qualitative case study, Gordon (2020) found evidence of the use of techniques of explicit pronunciation

instruction, such as various error correction techniques, the use of phonetic transcription, the use and explanation of phonetic rules and concepts, and the explicit use of students' L1 to draw attention to differences between their L1 Spanish and L2 English. It also showed teachers' awareness of the students' needs regarding the variety to focus on in class, while also trying to expose students to other native and non-native varieties.

Teaching pronunciation poses several challenges for teachers, such as limited training opportunities, difficulty integrating pronunciation into communicative activities (Breitkreutz et al., 2001; Foote et al., 2011), and a lack of clear guidelines and goals. Additionally, contradictory practices and the absence of immediate outcomes can complicate matters (Darcy et al., 2012). Despite recognizing the importance of both segmentals and suprasegmentals, there is a tendency to focus more heavily on the former (Breitkreutz et al., 2001; Foote et al., 2011). When teaching pronunciation, teachers tend to rely on techniques such as repetition, primarily at the level of phonemes and words (Baker, 2014; Buss, 2016; Foote et al., 2016). Although research indicates that suprasegmentals play a crucial role in being understandable (Derwing et al., 1998; Munro & Derwing, 1998; Derwing & Rossiter, 2002), many teachers find teaching intonation challenging (Baker, 2011; Couper, 2016, 2017). However, if teachers are not prepared to address pronunciation problems in the classroom, they may either ignore pronunciation teaching altogether, fail to teach it systematically, or rely on materials that may not be entirely appropriate to their classroom's specific needs (Derwing & Munro, 2005).

In an in-depth interview with eight Australian ESL educators, MacDonald (2002) found that four main factors prevented systematic pronunciation instruction: the absence of formal curricula, the difficulty of assessing student progress in pronunciation and the teacher's role in it, the difficulty of integrating pronunciation into the communicative approach, and the scarcity of teaching and learning resources. As a consequence, the teachers lacked confidence and were reluctant to teach pronunciation. In a study comparing two different contexts (Uruguay, where English is a foreign language and teachers are non-native English speakers; and New Zealand, where teachers are native speakers), Couper (2020) examined teachers' questions regarding pronunciation teaching. Across both groups, teachers reported gaps in their phonetics and phonology knowledge and a lack of pedagogical knowledge. Furthermore, non-native English-speaking teachers (non-NESTs) reported feeling uncertain about their pronunciation. Additionally, teachers cited time constraints and a lack of suitable textbooks as issues in teaching pronunciation.

Emphasizing the necessity of increasing future teachers' knowledge about phonetics and phonology during teacher education, Gregory (2005) aptly noted that "making the learner

cognizant of how the sounds of L2 are different from those of L1 should be an effective remedy for an inability to perceive L2 phonemes. It is logical to assume that language teachers can only help learners perceive the different phonemes if they themselves understand the mechanics involved" (p. 203). Baker (2011) conducted interviews with five ESL teachers in Canada and the US and also analyzed her own journal of pronunciation teaching experiences to determine whether research into discourse prosody (stress, rhythm, and intonation) had any impact on teacher cognition and pronunciation instruction in the ESL classroom. The results showed the impact of such research on teaching, and a greater focus on prosody in the classrooms of instructors who had taken courses dedicated to pronunciation pedagogy. However, even these instructors expressed a lack of confidence in teaching certain aspects of pronunciation.

The studies reviewed in this section highlight various opinions teachers have in different contexts about the goals of L2 pronunciation teaching, the complexity of teachers' beliefs regarding pronunciation teaching, mismatches between their professed and enacted beliefs, the challenges they face in various teaching contexts, and the lack of thorough preparation of teachers for teaching pronunciation. MacDonald (2002) suggested potential solutions to these challenges, such as increasing the prominence of pronunciation in curricula, redefining the teacher's role in pronunciation teaching, monitoring speech and giving feedback on pronunciation, and developing the teacher's ability to integrate pronunciation into activities for teaching other skills, especially non-native speaker teachers, a group which, apart from a few studies (Buss, 2016; Couper, 2016, 2020), has received limited attention in the pronunciation teaching literature. After reviewing the objectives of pronunciation instruction, the factors affecting pronunciation follow in the remainder of the section on the pronunciation knowledge base.

2.3.2 The objectives of pronunciation instruction

In their narrative review on the effectiveness of L2 pronunciation instruction, Thomson and Derwing (2015) posit that the primary objective of pronunciation research and instruction should be "helping learners become more understandable" (p. 2), per Levis' (2005) *Intelligibility Principle*. In contrast, the *Nativeness Principle* suggests that "it is both possible and desirable to achieve native-like pronunciation in a foreign language" (p. 370). Levis indicated that the latter principle dominated pronunciation teaching prior to the 1960s, until research revealed biological obstacles after a certain age. Although adult L2 learners can sound native-like (Moyer, 2014b), many may find it difficult even if they desire it. Furthermore,

previous studies (Derwing & Munro, 1997, 2015; Munro & Derwing, 1995) have demonstrated that individuals with strong accents can still communicate intelligibly and comprehensibly. Therefore, Derwing and Munro (2005) argued that insisting on native-like pronunciation in the classroom can be unrealistic and detrimental. What remains achievable and can be improved is intelligibility and comprehensibility. If the goal of instruction is to alter a form that does not hinder these two aspects of speech, this will simply mean accent reduction, which, as Thomson and Derwing (2015) argue, is an inefficient use of teachers' and students' time. Jenkins (2002) proposed that the "choice of pedagogic model is (or should be) a matter of selecting the NS accent which will have widest currency among the learner's target (NS) community" (p. 85).

The global use of English led to the emergence of various fields to document how English is used, grouped under the broad term Global Englishes, drawing on the work of scholars of Word Englishes (WE) (Kachru, et al., 2006) Engish as a Lingua Franca (ELF) (Jenkins, 2006a, Seidlhofer, 2011), and English as an International Language (EIL) (Matsuda, 2012). As Rose et al. (2020) note, ELF research has transformed how English language use is perceived in many areas of ESL/EFL education. Regarding pronunciation in particular, ELF research advocates the for the importance of intelligibility over native-speaker norms (Jenkins, 2006b, Saito, 2021), challenging "the way we view the English language as 'owned and ruled' by native speakers" (Rose at el., 2020, p. 1). According to Mauranen (2018), the global ELF-using community is similar to Anderson's (1991) imagined communities wherein "the members may never meet each other in person, but maintain a general awareness of belonging to the community" and are "diffuse, network-based multilingual communities where English is a dominant lingua franca" (Mauranen, 2018, p. 12). Jenkins (2002) explored intelligibility and accommodation phenomena in pronunciation and identified specific core features of ELF language use, known as the Lingua Franca Core (LFC). These features are essential for mutual intelligibility between non-native speakers and include phonological and phonetic features such as consonants, consonant clusters, vowel sounds, and stress placement. In fact, it is the achievability of its pronunciation that makes ELF appealing to students (Deterding, 2010)

Mauranen (2018) posited that while ELF shares certain characteristics with dialect contact, it is not considered a distinct variety due to its failure to meet the criteria for classification as a language variety, which would imply a unified language form and a speech community that can be accurately described. Therefore, Mauranen (2018) recommends the more neutral term "lect" to describe ELF, which still reflects its similarity to dialects, and introduces the separate concept of *similects* which are "not lects of any speech community" (p. 9). As she explains, "a number of lects reflecting contact with English have been given jocular

nicknames like Swinglish, Czenglish, Manglish or Dunglish" (p. 9), reflecting that the idiolects of speakers with the same L1 learning an L2 display similarities in pronunciation, syntax and vocabulary. Similects arise when learners who share an L1 learn the same L2, but they develop similarities even if learning takes place in different locations, among people of different ages, and at different times (which sets similects apart from dialects, whose features arise as a result of interaction within the community). Although similects do not undergo the same developmental stages, changes and diversification as community languages, they still represent language contact.

Jenkins (2002) warned of the possibility of negative reactions to changes in how L2 accents and intelligibility are viewed. In fact, as Thomson (2017) notes, "while the most scientifically rigorous research evidence supports adherence to the intelligibility principle, both teaching practices and the majority of empirical pronunciation studies continue to be grounded in the nativeness principle" (p. 12). For example, Jenkins (2005) conducted a study on NNS teacher accents and identity, interviewing eight teachers from Italy, Japan, Malaysia, Poland, and Spain about their attitudes towards NS and NNS accents. She concluded that, with some exceptions, most participants did not consider adopting ELF pronunciation norms likely unless personal experience validated it and teaching materials or teacher education programs legitimized it.

Research suggests that teachers' preferences concerning the nativeness or intelligibility principle may vary, depending on the specific context in which they teach. To fully comprehend the complexities of this issue, the next section will first review the research findings on the various factors that influence pronunciation.

2.3.3 Factors influencing pronunciation

The pronunciation of an individual is influenced by several factors. One such factor is age, which has been extensively studied. From a neurological perspective, Lenneberg (1967) posited a specific window of opportunity during which language learning is more rapid and effortless. This period, known as the critical period, is thought to end around puberty, after which cerebral plasticity and flexibility are reduced (*Critical Period Hypothesis* (CPH), Lenneberg, 1967). This hypothesis, as noted by Griffiths and Soruc (2020), dominated the question of age in language learning for a long time. Some early studies have found that although older learners may have certain initial advantages, younger learners tend to catch up over time (Snow & Hoefnagel-Höhle, 1978) and are more successful in the long term (Harley,

1986). Moreover, research has shown that an early age of onset leads to a more native-like pronunciation (Oyama, 1976). However, other studies have challenged this idea, demonstrating that the benefits of early instruction are short-lived (Burstall et al., 1974) More recent discussions highlight that it is not just the biological age that should be considered, but many other factors, such as the amount of quality input or individual differences (Singleton & Leśniewska, 2024). For instance, children are more likely to be exposed to contexts in which the L2 is often used than adolescents are (Jia & Aronson, 2013). Conversely, immigrants may spend years communicating only with other immigrants (Flege, 2019). Therefore, residing in the target language country does not necessarily lead to more exposure itself; age potentially affects the willingness to form connections with various groups (Singleton & Leśniewska, 2024).

In terms of phonology, the CPH predicts that acquiring a native-like accent beyond the age of nine or ten becomes increasingly difficult (Moyer, 2013). However, several studies have reported successful late learners achieving native-like pronunciation despite these difficulties (e.g., Bongaerts et al., 1997; Nikolov, 2000; Griffiths, 2003). Furthermore, longitudinal studies have demonstrated that exposure and practice can lead older students to outperform younger students in pronunciation accuracy and intelligibility (Garcia-Lecumberri & Gallardo, 2003), or minimize the difference between them (Fullana, 2006, regarding vowel and consonant discrimination). More recent research suggests that age interacts with other factors during language learning, such as time spent with native speakers and social networks (Llanes, 2010), individual differences, and context (Pfenninger & Singleton, 2019). Moyer (2013) noted that although the positive effects of early exposure or continuous experience with the language cannot be overlooked in terms of phonological attainment, "the factors responsible for phonological acquisition are interwoven in the unique relationship between learner and context" (p. 48).

Longer exposure to native speakers, for example, in the form of study abroad programs or living in the target language area, where there is an increased opportunity to use the L2, would suggest an effect on L2 pronunciation. However, research suggests that although oral fluency may improve due to studying abroad, L2 pronunciation does not, or only in certain respects (Díaz-Campos, 2004; Stevens, 2011). There is conflicting evidence regarding length of residence (LOR). While some studies report an effect of LOR (e.g., Flege et al., 1995; Flege et al., 1999; Trofimovich & Baker, 2007), other studies suggest that LOR does not play a significant role in L2 pronunciation development (Thompson, 1991; Flege et al., 2006).

However, exposure to the target language and contact with native speakers have been suggested to positively impact comprehensibility (Munro & Derwing, 2008) and accent (Moyer, 2011).

Another factor affecting pronunciation is language aptitude, defined by Carroll (1981) as “an individual’s initial state of readiness and capacity for learning a foreign language, and probable facility in doing so given the presence of motivation and opportunity” (p. 86). As described by Skehan (2012), Carroll’s four-factor view of language aptitude includes phonemic coding ability, inductive language learning ability, grammatical sensitivity, and associative learning. Working memory is also considered an important factor in aptitude (Juffs & Harrington, 2011). Various tests exist to measure aptitude, such as the Modern Language Aptitude Test (MLAT) (Carroll & Sapon, 1959) and the Language Learning and Meaning Acquisition (LLAMA) (Meara, 2005). It has been suggested that aptitude tests are a strong predictor of language proficiency (Li, 2016); however, as Griffiths and Soruc (2020) note, it remains unclear whether these tests measure innate ability or other factors. Moyer (2013) notes that although phonemic coding ability is a factor tested by the MLAT, it is “applied to language-learning aptitude in general; there is no such battery that delves deeper into phonology-related skills as a whole” (p. 52). What has been measured is the ability to mimic native models, to perceive new sound categories and to read aloud written sentences comparable to native speakers (Moyer, 2013). Moyer suggests that “the relevant mechanisms likely include hearing, perception, memory, articulatory flexibility, or some combination of processing skills” (2013, p. 53). Indeed, there has been little research on the relationship between language aptitude and L2 pronunciation learning (Trofimovich et al., 2015), but musical ability and training have been reported to influence L2 speech perception and production, although this relationship is complex (Arellano & Draper, 1972; Slevc & Miyake, 2006; Nardo & Reiterer, 2009).

Although motivation has been found to influence L2 foreign accents to some degree (Suter, 1976; Flege et al., 1995), there is no automatic connection between them (Oyama, 1976; Piske et al., 2001). However, Moyer’s (1999) study found a significant correlation between professional motivation (e.g., ambition for university teaching, writing/translation, or professional speaking) of L2 German speakers and the nativeness of their speech. Moyer’s (2007) study demonstrates that a combination of age of learning, length of residence, a strong sense of linguistic and cultural comfort, and a strong desire to succeed were the key factors that enabled two learners to achieve a native-like accent. Polat (2011) also reported a significant relationship between L2 accent scores and integrated orientation among Kurdish learners of Turkish (both girls and boys) and a negative relationship between introjection (when a person undertakes a task due to self-imposed sanctions, such as boosting their self-esteem or avoiding

feelings of guilt and anxiety) and accent scores in boys. Finally, Moyer (2013) emphasized the importance of the relationship between learning strategies and motivation, and the importance of learning more about how successful learners plan, act, evaluate, and reassess, as learners' self-efficacy and self-determination in goal setting have been demonstrated to impact pronunciation improvement (Moyer, 2007).

Affect, that is, feelings or emotions, also affect language learning. According to Griffiths and Soruc (2020), the areas of affect, include anxiety, attitudes (discussed in more detail in Sections 2.1.3.4 and 2.3.5), attribution, empathy, inhibition, and self-concept. Anxiety is defined as "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system" (Horwitz et al., 1986, p. 125). In a language learning situation, anxiety is particularly noticeable in listening and speaking, manifesting in the form of communication apprehension, test anxiety, and fear of negative evaluation (Horwitz et al., 1986). Anxiety has "an adverse effect on the ability to perform demanding physical activities at optimal levels of success" (Scovel, 1978, p. 135). As speaking and articulation are neuromuscular tasks, Scovel (1978) suggested a possible connection between emotional arousal and successful foreign language performance. More recent evidence indicates that foreign language anxiety (FLA) significantly affects speaking skills (Horwitz, 2010) and pronunciation (Baran-Łucarz, 2011; Phillips, 1992). Even non-NESTs may experience FLA (Horwitz, 1996; Numrich, 1996), which can lead anxious learners or teacher trainees to be "discouraged from developing FL oral communication skills and making efforts in FL learning" (Szyszka, 2011, p. 295). According to Szyszka (2011), teacher trainees with high levels of FLA perceive their pronunciation as lower than those with a lower level of FLA, with the strongest negative correlation between FLA and rhythm and word stress, and a lower but significant correlation between FLA and linking, assimilation, weak forms, and pronunciation. Fortunately, there are various strategies to reduce FLA, including cognitive, affective, and behavioral strategies. Kralova et al. (2017) successfully used psycho-social training to reduce pronunciation-related FLA in student teachers in Slovakia.

Self-constructs, as defined by Mercer (2008), refer to "beliefs about oneself which are thought to affect behaviour" (p. 182). Self-constructs include self-esteem, self-efficacy, and self-concept. Self-esteem is global in nature and relates to self-worth, whereas self-concept contains both cognitive and affective elements. Self-concept refers to "an individual's self-perceptions in a wider domain" (Mercer, 2008, p. 183) while self-efficacy refers to the "capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997 p. 3), and is more context dependent than self-concept (Mercer,

2008). Research has shown that self-efficacy has an inverse relationship with anxiety, indicating that anxious students are less efficacious in various areas of language learning (e.g., Mills & Péron, 2008; Woodrow, 2011; LeBlanc, 2015), although other studies have indicated that the two constructs can coexist (e.g., Han & Hiver, 2018). As Wyatt (2022) notes, "a positive task-, domain-, and context-specific L2 self-efficacy belief (…) might influence the choice of activity (…), as well as effort, persistence and resilience" (p. 207). This is especially important in pronunciation learning, which often becomes an individual activity and requires the application of effective strategies (see Section 2.3.6.2).

As Moyer (2013) notes, "accent, as an essential aspect of our identity, can be the site of resistance when we do not wish to yield our established sense of self, or it can be the gateway to integration into another culture" (p. 62). Guiroa et al. (1972) refer to this aspect of our identity as the language ego. According to Guiora et al., "Grammar and syntax are the solid structure on which speech hangs, lexis the flesh that gives it body, and pronunciation its very core. Pronunciation is the most salient aspect of the language ego, the hardest to penetrate (to acquire in a new language), the most difficult to lose (in one's own)," and as a result, it is "the most critical to self-representation…the most sensitive index of the ability to take on a new identity" (1972, p. 421-422). As Moyer (2013) describes, socio-psychological models studying the psychological processes relevant to language learning focused on the social context of SLA, the challenges associated with acculturation, and the conflict between the desire for integration and concerns about maintaining connections to the L1 culture. Research findings indicate that accepting a new cultural identity in a target-language country can lead to improved L2 learning and accents (Lybeck, 2002). However, language and culture shock can hinder learners and negatively impact acquisition (Schumann, 1975). Ethnographic and narrative approaches emphasizing context and learner agency highlighted identity as "highly personalized and fluid by virtue of the fact that is continuously (co)constructed through interaction" (Moyer, 2013, p. 64), illustrating how learners navigate between cultural affiliations and accents to project their identity (e.g., Marx, 2002). Regarding accents, learners may consciously control their accent as a means of projecting specific identities (Rindal, 2010). Some learners desire to pass or enjoy the act of passing for native speakers (Moyer, 2004; Fekete, 2018, 2023a), while others resist such assimilation because they already feel accepted (Berkowitz, 1989), because they identify as non-native speakers (Marx, 2002), or because they view their foreign accent (Moyer, 1999, 2004) or L1 (Fekete, 2023a) as a crucial aspect of their self-concept and linguistic heritage.

As Brinton (2018) notes, learners' backgrounds and prior experiences shape their motivation and the way they learn and "strongly color their learning experience – and with it,

their success in acquiring L2 pronunciation" (p. 290), which is why these aspects deserve attention from the teacher. In addition, rather than viewing the age of onset as a restricting factor in pronunciation outcomes, Moyer (2018) suggested focusing on factors that provide an advantage to adult learners and have been proven to influence L2 pronunciation, such as motivation, attitudes, experience, self-concept, and self-regulation. According to Moyer (2018), a learner's ideal L2 self can inspire students to seek opportunities for practice, and over time, they "may adjust [their] L2 self-concept in response to accomplishments and failures" (p. 100). She also stressed the importance of self-regulation in achieving positive accent outcomes, such as using positive self-talk and learning strategies. As Moyer (2018) emphasizes:

> "Those learners who push past the identifiably accented stage appear to engage in planning, strategic learning, and self-evaluation as they seek out external sources of input and feedback. Others may resist sounding different, however, preferring to hold onto their L1-influenced accent to preserve a well-established self-concept." (p. 101)

However, according to Moyer (2018), adult learners have agency regardless of the decision they make; they can recognize the difference between their production and their goals. With a positive attitude towards the language, they seek practice opportunities, which benefit the restructuring of their knowledge. The (future) teacher's role is to encourage them in this process. However, to be able to do so, teacher trainees need to be aware of these processes and factors as students. This dissertation investigates whether teacher trainees feel that they have agency and whether they have the tools to improve their knowledge. Moyer (2018) states that "we should strategically promote learner agency, self-concept, and self-evaluation, increasing the odds that our students will eventually reach their goals" (p. 107).

The above review, although by no means exhaustive, highlights some important factors that contribute to an individual's pronunciation and accent. The subsequent section focuses on pedagogical aspects of L2 pronunciation improvement.

2.3.4 Pedagogical perspectives on L2 pronunciation and intelligibility

Although it is difficult to change adult L2 pronunciation (Macdonald et al., 1994; Kennedy & Trofimovich, 2010), research suggests that instruction can be effective in improving pronunciation and, consequently, L2 learners' intelligibility (Derwing et al., 1997, 1998; Derwing & Munro, 2009; Derwing & Rossiter, 2003; Saito & Lister, 2012), even if learners have fossilized errors (Couper 2011; Derwing et al., 1997; Derwing & Munro, 2014). However, it is important to add that instruction and practice without actual exposure may not be sufficient

(Pawlak, 2011) because exposure can also help improve pronunciation skills (Thomson, 2018). In a classroom setting, materials that include all elements of natural speech, including hesitations and false starts, are preferable (Hodgetts, 2020). Comprehension practice during instruction can also contribute to pronunciation (Trofimovich et al., 2009). Furthermore, in a study on the short-term effects of individual corrective feedback on L2 pronunciation, Dlaska and Krekeler (2013) concluded that individual corrective feedback (ICF) proved to be a more helpful tool for improving L2 comprehensibility than a listening-only intervention (i.e., when the students only listened to their own recorded pronunciation and after that, the teacher's model pronunciation). Saito and Plonsky (2019) found that instruction on production, perception, or both can improve pronunciation in controlled tasks. However, the effectiveness of such training may not translate into more spontaneous tasks or global proficiency measures. Furthermore, Sakai and Moorman's meta-analysis (2018) demonstrated that perception-only training can positively affect production, although the extent of the improvement might depend on the sound type (the analysis found that obstruents trained better than sonorants or vowels).

To improve intelligibility, it is essential to determine the appropriate focus of pedagogical intervention. Brown (1991) suggested that the key focus should be on the functional load of phonemes, as classified by Catford (1987) (cited in Munro and Derwing, (2006)). Studies have demonstrated that errors in phonemes with a high functional load can impede intelligibility, whereas those with a low functional load may have a negative impact on the perception of accentedness but not on intelligibility (Munro & Derwing, 2006). Other factors affecting intelligibility include vowel length, initial consonants (Levis, 2018), suprasegmentals (Derwing et al., 1997; Hahn, 2004; Munro & Derwing, 1995), and speech rate (Munro & Derwing, 2001). Word stress instruction has also been identified as beneficial to learners (Field, 2005; Waniek-Klimczak, 2015). Although stress placement may not always be equally crucial for intelligibility, Jenkins (2002) found that misplaced nuclear stress can affect intelligibility in ELF interactions. Furthermore, if appropriately placed, primary stress can aid listeners' processing and recollection of content (Hahn, 2004). Interestingly, stress placement on the left syllable in disyllabic words proved more intelligible than placement on the right syllable (Field, 2005). However, stress shift in noun-word pairs, a topic often featured in coursebooks, was shown to have little impact on intelligibility (Cutler, 1986). In ELF interactions, pitch movement and relative pitch level have also been reported to play prominent roles in intelligibility (Pickering, 2009). In addition, a lack of pitch variation can make the speaker seem disinterested and distant (Pickering, 2001). These findings suggest that certain

aspects of pronunciation may require more time and effort in the classroom (McNerney & Mendelsohn, 1992).

According to Pennington (2021), despite evident growth in interest in pronunciation teaching, there are shortcomings and areas that require more attention. For example, she noted that the field of pronunciation teaching is not very innovative with its explicit, focus-on forms and reactive instruction; it does not take into consideration beginners as much as it does advanced learners, and even then, “what is taught about pronunciation […] is relatively basic, and only scratches the surface of the meaningful contribution which pronunciation makes to spoken language and communication more generally” (p. 13). As evidenced by the research discussed above, much knowledge is available on effective pronunciation improvement techniques, including the importance of instruction, exposure, role of corrective feedback, and conscious focus on aspects of pronunciation that affect intelligibility. It is also recommended to use techniques beyond repetition, preferably in a proactive way, starting from the beginning of one’s studies rather than just at more advanced levels. Despite this, research worldwide indicates that teachers do not feel adequately equipped to address the task of systematically improving their students’ pronunciation. This can lead to a cycle in which students do not prioritize pronunciation improvement, perpetuating the problem. However, the early phase of teacher education presents an ideal time to explore teacher trainees’ experiences and beliefs regarding pronunciation teaching methods to enhance their knowledge, make them more conscious of their beliefs and the meaning of these beliefs in the teacher trainees’ own teaching context, and address their potential misconceptions.

Two studies focused on the development of teacher cognition of pronunciation. To gain more insight into teacher learning, Burri and Baker (2020) observed the pronunciation learning process of five teachers in Australia over 3.5 years, first during a course on pronunciation pedagogy (collecting data through questionnaires, observations, interviews, and a final assessment task), and then two years into their teaching career (using narrative frames to find out more about teachers’ cognitions and practices). The study revealed that, although participants’ cognition developed after completing the course, this development diminished with the onset of their teaching. Nevertheless, the so-called needs-based approach emphasized in the pronunciation pedagogy course was noticeable in the participants’ teaching, where pronunciation was integrated into their teaching in a meaningful way to focus on the specific pronunciation needs of their students. Overall, this study provides evidence for the gradual nature of the pronunciation learning process, where development was noticeable despite the decrease. Burri and Baker (2021) similarly conducted a study on the development of four L2

instructors' cognitions and practices concerning English pronunciation teaching over six years. The study began with a pronunciation pedagogy course and was extended to participants' teaching careers. Through triangulation of data from various sources, the researchers created teacher profiles that provided valuable insights into teachers' cognitions and practices. Although the participants were all experienced teachers, they lacked experience teaching pronunciation. The study found that their development was continuous but nonlinear and that each participant's trajectory differed. However, two key conclusions were drawn. First, the participants began incorporating various techniques as a result of taking a pronunciation pedagogy course, such as speaking games, phonics activities, repetition, humor, kinesthetic/tactile techniques, diagrams, and tongue twisters. Second, their instruction was primarily teacher-centered, with limited opportunities for guided and free practice for learners. The article identified four factors impacting teachers' practices and cognitions about pronunciation: teacher preparation, personal-professional, language, and contextual factors, with contextual and language factors having a significant impact on participants' teaching practices over a long period. Based on these findings, Burri and Baker (2021) emphasized the need for the teaching context to be given greater importance in a graduate pronunciation pedagogy course.

The above studies indicate that teacher cognition development is a gradual and nonlinear process influenced by many factors. However, the research also highlights the importance of equipping teacher trainees with an understanding of the challenges inherent in teaching pronunciation and teaching them to identify the aspects of pronunciation worth developing, depending on their goals. By examining beliefs, knowledge, and attitudes towards the subject, we can identify potential obstacles and address any concerns or shortcomings during teacher education. This information can also serve as a benchmark for tracking progress, especially at the beginning of careers. It is worth noting that teacher trainees, who are still in the learning process, occupy a unique position in the field of education. The next section, therefore, explores pronunciation learning from the students' perspective.

2.3.5 Learners' pronunciation attitudes

The prestige, omnipresence, and codification of standard British and American English give them an advantage over lesser-known varieties, with less material available (Seargeant, 2016). Thus, it is not surprising that studies have shown that British accents are preferred in countries such as Spain (Cenoz & Garcia Lecumberri, 1999; Carrie, 2017), Denmark

(Ladegaard, 1998; Jarvella et al., 2001; Ladegaard & Sachdev, 2006) and Austria (Dalton-Puffer et al., 1997).

In the Hungarian context, studies have examined general attitudes towards English compared to other languages (Dörnyei et al., 1996; Csizér et al., 1999; Nikolov, 2003), indicating the popularity of English. However, this did not necessarily indicate a desire to become similar to English speakers or a strong interest in English-language cultural products (Csizér & Kormos, 2007). Some studies have examined Hungarian English learners' attitudes toward native versus non-native varieties or specific varieties of English. Balogh (2020) examined Hungarian students' attitudes towards four American English accent speakers and found negative attitudes towards non-standard accent speakers. Feyér's (2012) study of Hungarian high school students also found a preference for native varieties but no significant difference between preferences for American or British English. Püski (2021) reported that non-English majors had a more negative attitude towards a non-native accent than their English major peers. Fekete (2015) reported that most participants preferred and aimed for an American English accent when speaking, and the desire for a British accent was present. Studies have concluded that students may watch more American than British content during their free time (e.g., Nikolov, 2003; Fekete, 2015; Jakšič & Šturm, 2017), but British accents may be more prevalent in the classroom (Nikolov, 1999; Fekete, 2015), or students might feel the need to adjust to the model present in the classroom. Regardless of preferences, Carrie (2017) suggested that collecting data on students' attitudes and preferences can aid in designing materials that align with and complement learners' goals rather than change or negate their independent learning.

Various factors can influence preferences for British or American accents. Some of these include the geographical proximity of the country or the teacher's view of accents, as suggested by Dalton-Puffer et al. (1997); a preference for a particular culture (see Csizér et al., 2004; Feyér, 2012); the student's personality; and the perceived ease of understanding a particular variety. For instance, some might find American English "easy to understand" (e.g., Scales et al., 2006), while others may see a British accent as more difficult or challenging to imitate (Janicka et al., 2008; Carrie, 2017). In addition, the books used in class might also play a role, as studies have found that many tend to favor Inner Circle accents (Tajeddin & Pakzadian, 2020), more specifically, RP and GA (Tsang, 2019) with non-standard accents (Hilliard, 2014), and non-native accents (Kopperoinen, 2011) being underrepresented.

Research also indicates that teachers' accents matter to students (Buckingham, 2014; Tsang, 2019). Kang's (2010) study demonstrated the significance of the teacher's English

model and their attitudes toward accents, as these factors significantly impact students' perceptions of accents and pronunciation and shape their expectations. Therefore, teachers must be confident in their speaking and pronunciation skills, which serve as a primary source of language instruction for students. While students may not necessarily require an RP or GA accent from their teachers (Tsang, 2020), studies have shown that teachers who were thought to be native speakers received higher attitude ratings, for example, in terms of education or training (Kelch & Santana-Williamson, 2002). In some cases, students only viewed NNES accents as acceptable models when they misjudged the speakers for NESs (Buckingham, 2015). Therefore, while it is not essential for teachers to possess a native or native-like accent (Tsang, 2020; Ballard, 2013), some students may prefer it in certain situations (e.g., Luk, 1998; Buckingham, 2014; Candan & Inal, 2020), particularly in terms of improving pronunciation (Kelch & Santana-Williamson, 2002; Walkinshaw & Oanh, 2014).

Many students view native English-speaking teachers (NESTs) as the only acceptable model for pronunciation. Tsang's study (2020) demonstrated that students who preferred a teacher with an RP or GA accent aimed to achieve this goal, viewing the teacher as a model for their learning. As students become more proficient, they may become less accepting of non-native accents (Dewaele & McCloskey, 2015). Notably, non-native speakers may be even more demanding in this regard. Hendriks et al. (2021) found that Dutch and international non-native listeners evaluated lecturers with moderately non-native accents more negatively than those with slight or native accents, while native English listeners had the same attitude towards differently accented lectures.

Several authors have discussed the NEST and non-NEST distinction (Medgyes 1994, 2017; Moussu & Llurda, 2008; Braine, 2010;). Medgyes (2021) argues that non-NESTs have several qualities that NESTs do not. He contends that non-NESTS can "teach language learning strategies more effectively, supply more information about the English language, anticipate and prevent language difficulties more successfully, show more empathy towards their learners, and benefit from the native language in monolingual classrooms" (p. 608). With respect to pronunciation, prior research has demonstrated that NNSTs can be just as effective in teaching pronunciation as NSTs (Levis et al., 2016. Despite student expectations the teachers' accent, Baker (2011) notes that "as speakers, we are who we are. It would be unrealistic to think that non-native English-speaking teachers could intentionally turn alternative speaking styles on and off at will given the incredibly complex natures of both language use and life in language classrooms" (p. 36). This emphasizes the importance of NNSTs knowledge rather than their L1 (Aslan & Thompson, 2017). Nonetheless, as Gordon (2020) points out, "it is important to

analyse in detail the NNSTs' knowledge base of pronunciation instruction and how this foundation influences their pronunciation teaching practices in the classroom" (p. 4).

The attainment of native-like pronunciation or the honing of existing pronunciation skills requires not only the guidance of the teacher but also the active participation and agency of the learner. In this regard, the implementation of language learning strategies is crucial. Therefore, after a brief overview of language learning strategies, the literature on pronunciation learning strategies is presented in the next section.

2.3.6 Pronunciation Learning

2.3.6.1 Language learning strategies

According to Oxford (1990), *language learning strategies* (LLS) refer to "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations" (p. 8), but there are several other definitions of LLS (e.g., Rubin, 1975; O'Malley et al., 1985; Oxford, 1986; Wenden, 1986; Chaudron, 1988; Cohen, 1998; Swan, 2008). Language learning strategy research gained momentum in the 1990s. However, its origins can be traced back to the 1970s, with studies investigating the characteristics of the "good language learner" and how they differ from less successful learners. One such study is Rubin's (1975) study of good language learners, which identified seven characteristics of good language learners to teach less successful students these strategies. Another is Stern (1975), who listed ten language learning strategies used by good language learners. Some studies have investigated the relationship between LLS use and success (e.g., O'Malley et al., 1985; Ehrman & Oxford, 1995; Green & Oxford, 1995) or examined the strategy use of unsuccessful learners (e.g., Sinclair Bell, 1995). However, due to the diverse factors and individual variables that influence language learning and its skill specificity, there is no universally applicable set of good LLS, and the results vary. Another difficulty of LLS research is that it relies on introspection (Przybył & Pawlak, 2023).

Despite the abundance of empirical investigations into LLS, their uniform definition and classification have proven challenging. Some scholars expressed doubts about the concept, while others emphasized its importance in understanding individual learner differences (for a more detailed description, see Oxford, 2017). To address the lack of consensus on the definition and concept of LLS, Oxford (2017) conducted a detailed analysis of the existing definitions over the last 25 years. She compared and contrasted them and found common features among

the definitions, such as the centrality of mental actions/processes in all forms of strategies and the purposefulness of strategies (with varying purposes, including learning, but also self-regulation, task accomplishment, performance/use, proficiency, facilitation, and helping or involving the whole learner). In addition, many definitions emphasize consciousness. However, she noted that few definitions mention the importance of the context of strategy use or the teachability of strategies. Based on her analysis, Oxford (2017) provided her own definition of LLS, taking into account the common features and those not frequently mentioned:

> "L2 learning strategies are complex, dynamic thoughts and actions, selected and used by learners with some degree of consciousness in specific contexts in order to regulate multiple aspects of themselves (such as cognitive, emotional, and social) for the purpose of a) accomplishing language tasks; b) improving language performance or use; and/or c) enhancing long-term proficiency. Strategies are mentally guided but may also have physical and therefore observable manifestations. Learners often use strategies flexibly and creatively, combine them in various ways, such as strategy clusters or strategy chains, and orchestrate them to meet learning needs. Strategies are teachable. Learners in their contexts decide which strategies to use. Appropriateness of strategies depends on multiple personal and contextual factors." (Oxford 2017, p. 48)

There are various classifications of language learning strategies (e.g., Rubin, 1981; O'Malley et al., 1985; Oxford, 1986, 1990; Macaro, 2001, 2007, 2018; Griffiths, 2013; for a comprehensive overview of these classifications, see Przybył & Pawlak, 2023). One well-known classification is that of Oxford (1990), which identifies six basic categories of LLS: *memory strategies* for retaining and recalling information, *cognitive strategies* for comprehending and producing language, and compensation strategies for using language despite insufficient knowledge. These three categories are considered to be direct strategies that work with language. The other three categories are indirect strategies: metacognitive strategies for coordinating, arranging, and evaluating the learning process; affective strategies for regulating emotions; and social strategies for learning, cooperating, and empathizing with others, all of which help focus, organize, guide, and facilitate learning. As Oxford (2017) notes in her later work, strongly related to strategies are the concepts of self-regulation, agency, and autonomy, which she refers to as "learner strength" factors. She also noted the importance of five additional factors potentially linked to learning strategies: growth mindset, self-efficacy, resilience, hope, and internal attributions.

In their overview, Przybył and Pawlak (2023) observe a move away from rigid classifications of LLS by certain scholars (e.g., Griffiths, 2013; Oxford, 2017). In the description of her strategic-self regulation (S^2R) Model, Oxford (2017) notes that "some

strategies have more than one purpose and that strategy classifications if used dogmatically, can be misleading" (p. 339). In this model, she provides a flexible classification of LLS, which rejects the distinction between language learning and language use and underscores the importance of metastrategies, which oversee the various domains. She offers an alternative to previous taxonomies which, as Przybył and Pawlak (2023) note,

> "Remains general enough to classify particular tactics into one of the labelled categories of strategies…set in a theoretical and systematic framework, which on the on hand reflects the contemporary expectation to recognize the complexity of the learner, but, on the other hand, makes it possible to incorporate such concepts as *strategy chains* or *task-specificity*, and does not deprive strategy researchers of the option to analyze strategies across skills or other variables" (p. 65).

The taxonomy comprises four main domains: *cognitive*, where learners retrieve information and process new knowledge; *affective,* for regulating emotion; *sociocultural-interactive,* which facilitates communication when competence is not sufficient and understanding various sociocultural contexts; and *motivational*, involving learners' self-regulation of motivation, each corresponding to a metastrategy (metacognitive, metamotivational, metasocial, and meta-affective).

Various factors are commonly assumed to affect strategy use, including social and individual factors (Ellis, 1994). For example, learner beliefs (Zimmerman, 2000; Suwanarak, 2012), anxiety (Park, 2007; Pawlak, 2011), learning experiences (Wenden, 1991; Pawlak & Kiermasz, 2018), and the language being learned (Schmidt & Watanabe, 2001) have all been linked to LLS. When it comes to learner factors, gender (Ehrman & Oxford, 1989), age (Ehrman & Oxford, 1989), proficiency levels (Griffiths, 2013), and motivation (Oxford & Nyikos, 1989; Pawlak, 2012) have all been associated with LLS. Similarly, various diverse contexts and individual factors should be considered to meet learners' needs regarding strategy instruction. Even if it might prove challenging to consider all ways of differentiation, Oxford (2017) suggests attention to sensory preferences, cognitive style, current strategy use level or proficiency level, specific strategies that students already use, interests, and learners' goals.

2.3.6.2 Pronunciation learning strategies

In her overview of language and pronunciation learning strategies, Szyszka (2017) noted that while there are a few studies on pronunciation learning strategies, research in this area lags behind that of other L2 skills (see Oxford's (2017) comprehensive overview of strategy research regarding various skill areas and language subsystems, such as grammar, vocabulary, reading,

writing, listening, phonology, pronunciation, speaking/oral communication, and pragmatics in context). Pronunciation learning strategies (PLS) are defined by Pawlak (2010) as "deliberate actions and thoughts that are consciously employed, often in a logical sequence, for learning and gaining greater control over the use of various aspects of pronunciation" (p. 191). Typically, LLS research serves as the foundation of PLS, with many existing categorizations based on Oxford (1990) and O'Malley and Chamot (1990). Peterson (2000) was one of the first studies to fully focus on PLS, collecting data on university students' PLS use from diaries. This study helped categorize a wide range of previously unidentified PLs and tactics (Jarosz, 2019).

There are some variations in the classification of language learning strategies (Szyszka, 2017; Przybył & Pawlak, 2023). According to Szyszka, some classifications include only four main types of strategy: cognitive, metacognitive, social, and affective. However, in a PLS taxonomy, she advocates for the separate listing of memory and compensation PLS based on Oxford's six general LLS categories, allowing for a more detailed categorization. In her book, she provides a taxonomy of PLS based on Oxford's (1990) LLS, which is used in the present dissertation (see Table 1). Some authors (e.g., Peterson, 2000; Szyszka, 2017) distinguish between strategies and smaller, more specific actions called *tactics*, defined by Oxford (2011) as "specific, applied way or ways in which a strategy is being used to meet a goal in a particular situation and instance" (p. 31). Others, however, do not make this distinction and use the term strategy for smaller, more specific actions. For the present dissertation, we follow Szyszka's (2017) approach and use the term tactic to refer to more specific actions associated with broader strategy types.

Table 1. Pronunciation learning strategies (PLS) and tactics based on Oxford (adapted from Szyszka 2017, p. 47).

PLS based on Oxford (1990)	Pronunciation learning tactics
1. Memory	Using phonemic transcription and other codes, singing songs and creating rhymes, forming associations with already known pronunciation of L2 and L1 words, recalling other's pronunciation, and repeating to enhance memorization of pronunciation
2. Cognitive	Imitating native speakers' or/and teachers' pronunciation, silent and loud repetition, self-speaking, reading aloud, speaking silently to oneself, practicing sounds in isolation and context, detecting pronunciation mistakes, noticing and miming lip movements, focusing on pronunciation while listening and speaking, formulating hypotheses concerning pronunciation and verifying them, slowing down the pace of speaking for clear enunciation, noticing and identifying L2 accents, recording voice in order to hear one's pronunciation, mentally rehearsing pronunciation before speaking, noticing differences between L1 and L2 pronunciation
3. Compensation	Avoiding words with problematic pronunciation, using gestures and facial expressions to support pronunciation of difficult words, substituting ambiguous word pronunciation with other words and synonyms, resorting to dictionaries, electronic devices and other works of reference for help
4. Metacognitive	Learning about L2 pronunciation and its rules, focusing on model sounds and picking them up, planning for pronunciation performance
5. Affective	Maintaining a sense of humour with regard to pronunciation mistakes, playing with L1 and L2 accents, encouraging oneself, taking risks in pronunciation, paying more attention to pronunciation after being praised by others
6. Social	Asking others for pronunciation correction, speaking L2 and learning pronunciation with others, teaching pronunciation to other people

Szyszka (2017) noted that teaching specific strategies to students is important because it "fosters autonomy in pronunciation learning so that learners equipped with PLS are able to use them to improve their pronunciation outside the classroom in an independent way" (p. 49). According to Vitanova and Miller (2002), it is important for language learners to identify their pronunciation strengths and weaknesses and learn the strategies necessary to become more confident speakers. Furthermore, training students in strategy use can increase their autonomy, change their attitudes towards pronunciation learning, refine their terminology of phonetics (Bukowski, 2004), enhance their ability to read primary, construction, and word stress (Sardegna, 2009), and improve linking (Sardegna, 2011). Regarding the common strategies that students use, Eckstein (2007) found that asking for pronunciation help was the most frequently used tactic among students, and using symbols that helped them more than spelling was the

least frequent. In contrast, Pawlak (2008) found a preference for cognitive, and Pawlak and Szyszka (2018) for cognitive and memory PLS. They also found that, although learners deem PLS useful, they may not necessarily enjoy using them. Eckstein (2007) also found that the tactics that correlated with higher spontaneous pronunciation skills were noticing others' pronunciation mistakes, adjusting facial muscles, and requesting pronunciation help and that strong learners used PLS more frequently than poorer learners.

While PLS research includes both quantitative (Eckstein, 2007; Pawlak, 2008) and qualitative designs, Szyszka (2014) notes that qualitative studies often involve tools that allow "the participants to reflect upon their internal and external processes of learning pronunciation" (Szyszka, 2014, p. 37), as well as provide additional information beyond closed questionnaire items, in the form of interviews, reflections, self-reports, and diaries. For example, Pawlak (2011) and Szyszka (2014) conducted qualitative studies using diaries. In his study, Pawlak (2011) asked 60 advanced students to keep diaries for three months, providing them with facilitating prompts to guide them in their reflections on their pronunciation learning, problems, and solutions. The results suggest that participants tended to rely on more traditional strategies such as repetition, formal practice, transcription, and dictionaries while learning pronunciation; they had short-term, but not necessarily long-term, plans to improve their pronunciation, and over time, they became more reflective of pronunciation. Using a combination of semi-structured interviews and diaries, Szyszka (2014) conducted a study to identify pronunciation strategy chains used in pronunciation learning. The results revealed 36 strategy chains used for tasks, such as preparing for a presentation, learning the pronunciation of new words, improving pronunciation while watching movies, listening to music, and reading. The data also indicate that cognitive PLS were predominantly followed by memory PLS. Szyszka (2014) emphasizes the importance of conducting interviews and examining diaries for future teachers, as "the verbalisation of practices exploited in pronunciation learning helps the participants become more aware of their pronunciation strengths and weaknesses, which may later be adopted in the process of pronunciation teaching." (p. 45). In another study, Pawlak and Szyszka (2018) highlighted the significance of research designs that examined the use of PLS in specific tasks to add variety to existing insights on the application of pronunciation strategies. Using diaries written by students, this dissertation focuses on the strategies and tactics employed to complete a specific task, namely shadowing.

2.3.6.3 Shadowing as a technique for improving pronunciation

Shadowing is a “paced, auditory tracking task which involves the immediate vocalization of auditorily presented stimuli” (Lambert, 1992, p. 266); in other words, while listening to an audio recording, the person shadowing tries to immediately repeat the recorded speaker, attempting to mimic them as closely as possible. Initially used in simultaneous interpreting, shadowing was implemented as a classroom teaching technique to enhance listening comprehension (Hamada, 2016; Tamai, 2002). Kadota and Tamai (2004) recommended the following steps for shadowing (see Table 2):

Table 2. Recommended six steps of shadowing practice (Kadota & Tamai, 2004, p. 62) as cited in Sumiyoshi (2018)

Steps	**Procedure**	**Details**
1	Listening	Listening to the audio without the script, and trying to roughly grasp the content and the speech style.
2	Mumbling	Shadowing without the script focusing on the heard sound rather than reproducing pronunciation.
3	Synchronized reading (content understanding)	Shadowing with the script focusing on the meaning of the script.
4	Prosody	Shadowing focusing on prosodic features, such as the stress, rhythm, intonation, speed, pause, etc.
5	Synchronized reading (difficult points)	Shadowing with the script focusing on the parts listeners find difficult.
6	Content shadowing	Shadowing focusing on the content without reading the script.

Extensive research has been conducted on shadowing over the past few decades (see Kadota, 2019). In his review of the application of shadowing in various studies, Hamada (2014) concluded that while further empirical data are needed, research suggests that shadowing is effective in improving listening skills. More specifically, Hamada (2020) notes that students’ “bottom-up processes in listening improve; they can recognize more words, which consequently smooths the listening process and leads to better comprehension” (Hamada, 2020, p. 2). Despite its popularity in Asia, this technique has received limited attention in other areas, which Hamada and Suzuki (2022) attributed to the prioritization of top-down processing and

cognitive and metacognitive strategies in listening that enable listeners to compensate for the lack of bottom-up processing skills. However, he argues that “for better listening comprehension, learners should be able to recognize words aurally, which occurs in the bottom-up listening process.” (p. 492). In order to specify the type of bottom-up listening processes that shadowing contributes to, Hamada (2020) added attention to output, explicit instruction, and corrective feedback to the shadowing process and reported an improvement in intermediate Japanese EFL students’ phonemic discrimination skills. Furthermore, shadowing has been found to have a positive impact on aspects of pronunciation such as rhythm, accentual and sentence-final lengthening, intonation (Mori, 2011), comprehensibility (Foote & McDonough, 2017), phoneme perception skills (Hamada, 2016), segmental and suprasegmental features, and intelligibility (Hamada, 2018). Several studies have also examined shadowing from students’ perspectives (Bovee & Stewart, 2009; Hamada, 2011; Foote & McDonough, 2017; Sumiyoshi & Svetanant, 2017; Hamada, 2018; Dupák & T. Balla, 2020), demonstrating that it gives students an impression of progress and confidence (Bovee & Stewart, 2009; Hamada, 2018; Dupák & T. Balla, 2020; Baranyi-Dupák, 2022a).

Hamada and Suzuki (2022) emphasized the need for a theoretical framework for shadowing in SLA acquisition and the need to summarize various shadowing activities so that they can be effectively applied in classrooms. Therefore, shadowing they situated within the framework of systematic and deliberate practice, which is supported by skill acquisition theory (DeKeyser, 2015). Hamada and Suzuki’s study (2022) identifies three ways in which shadowing can contribute to the declarative-procedural-automatization phases. First, it can enhance certain sub-processes of listening skills, especially due to the time pressure and online processing, which may contribute to proceduralization (as opposed to simple offline repetition). Second, it can improve aspects of pronunciation through constant repetition and close attention to aspects of language that might not receive due emphasis during meaning-focused communication, with the repeated use of the same language features leading to automatization. Lastly, by scaffolding “the internalisation of linguistic exemplars and rules, and their further proceduralisation and automatization” (Hamada & Suzuki, 2022, p. 4), it can serve as a way for beginner learners to accumulate declarative knowledge contextually, which can later facilitate engagement in meaning-focused practice (for example by helping them memorize vocabulary). They further proposed two major groups of shadowing tasks (see Table 3): shadowing for phonological processing, and shadowing for intake through meaning-focused processing. The first category is subdivided into shadowing for improving phoneme perception, recommended for lower-level learners, and shadowing for improving pronunciation. The authors suggest that

it "constitutes a useful, sorted toolbox that facilitates teachers' decisions to select an appropriate shadowing practice for their students" (p. 8).

Table 3. Varieties of shadowing techniques (adapted from Hamada & Suzuki, 2022, p. 3)

Section		Type	Description
Phonological processing	Phoneme perception	(1) Standard shadowing	Simultaneously repeat what you hear
		(2) Mumbling	Shadow in a quiet voice
		(3) Text-presented shadowing	Shadow using scripts
		(4) Pre-shadowing	Shadow before learning the contents
		(5) Post-shadowing	Shadow after learning the contents
		(6) Self-monitoring shadowing	Record and review one's shadowing
		(7) Pair-monitoring shadowing	Monitor the pair's shadowing
	Pronunciation	(8) Prosody shadowing	Shadow attending to prosody
		(9) Gesture shadowing	Shadow using gestures
		(10) IPA shadowing	Shadow using phonetic alphabet
Intake processing		(11) Content shadowing	Shadow focusing on the meaning of the content
		(12) Conversational shadowing	Shadow in pairs
		(13) Selective shadowing	Shadow only selected words
		(14) Interactive shadowing	Shadow each other while adding comments
		(15) Phrase shadowing	Shadow phrase by phrase
		(16) Shadow reading	An integrated practice of shadowing activities, summarizing and retelling

2.4 Context

This section provides information on the context in which the present study was conducted. It briefly overviews of foreign language teaching in Hungary, followed by a description of English language teacher education.

2.4.1 Foreign language teaching in Hungary

The Foreign Languages section of the National Core Curriculum sets general guidelines for teaching foreign languages in public education in Hungary. Specific requirements and details are outlined in framework curricula, tailored to different school types, and divided into smaller, two-year sections, containing the same development tasks and goals for all foreign languages. Currently, students have the choice of English or German as their first foreign language, beginning in the fourth year of elementary school. Öveges and Csizér (2018) noted that this is a relatively late start compared to other countries. However, many students begin learning a foreign language during years 1-3, or if parents consider it important, even as early as kindergarten (Nemes & Antal, 2023). Students must reach an A2 level of knowledge by the time they finish elementary school and a B1 level by the end of high school or grammar school, with a minimum of three classes weekly. Studying a second foreign language is compulsory in grammar schools, but optional in vocational grammar schools and elementary schools. While some elementary schools offer the choice to start one's second foreign language in the 7th grade of elementary school, the choices are often limited to English or German, and other options may not be as available (e.g., French (Nemes & Muhariné Preszter, 2019)). It is mostly in grammar schools that further second language choices are more typically available and taught, such as Spanish, French, and Italian, three times weekly (Öveges & Csizér, 2018). Although some choices are becoming increasingly popular, such as Chinese (Simay & Fan, 2020), students might not reach the level where they are confident enough to take their school-leaving exam in that language, as data regarding Italian as a second foreign language suggest (Horváth, 2023).

Öveges and Csizér (2018) note that given the high number of foreign language classes (936) during one's primary and secondary education, the fact that only qualified teachers can teach in public education, the relatively wide range of teaching materials to choose from, and the availability of many additional materials on the internet raises the question of why language teaching is not more efficient in Hungary. Studies conducted internationally suggest that based

on the language proficiency of Hungarian people, the efficiency of foreign language teaching in public education could be improved (Öveges & Csizér, 2018). Hungary ranked third to last in terms of the percentage of its population who claimed to be able to speak at least one foreign language (42.2%) according to the European Commission's latest report on language proficiency (Eurostat, 2016).

Einhorn (2016) identified several challenges faced by teachers and schools that may contribute to the problem. These include planning, which is focused on content rather than learning objectives and outcomes, and limited opportunities for meaningful discussions about goals and dilemmas at the school, subject, and class levels. Such dilemmas involve responding to generational differences and massification, improving students' adaptivity, and predicting and adapting to the needs of the labor market. In the context of language teaching, Einhorn notes that while teaching and learning goals are both pragmatic and intercultural, learners tend to be overly focused on pragmatic reasons (such as better job opportunities), whereas, in their free time, they use the language for intercultural purposes (such as entertainment, communication, and searching for information on specific topics), indicating that their goals and practices might be misaligned. Dóczi (2016) adds further reasons, such as too much focus on preparation for language exams (also referred to in other studies, such as Tartsayné et al. (2018), Öveges & Csizér (2018)). She also mentioned the constant need to restart studying in each new context, as high schools are rarely capable of building on the knowledge acquired in elementary schools, and students studying in vocational schools, where language teaching is less efficient, are at a disadvantage. In a study conducted among 1814 language learners and 1116 language teachers by the National Professional Association for Language Teaching and Language Testing, Kuti (2016) summarized participants' opinions on what educational contextual factors determine the success of language learning. They expressed the need for a high weekly number of classes (at least three or even every day), to start learning as early as possible, dedicating ample time to extracurricular activities, or in their free time, the continuity of learning between elementary and high school, the freedom to choose the language learned, positive parental attitude to learning, the support of the school leadership, modern, up-to-date coursebooks, and freedom for teachers to choose the book they wish to teach. Regarding the roles of the student and the teacher, participants expressed the opinion that successful outcomes depend on a supportive classroom atmosphere, the language teacher's consistency, dedication to the target language and its culture, proficiency in the language and knowledge of its methodology, paying attention to individual differences, constant feedback on progress, and from the students' side, positive attitudes and taking responsibility for one's learning. Vajnai et

al.'s (2021) review of Hungarian studies suggests that foreign language learning efficiency correlates with region, school type, and socioeconomic status.

In recent years, there has been a notable increase in the number of Hungarians speaking a foreign language, particularly among the younger generations (Einhorn, 2015). For example, a study involving high school students found that the number of students studying two or more languages slightly surpassed the EU average (Eurostat, 2019). An increase in motivation could be attributed to younger generations engaging in extramural English activities, such as watching foreign language media and content (Fajt, 2021), or education policies promoting language exams (such as the requirement of a B2-level language for university graduation or the retribution of the first language exam fee) (Novák & Fónai, 2020).

2.4.2 English teacher education in Hungary

When applying for teaching MA/MSc programs in Hungary, prospective teachers must choose two majors (except for some short-track, 2 and 4-semester programs that build on existing BA or MA degrees). In 2013, the former five-semester MA teacher education program was replaced by an undivided five-year program for elementary school teachers and a six-year program for high school teachers. This means that they make the decision to become teachers at the age of 18 or 19, and unlike in the case of the previous Bologna program, when they chose teacher education in possession of a BA or BSc degree at the age of 21 years, they stay in the chosen program for five or six years. The length of the program, as well as increasing group sizes, weaker selection criteria on admission, student burnout, fear of teaching, and a negative view of public education, as Doró (2022b) notes, often make students feel impatient, stuck, unhappy, more critical of the teacher education program, and more focused on the difficulties of teaching. However, the curriculum changed in the fall semester of 2022, shortening the teacher education program to five years, placing more emphasis on early teaching practice, and reorganizing the focus of certain areas. This means that some of the circumstances described above are no longer applicable. However, since the participants of the study were subject to the previous program (in effect between 2013 and 2022), this program is described in more detail below.

While all teacher-education university programs in Hungary share fundamental features, the course layout and content may differ slightly. However, as the data collection took place at the University of Szeged, teacher education programs at our university in general, and the English Language Teacher Education program in particular, are be described. Regardless of

their major, all teacher trainees at the university attend pedagogy and psychology classes starting in their first year. While some of these courses may involve classroom observation, trainees do not begin their actual teaching practice until the fourth year for elementary school trainees and the fifth year for high school trainees. During this practice, after observing a set number of classes, students must teach 15 classes per major in a high school or elementary school. In their fifth or sixth year (depending on their specialization), trainees undertake a year-long teaching practice, observing and teaching an increased number of classes in major A during the fall semester and major B during the spring semester, as well as participating in various school activities. Throughout their practice, a mentor teacher supervises and guides them. During this time, they must also write a thesis in either Major A, Major B, or pedagogy/psychology and a teaching portfolio, a document showcasing their understanding and application of the nine teacher competencies. They must submit and defend both works at the end of their sixth year and pass their final exam.

Regarding those who major in English, the English Language Teacher Education program offered at the University of Szeged has multiple objectives: to improve students' language proficiency, provide methodological content, linguistics, and second-language acquisition courses, as well as literature, culture, and history classes. Language skills are developed through skill courses (reading, writing, speaking, theoretical and practical grammar courses), focusing on preparing students for the Academic English (AE) exam. This is a skill-based exam that students are required to pass at the end of their third semester in order to be able to advance to the next phase of their studies. After passing the exam, the students still attend integrated skill development classes until the end of the third year. They also attend various literature, culture, history, and linguistics lectures and seminars throughout the second and third years. Focused English language methodology training begins in the second year with an introductory lecture, whereas methodology seminars start in the third year. In the fourth year, the programs start to differ slightly for those who wish to be elementary or high school teachers. Elementary school teacher trainees enroll in fewer classes strictly focused on language and methodology. In contrast, high school teacher trainees still receive every type of content mentioned previously, as well as phonetics and phonology as a separate lecture. However, for these students, methodology becomes increasingly specialized and prominent in the curriculum. Students attend university courses until the end of their penultimate year, when they begin teaching practice in their final year. During this time, they are only required to attend a seminar designed to assist them in discussing and reflecting on their experiences during their teaching practice.

Before the data collection semester, the second-year participants in this study were expected to complete various courses. These include language skill development (such as reading, writing, communication, and use of English), an English Foundation course that covers more theoretical aspects of English grammar, and an academic study skills course. Additionally, they took introductory classes in literature, linguistics, British and American history and culture, applied linguistics, and English learning and teaching. In the semester of data collection, students attended courses such as Second Language Acquisition, a literature survey course of their choice, Basics of Teaching English as a Foreign Language, and Integrated English Language Skills, an integrated skill development course. The data were collected during this course.

3. Methodology

The purpose of this chapter is to explain the study design. The first section presents the research questions addressed in this dissertation. Next, the participants are described, followed by a description of the methodological steps taken to collect and analyze the data.

3.1 Research questions

The literature review presented above highlights the crucial role of teacher beliefs, prior experience, and teacher education in shaping both teacher learning and subsequent teaching practices. Furthermore, it emphasizes the importance of providing teachers and future teachers with opportunities to articulate and become aware of their beliefs. The review also revealed that, although rapidly increasing, there is still a scarcity of research on pronunciation learning and teaching compared to research on other skills, which is reflected in teacher cognition research, especially in non-native contexts. The reluctance of teachers to teach pronunciation is often attributed to the challenges faced in various teaching contexts and the lack of adequate training and preparation, which prevents them from systematically improving their students' pronunciation skills. To address these issues, there is a pressing need for research that explores teacher trainees' underlying beliefs, attitudes, and experiences regarding pronunciation teaching, while also examining their pronunciation learning habits and experiences. Uncovering these factors in the early stages of teacher education can help identify ways to enhance their knowledge, make them more conscious of their beliefs and the meaning of these beliefs in the teaching context of the teacher trainees, address potential misconceptions, and provide confidence in improving students' pronunciation skills.

This dissertation aims to contribute to this by better understanding teacher trainees' beliefs, experiences, and attitudes towards English pronunciation and accents in Hungary. This dissertation is divided into two major studies (Part 1 and 2). Part 1 includes Studies 1, 2 and 3, while Part 2 includes one study (Study 4), each focusing on its own research question(s).

Study 1:

- RQ1 What are Hungarian English language teacher trainees' attitudes towards various English accents?
- RQ2 What are Hungarian English language teacher trainees' beliefs about accents?

Study 2:

- RQ3What are Hungarian English language teacher trainees' beliefs about pronunciation learning and teaching?

Study 3:

- RQ4: What is Hungarian English language teacher trainees' experience with formal and informal pronunciation learning?

Study 4:

- RQ5: What strategies and methods have Hungarian English language teacher trainees used to improve their English pronunciation?

Each research question is further divided into sub-questions. These are listed and summarized in Table 4.

Table 4. Summary of research questions, sources of data, and method of analysis

		RQ Nr	Research Questions	Data source	Method of analysis
Part 1	**Study 1**	RQ1	What are Hungarian English language teacher trainees' attitudes towards various English accents?	Questionnaires	Descriptive statistics Qualitative data analysis
		RQ1.1	Which English accents do they prefer and why?		
		RQ1.2	Do they engage in conscious accent imitation?		
		RQ2	What are Hungarian English language teacher trainees' beliefs about accents?		
		RQ2.1	What are their beliefs about the necessity of accents?		
		RQ2.2	What are their beliefs about the necessity of accents?		
		RQ2.3	What are their beliefs about the controllability of accents?		
	Study 2	RQ3	What are Hungarian English language teacher trainees' beliefs about pronunciation learning and teaching?	Questionnaires	Descriptive statistics Qualitative data analysis
		RQ3.1	What are their beliefs about their own pronunciation?		
		RQ3.2	What are their beliefs about the challenges of pronunciation learning		
		RQ3.3	What are their beliefs about the factors that influence pronunciation?		
		RQ3.4	What are their beliefs about the importance and frequency of pronunciation learning in the classroom?		
	Study 3	RQ4	What is Hungarian English language teacher trainees' experience with formal and informal pronunciation learning and with accent change?	Questionnaires	Descriptive statistics Qualitative data analysis
Part 2	**Study 4**	RQ5	What strategies and methods do Hungarian English language teacher trainees use to improve their English pronunciation?	Questionnaires	Descriptive statistics Qualitative data analysis
		RQ5.1	What strategies and methods do Hungarian English language teacher trainees use to improve their English pronunciation in general?		
		RQ5.2	What strategies and methods did Hungarian English language teacher trainees use to improve their English pronunciation regarding a specific task, shadowing?	Shadowing Diaries	

3.2 Participants

The study involved 128 second-year English teacher trainees studying at the University of Szeged, Hungary, with a proficiency of B2-C1 level, as they all passed an internally administered, university-regulated, complex language and study skills exam at the end of the semester preceding data collection. The selection of teacher trainees as study participants was based on their unique ability to provide multiple perspectives, given their status as English language learners with recent high school experiences, English majors, and future teachers. In the fourth semester of their studies, when the data collection took place, they were required to attend four compulsory courses in the English teacher education program (90 minutes each) (Section 2.4.2). Of the participants, 73% were female (n=93) and 27% were male (n=35), aged between 20 and 25 years old. The participants spoke several additional languages, including German (42%), Spanish (21%), French (12%), Italian (9%), Japanese (5%), Russian (5%), Romanian (2%), Serbian (2%), and Chinese (2%). Regarding the onset of language learning, the majority (75%) of the participants started learning English in their fourth year of elementary school, whereas 16% of the participants started learning English in elementary school but earlier than their classmates, and 9% started learning English in kindergarten. Of the participants, 35% reported having stayed in an English-speaking country, of which 30% had visited the United Kingdom and 5% had visited the United States. The majority (14%) spent a week there, followed by those who spent two weeks (12%), three weeks (5%) and 3-4 months (5%) at their chosen destination. Approximately a quarter (24%) of the participants reported having been taught by a native English speaker in school, half of whom had a native English speaker teacher in elementary school and the other half in high school (a few students had more than one such teacher). Of the native speaker teachers, 54% were American, 23% British, 15% Australian, and 8 Scottish.

The questionnaire used in the present study (see Section 3.4.1 and Appendices A and C) shed light on participants' English use, perceived oral fluency, the most challenging aspects of speech, and aspects of speech that the participants would like to improve. Regarding the frequency of their English language use outside the classroom, 20% reported using English daily, 22% reported using it almost every day, 40% once or twice a week, and 18% reported using it less than once a week. Most participants (63%) reported using English to exchange written messages with non-native speakers, followed by speaking with non-native speakers (61%). Other reported purposes included exchanging written messages with native speakers (30%); speaking with native speakers (17%); writing for non-university-related purposes (work

emails, posts on social media, short stories, journaling, fanfiction, stories, lyrics, poems, songs) (11%); watching films/videos in English (9%); reading in English (8%); tutoring (4%); translation (3%); and gaming (1%). On average, participants rated their fluency at 3.54 on a six-point scale (SD=.96), where 1 indicated "hesitant, making a lot of pauses" and 6 indicated "native-like fluency" (see Figure 6).

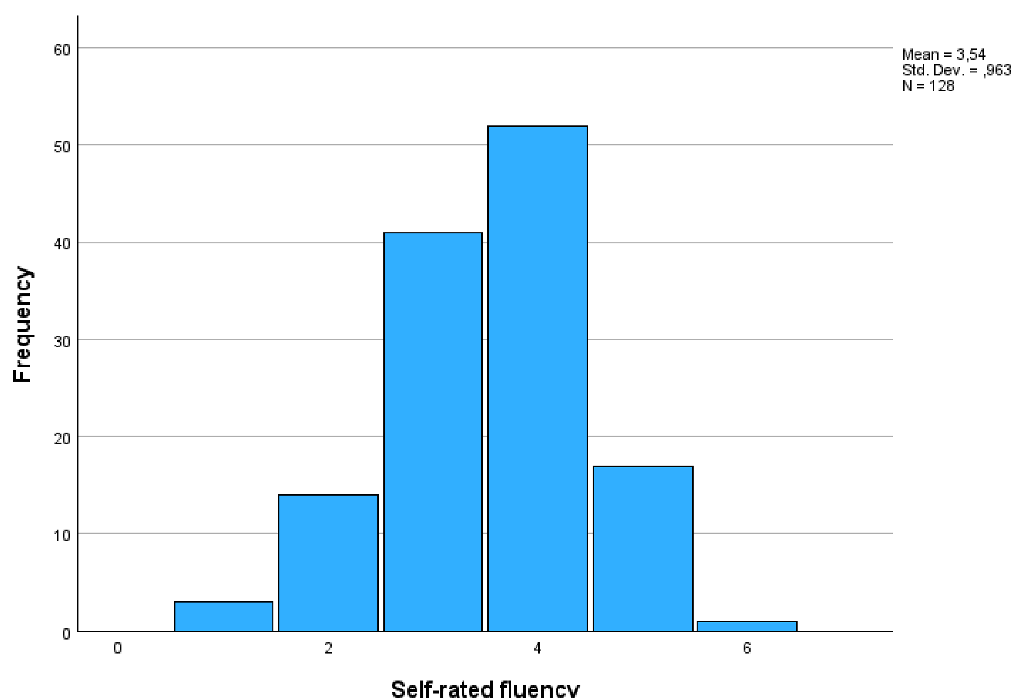

Figure 6. Participants' self-rated English-language fluency

The questionnaire also inquired about the most challenging aspects of speech for participants (summarized in Table 5). It is important to note that the participants were free to choose multiple answers.

Table 5. The most challenging aspects of speech for students

Aspect of speech	N	% of students indicating it as a problem
Finding the appropriate words	83	64.84%
Attention to grammar and vocabulary	47	36.70%
Attention to grammar	46	35.90%
Stress	45	35.20%
Intonation	42	32.80%
Speaking without pauses	34	26.60%
Attention to vocabulary	18	14.10%
Thinking in the target language	12	9.40%

Table 5 shows that the most challenging aspect of speech for the participants was finding the appropriate words while speaking (64.84%). This was followed by paying attention to vocabulary and grammar (36.70%) and grammar alone (35.90%). The results also highlighted stress (35.20%) and intonation (32.80%) as the next challenges for the participants. Additionally, speaking without pauses (26.60%) and paying attention to vocabulary (14.10%) were aspects of speech that required improvement. The least frequently chosen answer was thinking in the target language (9.40%).

Participants were also asked to indicate which aspects of their language use they wished to improve (see Table 6).

Table 6. Aspects of speech participants would like to improve

Aspect of speech	**N**	**% of students indicating it as a problem**
Actively use more words	97	75.78%
Knowing more words	71	55.40%
Better pronunciation	60	46.87%
Activating grammatical knowledge	55	42.96%
Better intonation	55	42.96%
Better grammar	52	40.62%
Improving fluency	48	37.50%
Speaking faster	30	23.43%
Thinking in the target language	12	9.37%

The results indicated that most participants desired to improve their vocabulary activation (75.78%), followed by those who wished to expand their vocabulary (55.40%). Other areas of focus included pronunciation (46.87%), applying grammatical knowledge during speech (42.96%), intonation (42.96%), and grammar (40.62%). Some participants expressed a desire for more fluent speech without hesitation (37.50%), speaking at a faster pace (23.43%), and thinking in the target language (9.37%).

All participants were enrolled in a course called Integrated English Language Skills, one of the four compulsory courses in the semester. The course was designed to improve the students' speaking, listening, reading, writing skills, vocabulary, and pronunciation through various written and oral tasks. Participants had already completed grammar courses, introductory courses in linguistics and applied linguistics, and preparatory courses for their Academic English Exam (a university-regulated, complex language and study skills exam at the end of the third semester of the teacher education program). However, they had not yet

taken any courses on phonetics and phonology (scheduled in their fourth year, as described in Section 2.4.2)

3.3 Research methods in teacher cognition

Investigations of language teacher cognition have been conducted using various methodologies. While earlier research predominantly focused on teachers' decisions and decision-making processes through quantitative analyses, such as frequencies and correlations, to identify decision patterns, studies concentrating on the contextual nature of language teacher cognition have introduced a shift from quantitative to qualitative designs. This shift "introduced a move from researcher-determined decisions and beliefs about language teacher thinking to participant-oriented conceptualizations and explanations" (Burns et al., 2015, p. 591). As highlighted by Borg (2012), while quantitative studies are not lacking in teacher cognition research, there is growing recognition that quantitative analyses can be made more profound by qualitative methods. Therefore, the present dissertation uses a parallel mixed-methods design "to answer related aspects of the same basic research question(s)" (Teddlie & Tashakkori, 2009, p. 31). In doing so, it aims to provide a more in-depth understanding of the numeric data and describe the qualitative data more precisely "to achieve an elaborate and comprehensive understanding of a complex matter, looking at it from different angles" (Dörnyei, 2007, p. 164). In addition, part of the data collection involved action research, defined by Mills (2014) as "any systematic inquiry conducted by teacher researchers, principals, school counselors, or other stakeholders in the teaching/learning environment to gather information about how their particular schools operate, how they teach, and how well their students learn" (p. 8). The aim of action research, as Mills (2014) noted, is to gain understanding, foster reflective practice, make changes in the school environment and education and enhance student outcomes. By conducting action research, teachers impact practice in various ways: they collect data that provide insights into how the interventions affect student outcomes, solve the kinds of problems that are directly relevant to them, and can use the results to enhance the predictability of their teaching. Teachers conducting action research are willing to reflect on and challenge their usual way of thinking and make a problem-solving philosophy part of their professional identity (Mills, 2014). Its main strength, as Burns (1999) notes, lies in the fact that "it addresses questions of real practical and theoretical interest to many educational practitioners," can be replicated in similar contexts by other teachers, and puts great emphasis on the application of the findings in practice (p. 25). The aim of the present study's action research design was to

investigate students' beliefs, attitudes and experiences regarding pronunciation teaching and learning. The study was conducted to encourage reflective practice that can be incorporated into existing courses, facilitate discussion among colleagues, and assist in syllabus design at the University of Szeged and other Hungarian contexts over the long term. Additionally, the study aimed to discover how participants learn pronunciation and investigate the impact of a specific pronunciation task on student outcomes, as well as the potential advantages and challenges of applying it in teaching practice.

The various methods used for data collection in language teacher cognition research include interviews (Cohen & Fass, 2001; Borg & Al-Busaidi, 2012; Couper, 2017; Lim, 2016), observations (Borg, 2001; Mak, 2011; Couper, 2017 Lim, 2016), questionnaires (Cathart & Olsen, 1976; Borg & Al-Busaidi, 2012; Gao et al., 2011; Burri et al., 2017), journals (Young & Sachdev, 2011; Liu & Xu, 2011), group discussions (Farrell, 2011; Miri et al., 2017), think-aloud protocols (Liviero, 2017), narrative writing (Werbińska, 2011; Moodie, 2016) and stimulated recall (Kuzborska, 2011; Jackson & Cho, 2018). Each of these methods has strengths and limitations; however, combining them can increase the generalizability of the findings and reduce some limitations. As Gillham (2000) suggests, "one approach is rarely adequate; and if the results of different methods converge (agree, or fit together) then we can have greater confidence in the findings" (pp. 2). Questionnaires were used to gain insight into participants' beliefs, attitudes, and experiences regarding pronunciation, and a diary (journal) was used to map their pronunciation learning strategy use. Data were obtained over a period of two years, from May 2020 to May 2022, from three separate samples. The following sections elaborate on the reasons for choosing these two data-collection tools.

3.4 Research instruments and procedure

3.4.1 Questionnaires

Questionnaires are widely used tools for collecting data in language teacher cognition research, in both quantitative and qualitative designs (Borg, 2012, 2019). While qualitative methods appear to be more common, quantitative tools offer advantages such as ease of processing, possibility of administration in a wide range of contexts, feasibility with large samples (Borg, 2019), and flexibility because participants can complete them remotely, allowing for more time and possibly more data (Gass & Mackey, 2007). However, questionnaires have limitations, including the potential for unreliable data due to improper

wording (Dörnyei, 2007), dishonesty, participants' motivation (Dörnyei, 2003), socially preferable answers (Wagner, 2010), the difficulty of providing answers in an L2, and reluctance to provide elaborate answers to open-ended questions (Gass & Mackey, 2007). Various alternative methods are available, such as interviews, authentic or simulated observations, narrative writing, group discussions, stimulated recall, document analysis, focus group interviews, and think-aloud protocols (Borg, 2019). However, many of these methods were not applicable because of the pandemic and the lack of teaching opportunities and experience among participants, who were in the second year of the teacher education program with no teaching practice yet. While observations could have been conducted with participants who were more advanced in their studies, excluding the possible effects of the Phonetics and Phonology class scheduled in the same year would have been challenging. Therefore, questionnaires were chosen as a feasible and efficient method for collecting data based on the circumstances and the target population of the study.

The questionnaire was designed to gather insights into teacher trainees' beliefs, attitudes, and experiences regarding accents, pronunciation learning, and teaching. The questionnaire consisted of 18 questions, nine of which were closed-ended and multiple-choice, while the remaining nine were open-ended. Both the questionnaire and responses were in English. Although Likert scales, which are often easy to administer and readily available (Borg, 2019), could have been employed in the questionnaire design, relying on a strictly quantitative design would have hidden important details and clues in the responses, and participants' elaborate views on issues could have been lost in numbers. Hence, whenever possible, the study relied on open-ended questions to allow respondents to "express their thoughts and ideas in their own manner and thus potentially resulting in less predictable and more insightful data" (Gass & Mackey, 2007, p. 151). Quantification and classification were applied only to make the tendencies more transparent and comparable. Scales were used to gauge students' views on the perceived difficulty or importance of pronunciation phenomena. Ready-made lists of choices were provided for questions that were expected to yield otherwise vague or varied answers that would have been difficult to categorize. An "other" option was included whenever possible so that participants could add any unlisted answers.

Prior to the semester of data collection, the shadowing task was piloted with two groups of university students to assess its feasibility and obtain constructive feedback from the students, which was used in the design of the questionnaire. In these classes, students were offered two speech samples, but were still allowed to choose another speech sample on their own, if they preferred. Some students chose their own recordings, some with a faster speech

rate than the one provided by the instructor, and others with a slower speech rate. Their performances revealed that students who had chosen a recording with a slower speech rate found the shadowing process much less challenging than those who chose a recording with a faster speech rate. However, the vast majority of the students reacted positively to the shadowing task; all of them understood the instructions and were able to complete the task within the allotted one week. Additionally, the shadowing task was administered outside the university setting with two adult language learners who practiced shadowing alongside their regular language learning routine for 4-5 months to gain further feedback. The participants of the study (see Dupák & T. Balla, 2020) reported a perceived improvement in listening skills, pronunciation, fluency, word retrieval, and a better understanding of connected speech.

The questionnaire in the present study was developed based on the previously mentioned feedback and insights, as well as considering the gaps in Hungarian research. Some questions were adapted from the questionnaires used in studies by Cenoz and Garcia Lecumberri (1999) and Derwing and Rossiter (2002), as well as the researchers' personal experiences with problematic areas of L2 speech and pronunciation learning among university students in Hungary. The questionnaire was given to two university instructors for overview and feedback, and a think-aloud protocol was used with six students. Based on their feedback, minor wording adjustments were made, and options in the multiple-choice questions were added, but all questions were found to be comprehensible.

3.4.1.1 Procedure

The questionnaire was distributed over three consecutive years, twice during distance teaching due to COVID-19 (2020 and 2021) and once in a face-to-face teaching setting (2022), towards the middle of the semester, before students started working on the shadowing task. The students were free to decide whether they wanted to complete the questionnaire. Consent was obtained from the participants for anonymous use of their answers in research. A total of 128 participants completed the questionnaire: 46 in 2020, 38 in 2021, and 44 in 2022. All of the questions can be found in Appendix A, detailing the number of respondents for each question. Following the first distribution, one question (Question 4) was removed because the participants indicated its redundancy, and new questions (Questions 7, 8, 10, 11, and 14) were added to gain greater insight into the topic. A single question (Question 16) was added following the second distribution.

3.4.1.2 Data analysis

Closed-ended questions were analyzed using SPSS, whereas the data from open-ended questions were first coded using inductive coding (more specifically, in vivo and descriptive coding), and then organized into major categories using pattern coding (Saldaña, 2016). MaxQDA software was used to facilitate the management of codes and calculate frequencies, but no predefined codes were imposed on the data. Some insightful and detailed comments provided by participants were used as examples in the qualitative analysis. Data provided regarding one question were not included in the study because the answers did not provide sufficient information for analysis (Question 11 in the questionnaire handed out to students; see Appendix C). For question 11, added in 2021, the number of respondents does not closely match that of the other questions added in the same year (see Appendix A) because many students misunderstood it, and their answers could not be analyzed. Therefore, those misunderstood 17 answers were excluded from the analysis. During the analysis, the questions were grouped into studies that form the basis of this present dissertation. Appendices A and C show the original order of the questions as they appeared in the questionnaires (Appendix A lists the questions in order, indicating the main topics they belonged to and the number of responses analyzed, whereas Appendix C shows the questionnaire as handed out to students). Appendix B presents the questions according to how they appear in the Results section of the present dissertation.

3.4.2 Diaries

Diaries served as the primary data collection tool for the strategy data in this dissertation. It is important to note that they constituted only one aspect of a more extensive project that was not entirely encompassed in the present study. Nonetheless, for the purpose of clarity and to provide context, the methodology employed to gather the diaries is described in Sections 3.4.2.1 and 3.4.2.2.

3.4.2.1 Shadowing Diaries

Diaries are used to gain information about learners' internal processes, impressions, perceptions, and insights, and "even in studies that provide a structure for the diary writers to follow (e.g., certain topics to address and guidelines for the content), researchers are still able to access the phenomena under investigation from a viewpoint other than their own" (Gass & Mackey, 2007, p. 48). As Dörnyei (2007) noted, by recording their feelings, thoughts, and

activities, participants become co-researchers. Further advantages of diaries include the possibility of observing changes and fluctuations due to frequent recordings, and providing background information that could aid in interpreting other results (Dörnyei, 2007). However, its limitations include the commitment required from participants, potential difficulty in the analysis due to its structure, forgetfulness, lack of motivation, and a progressive loss of motivation to write entries (Gass & Mackey, 2007; Dörnyei, 2007). As Holly (1989) suggests, diaries, journals, and logs differ in their format as follows:

> "The log is an objective record of information (pages read, attendance, activities, lesson plans); the diary is a personal document in which the author can record log-type information but is primarily a book for expressing the author's thoughts, reactions, ideas, and feelings related to everyday experiences; and the journal is a document that includes both the objective data of the log and the personal interpretations and expressions of experiences of the diary, but which moves beyond these to intentional personal and professional reflection, analysis, planning, and evaluation." (Holly, 1989, p. 25-26)

The data collection tool used in this dissertation combines the elements of a log and diary. However, certain data were not the primary focus of this dissertation because of its length limitation. As a result, the present dissertation places less emphasis on the reflective and analytical aspects associated with a journal and instead focuses on the reactions, thoughts, and feelings that arise from daily recorded practice. Therefore, the term "diary" will be used throughout this dissertation. Diaries (n=107) were collected as part of a mandatory task for a course and were the source of the data presented in Study 4.

These diaries were submitted by the participants on three occasions from 2020 to 2022. To ensure maximum effectiveness, the participants were provided with a diary template containing a series of specific guiding questions to assist in organizing their entries (see Appendix D). The diaries were a mandatory component of an individual task assigned to students enrolled in Integrated English Language Skills Classes, in which they were asked to provide regular feedback on their shadowing progress. Completed diaries were submitted as Excel tables via the study platform of the university called Coospace, and then downloaded and merged into a single document to facilitate coding. The final document features the following sections: participant number and chosen accent (British or American), impressions of the first attempt, date of practice, frequency of practice per occasion, biggest difficulty or difficulties per session, description of how a particular problem was overcome, and overall impression. In 2022, the collection of diaries had one notable difference: the task was optional, and students could choose it as one of four assignments. Informal feedback suggested that some students

might find the task laborious and time-consuming once in-person classes resumed, despite being easy during lockdown. Only nine out of 48 students across the three groups in 2022 chose to complete the shadowing task. As in previous years, Coospace was used as the platform for electronic diary submission. The diaries allowed students to express their thoughts in detail at their own pace. As Szyszka (2014) notes, their additional benefit for future teachers is that "the verbalisation of practices exploited in pronunciation learning helps the participants become more aware of their pronunciation strengths and weaknesses, which may later be adopted in the process of pronunciation teaching." (p. 45).

With in-person classes not possible owing to the pandemic in 2020 and 2021, submission-based tasks were popular. Students were informed that diaries were needed to monitor progress and to satisfy the instructor's curiosity about their progress in this novel task. The diaries proved to be valuable sources of information, with the majority of students completing them with detailed insights and valuable information from the perspective of pronunciation-learning habits and attitudes. Consequently, their inclusion in the dissertation from a PLS perspective was subsequently made, and students were at no point under the pressure of completing the diaries for research purposes, which may have affected their answers. While the shadowing task was a compulsory element of the class for the majority of the participants, anyone who completed the required submissions (audio files and diary) by the deadlines received the maximum possible percentage for the task as an acknowledgment of their progress, perseverance, and motivation and because of the difficulty of the shadowing process for many. According to their reports, this was their first instance of shadowing in this specific manner, even though some students reported doing activities similar to the task.

3.4.2.2 Shadowing materials

The students were tasked with shadowing a one-minute-long recording of a native speaker's speech. This required them to read the transcript aloud while listening to the recording and trying to closely match the speaker's speech, intonation, and rhythm. According to Kadota (2007, p. 236 as cited in Sumiyoshi & Svetanant 2017, p. 7), in the case of content shadowing (when shadowing occurs without a script and is aimed at understanding the meaning of the text), the script should not include many unknown words and the speed should allow learners to understand the meaning. Although the text assigned for shadowing contained potentially unknown words, based on their level of proficiency, participants were not expected to have difficulty understanding it.

Participants were allowed to choose from two samples which were chosen based on speech rate, accent, genre, and topic. The speech rate of the samples was chosen such that it was fast enough for the participants to be able to shadow it, but it would still remain challenging. One of the speakers spoke with an SA accent, and the other spoke with an RP. These two accents were chosen based on the reviewed literature as the ones most preferred by students and most used in coursebooks. The American speaker is an entrepreneur and author from New Jersey, whereas the British speaker is an actress and a television host. Both samples were extracted from long interviews conducted during two talk shows. The talk show genre was chosen because it allows for spontaneous speech, whereas the topic was intended to be one in which young adults might be interested. In the British sample, the speaker described childhood experiences, whereas the American speaker discussed their approach to dealing with difficult situations. In both cases, the interview questions were transcribed to provide additional context for the participants. The audio samples were approximately one minute long and were cut from the interviews to form a coherent unit with clear beginnings and endings. No adjustments were made to the speed of the original recording; the participants were asked to listen and shadow the speakers at the original speed.

3.4.2.3 Shadowing procedure

The shadowing procedure included several steps and generated various types of data, not all of which were directly relevant to the present study. Nonetheless, the entire procedure is described for the sake of clarity. Given the COVID-19 lockdown situation, shadowing was introduced to participants during online sessions in 2020 and 2021 and in class in 2022. Participants were asked to choose whether they wanted to work with a sample of a British or an American speaker. They were given transcripts based on their preference, which they were asked to read carefully. 75% of the participants (n=80) chose the American speaker, whereas 25% (n=27) chose the British speaker. The transcript contained only periods at the end of the sentences, and no other punctuation. Subsequently, students were given the original recording, which they listened to once. The next step was a demonstration by the instructor on how shadowing is performed. At this point, participants were informed that they had a two-week period to produce a final recording of their shadowing and upload it to Coospace. The practice period was scheduled to include the university spring break, when students had more time to organize their practice sessions at their convenience. The practice period occurred after the students were given the questionnaires. Participants were allowed to practice shadowing as

often as necessary. They were expected to record a “Final Shadowing Sample” when they were satisfied with their progress. As Sumiyosh and Svetanant (2017) suggested, the individual arrangement of practice sessions and recording at home can reduce the potential test anxiety that might arise from recording oneself. Both files were uploaded to the online platform mentioned above.

3.4.2.4 Data analysis

Data from the diaries were first coded using inductive coding. Experienced difficulties and tactics used for overcoming problems were organized into categories using pattern coding (Saldaña, 2016). MaxQDA software was used to facilitate the management of codes and calculate the frequencies. Furthermore, the strategies and tactics were categorized based on Szyszka’s (2017) PLS taxonomy (see Section 2.3.6.2).

4. Results and discussion

The data collected in this dissertation were divided into two main parts that include four smaller studies, each with a distinct focus. Part 1 includes Studies 1, 2 and 3. The first study focused on teacher trainees' attitudes and beliefs regarding English accents (Study 1). Next, the data collected regarding teacher trainees' beliefs about pronunciation are presented (Study 2). The third section contains data on teacher trainees' past experiences with pronunciation learning and accent change (Study 3). Part 2 includes the fourth study, which presents data on reported pronunciation learning strategies and task-focused pronunciation learning strategies (Study 4). Each study follows a similar structure, starting with the data presentation, then a discussion, and a brief summary.

4.1 Results of Study 1

Study 1 focuses on the attitudes and beliefs of Hungarian English language teachers about English accents. Part A of Study 1 discusses on participants' attitude data, including accent preferences and imitation. Part B explores participants' beliefs regarding the necessity and attainability of a native-like accent and the controllability of an accent.

4.1.1 Results of Part A

4.1.1.1 Accent preferences and reasons

In the first year of data collection, participants (n=46) were asked to name their favorite accent to listen to and explain their choices. However, this question was eliminated during the subsequent two years of data collection as some students felt compelled to repeat their responses when answering another question *(Is there an accent you consciously try to imitate* – discussed in Section 4.1.1.2). Of the 46 students who provided an answer, 11 (23.9%) indicated no preference; among the remaining 35 students (76.08%), some mentioned one accent, while others named two accents they preferred (see Table 7).

Table 7. Accents participants preferred listening to

Accent	**Nr of times mentioned**	**%**
British	18	32.14%
American	12	21.42%
No preference	11	19.64%
American (specified)	4	7.14%
Australian	4	7.14%
Other	2	3.57%
Irish	2	3.57%
British (specified)	2	3.57%
Scottish	1	1.78%
Total	**56**	**100%**

According to the data presented in Table 7, British accents were indicated most frequently, followed by American accents. Most students did not provide a specific accent, assuming that there was one British and one American accent. Those who did specify mentioned Californian, Michigan, New York accents, a Western American accent and African American English, or the Liverpool and the Manchester accents in the case of the British. Additionally, Australian, Irish, and Scottish accents were mentioned from the native accents, and Indian and Russian fell under the "Other" category.

Some of the 46 participants provided elaborate reasons for their preference. The main reasons for choosing an American accent were its *frequency, familiarity, ease of use, personal preferences,* and *experience*. Five students noted that it was more frequently heard in TV shows and movies, three participants found pronunciation easier (e.g., a specific sound phenomenon like flapped /t/), two participants were more familiar with this accent, two participants mentioned personal preferences, and one participant had experience using this accent in school.

The reasons for the preference for a British accent were *experience, uniqueness, sound,* and *preference for a speaker*: two participants were exposed to it during their school years, and one participant perceived American as more usual and British as more unique. Another participant mentioned a specific sound phenomenon they liked (aspirated /t/, non-rhotic /r/), and a fourth participant mentioned a celebrity from a favorite band from their teenage years, who spoke with a British accent. Finally, one participant mentioned that this was the accent they enjoyed imitating. However, three participants expressed negative attitudes towards British accents, referring to the difficulty of their imitation, with two students also finding attempts to imitate it *irritating* and *fake*. The only reason mentioned for preferring the

Australian accent was that the participant watched a documentary presented by a native speaker of Australian English.

Further analysis focused on the subjective descriptions provided by participants to characterize a particular accent. These characteristics were assigned to the following categories: perceived positive and negative attributes, intelligibility-related observations, affective reactions, production-related observations, and expressions reflecting standard ideology. Table 8 presents the specific words and phrases that participants associated with the accents.

Table 8. Perceived qualities and characteristics of accents

Category	Description	Frequency	Accent associated with
Perceived positive attributes	calm	1	American
	cool	1	American
	pleasant	1	American
	more neutral	1	American
	characterful	1	American
	bubbly	1	Australian
	good to listen to	1	Australian
	sophisticated	5	British
	elegant	4	British
	nice	2	British
	pleasant	2	British
	polite	2	British
	beautiful	1	British
	confident	1	British
	eloquent	1	British
	not boring	1	British
	soft	1	British
	sounds better	1	British
	formal	1	British
	more enthusiastic	1	British
	more articulate	1	British
Perceived negative attributes	lazy	1	American
Intelligibility	(more) understandable	3 + 2	American British
	clear	2	American
	easier	2	American
	easier to understand	2	American
	not easy to understand	1	American
	hard to understand	1 + 1	Australian British
Affective reaction	funny	2 + 1	Australian Irish
	happy	1	Australian
	fascinating	1	British
	special	1	British
	very cute	1	Indian
	interesting	1	Scottish
Production	easier to produce	1	American
	difficult to pronounce	1	British
	hard to imitate	1	Irish
Reflecting a standard ideology	perfect	1	British
	pure	1	British
	the true English accent	1	British

British accents were most commonly associated with positive connotations, followed by American and Australian accents. The only negative association was observed in connection with an American accent. Regarding comprehensibility, American accents were mentioned more frequently, whereas Australian and British accents were perceived as more difficult to understand. Affective responses were observed for British, Australian, Irish, Indian, and Scottish accents, with American accents notably absent from this group. Regarding production, American accents were considered easy to produce, whereas British and Irish accents were perceived as more challenging. Terms associated with a standard ideology appeared only in connection with British accents.

4.1.1.2 Imitating an accent and reasons

When teacher trainees (n=128) were asked whether they consciously tried to imitate accents, more than half of the participants, 64% (n=82), responded positively. The accents mentioned by the participants are shown in Figure 7. Of these participants, 46% reported imitating a British accent, whereas 37% stated that they imitated an American accent. Only 10% reported that they produced a mixture of British and American accents, with the remaining participants mentioning other accents, such as Australian (4%), Scottish (2%), Irish (2%), French (1%), and Russian (for entertainment purposes) (1%). In addition, some participants reported imitating a specific person (2%) or any accent they heard and liked (2%).

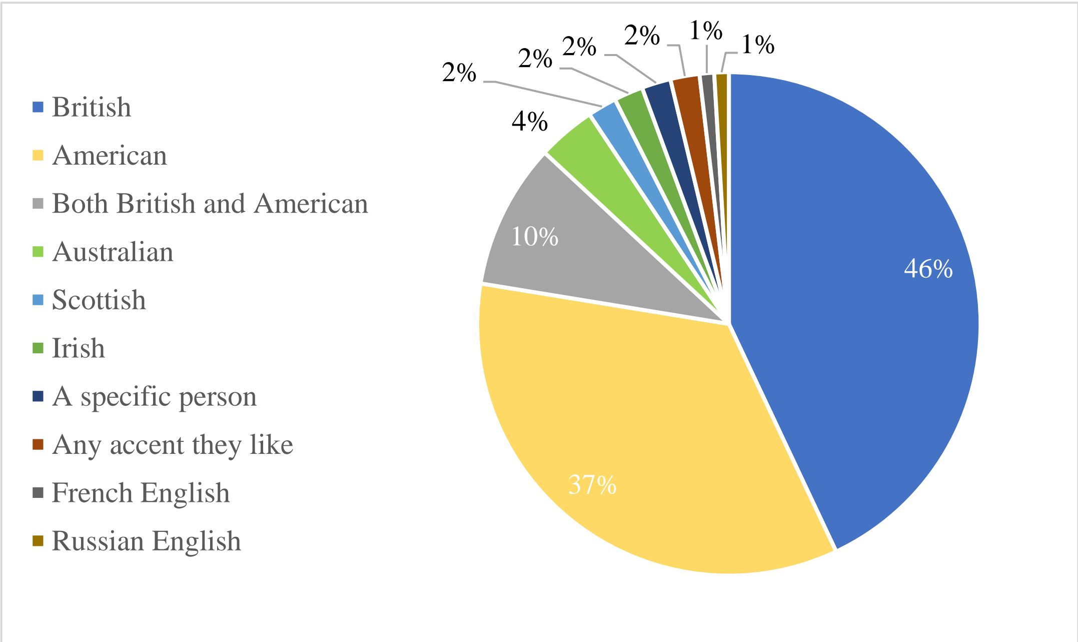

Figure 7. Accents most frequently imitated by participants

Although this question did not specifically require students to provide reasons, some participants did. Among the 46% who reported attempting to imitate a British accent, a few noted doing so for entertainment purposes or conveying a more formal or sophisticated persona. Some individuals expressed that they were drawn to the accent because it was *formal*, *sophisticated*, *beautiful, wonderful, posh,* and *classy*. Some participants noted that they imitated only among close friends.

The second most prevalent group among those who attempted to imitate an accent was the participants who tried to imitate an American accent. If they provided a reason, it was usually that American English was more familiar because of TV shows, because their teacher used it, or that they found it *pleasant*, *widespread*, *easier to understand, easy to imitate*, *more natural*, and *not forced*.

When it came to imitating Scottish English, one student noted doing so because it was *difficult to understand*, and another because they found it *amusing*. The reasons for imitating an Irish accent were either *humor* or *personal preference*. Russian English was imitated for *fun*. However, some students pointed out that they only imitated accents on specific occasions, for instance, when they were with friends or when they were watching a TV show and wanted to experiment. A few participants mentioned that they mimicked accents only when they were alone.

The remaining 36% (n=46) stated that they did not actively attempt to imitate an accent, and approximately a quarter of the participants provided a reason. Two participants mentioned that their main focus was *correct, fluent speech*, rather than imitating accents. Three students indicated difficulty with imitation for various reasons: its *strange sound*, *feeling uncomfortable*, or *lacking the courage* to do so. One participant admitted that they tried to avoid having a Hungarian accent; another acknowledged that, although they had not tried to imitate any accent, doing so could help them with their stress and intonation issues.

4.1.2 Results of Part B

4.1.2.1 Beliefs on the necessity of a native-like accent

Participants were asked whether they considered it important to sound like a native speaker. Of the 127 participants, 69% (n=87) responded affirmatively, whereas 31% (n=40) held the opposite view. Table 9 provides a concise summary of their reasons, which are explored further below. It should be noted that some participants occasionally provided multiple reasons.

Table 9. Necessity of a native-like accent

Necessary (n=87)		**Not necessary (n=40)**	
Reason	**% of all positive cases**	**Reason**	**% of all negative cases**
Teacher as a model	47%	Other aspects of speech are more important	42%
Native-like perceived as better/superior	25%	No reason given	18%
Increased comprehensibility	9%	Not possible/challenging	13%
Preference for imitation	9%	Not important	11%
Personal goal	6%	Satisfied with the current accent	11%
Confidence	6%	Complicates comprehensibility in the Hungarian context	3%
No reason given	6%	A Hungarian accent is acceptable	3%
Natural for a language learner	5%	Problematic concept	3%
Pretending	3%		
Work-related reasons	2%		
Reject sounding Hungarian	2%		
External expectation	1%		

Among the students who considered sounding native-like necessary, nearly half of the responses (47%) deemed it essential for a future teacher as they will serve as role models for students. Meanwhile, a quarter of the answers (25%) perceived speaking like a native speaker as a more professional sounding, precise, and aesthetically pleasing form of English. Some answers reflected the opinion that sounding native-like led to enhanced comprehensibility (9%), while others expressed a preference for imitation (9%). Furthermore, some students (6%) maintained that sounding native-like was a personal goal because of their perfectionism, while others believed it bolstered their confidence (6%). Some said that sounding native-like was

natural for a language learner (5%), that they would enjoy pretending to be native speakers (3%), or that they wanted to work abroad (2%). A small minority of respondents (2%) disapproved of a Hungarian accent and sought to avoid sounding "Hunglish." Only one student felt that sounding like a native speaker was an expectation imposed by the teachers and society (1%). Finally, some participants did not provide a specific reason for wanting to sound native-like (6%).

Of the participants who thought that sounding native-like was unimportant, 18% did not provide a reason. Among those who provided an explanation, 42% believed that being fluent and understandable was more crucial than focusing on one's accent. Another 13% found it difficult or impossible to sound native-like, whereas 11% indicated that they did not place much value on sounding native-like. The same number of answers (11%) indicated satisfaction with their current accent. Three additional reasons were mentioned, each by one student: the potential difficulty of being understood with a native-like accent in the Hungarian educational context (3%), being proud of their current Hungarian accent (3%), and expressing confusion about the term "native-like" (3%).

Of the participants who answered negatively, a sub-category (n=12, 30%) emerged, consisting of remarks revealing a desire to sound native-like or imitate native speech despite not considering it to be necessary. Half of them admitted practicing a native-like accent, while one participant believed that accents probably influenced them; another said that a native-like accent would boost their ego; and another stated that a native-like accent was important. Two participants found it a fun challenge, while two others admitted paying attention to the correct pronunciation. Finally, one participant found inspiration in teachers who sounded like native speakers.

4.1.2.2 Beliefs on the necessity of a native-like accent for a language learner

Participants were also asked about their views on whether it was important for language learners to sound native-like. Of the 128 responses obtained, 49 (39%) participants believed it was, whereas 56 (44%) stated that it was not. The remaining 23 participants (18%) said it was not important, but acknowledged that it could be beneficial in specific scenarios. After analyzing the positive, negative, and undecided answers, four categories were identified from the answers of those who considered sounding native-like important, eight main themes from the answers of those who did not consider it important, and four main themes among those who believed it was sometimes important (see Table 10). Some participants occasionally provided more than one reason.

Table 10. Necessity of a native-like accent for a language learner

Important (39%)		**Not important (44%)**		**Sometimes important (18%)**	
Reason	**% of all positive responses**	**Reason**	**% of all negative responses**	**Reason**	**% of all undecided responses**
Learner-focused reasons	45%	Other aspects are more important	32%	Work	35%
Comprehensibility	37%	Comprehensibility more important	32%	Positive feelings associated with it	26%
Making a specific impression	14%	Accent is acceptable	16%	Personal reasons	26%
Teacher-focused reasons	8%	Lower level	13%	Other	26%
		It is a "bonus"	5%		
		Too difficult	2%		
		Stressful	2%		
		Not a requirement in assessment	2%		

After analyzing the answers of participants who valued sounding like a native speaker, four main categories emerged. The first category was related to learners' perspective (45%). These participants believed that sounding native-like should come naturally for a good speaker; they emphasized that students had a duty to strive for it despite the challenges. They emphasized that pronunciation and sounds were as important as any other aspect of language learning and that imitation was crucial to language learning. They also mentioned the motivation and confidence gained from speaking like a native speaker and the benefits it could provide (e.g., a better position in the job market). The second category focused on the importance of comprehensibility (37%). Participants felt that sounding native-like facilitated general comprehensibility and mutual understanding between NNSs, thus avoiding misunderstandings. The third category was related to the impression one can make by having a native-like accent (14%). The participants noted that sounding native-like was more beautiful, gave the impression of being at a high level, and sounded more academic. Finally, teacher-focused reasons accounted for 8% of the responses. In the view of the participants, teachers should sound native-like, guide and inspire students toward this goal.

The participants who answered negatively were primarily of the opinion that comprehensibility (32%) or another aspect of the language, such as grammar (14%), vocabulary (9%), correct pronunciation (9%), or fluency (7%) held greater importance. Other students thought that having a non-native accent was completely acceptable (16%), because Hungarian

learners of English were not native speakers and did not need to strive to sound like them. The remaining reasons included the notion that imitating a native-like accent should be avoided at lower levels (13%), that it is merely a supplementary skill, a "bonus" (5%), that it is too challenging for certain individuals (2%), that it might cause undue stress (2%), and that it is not a requirement in any formal assessment (2%).

While many students argued that a native-like accent was not strictly necessary, some still acknowledged that there were a few exceptions, such as for one's job (35%). Others believed that it could be a rewarding experience (26%) or a personal choice (26%). However, as a small minority of the participants remarked (4%), those who started learning a language later in life should approach the issue cautiously, as it could be more challenging than for younger learners (4%). Some participants clarified that even though they did not prioritize sounding native-like, they recognized the importance of clear pronunciation and intonation (13%) and how it could contribute to a better understanding between themselves and native speakers (9%). Finally, one participant pointed out that even though sounding native-like may not be a requirement, some learners could still feel self-conscious about not achieving this goal.

4.1.2.3 Beliefs on the attainability and controllability of a native-like accent

The next question aimed to discover whether participants thought it possible for a language learner to attain native-like pronunciation if they learned English as a foreign language. Of the 82 respondents who answered this question, 85% (n=70) believed it was attainable, whereas only 15% (n=12) considered it unattainable.

Those who believed it was possible to attain native-like pronunciation could be divided into two groups. The first (19%) stated that this was possible without providing further details. One participant in this subset referred to their grandmother, a German teacher who was mistaken for a native by native Germans, and two others mentioned having friends who spoke with what they referred to as a "native-like" accent. The second group (81%) provided certain conditions that must be met to achieve this goal (with some respondents mentioning multiple conditions) (see Table 11).

Table 11. Conditions for the possibility of attaining a native-like accent for a non-native speaker

Condition	% of students mentioning the condition
Abundant practice	49%
Living among native speakers	33%
Listening to native speakers	9%
Speaking with native speakers	7%
Dedicating time to learning	7%
Possessing musical pitch	4%
Learning in childhood	4%

Of the participants who thought that some conditions needed to be met, almost half cited the need for extensive practice (49%), followed by the need for immersion among native speakers (33%), listening to native speakers (9%), speaking with native speakers (7%), dedicating ample time to learning (7%), possessing a musical pitch (4%), and learning the language in childhood (4%).

The reasons for believing that it was not possible to sound like a native speaker were as follows (see Table 12): age as a factor (25%), the influence of one's first language (17%), and the differences between languages hindering the acquisition of sounds non-existent in the native language (8%). One participant suggested that it was conditional upon being bilingual (8%) and three participants (25%) provided no reason.

Table 12. Reasons for the impossibility of attaining a native-like accent for a non-native speaker

Reason	% of students mentioning this reason
Age	25%
Effect of L1	17%
Differences between L1 and L2	8%
Only for bilinguals	8%
No reason	25%

4.1.2.4 Beliefs on the controllability of accent

Students were asked whether they believed that they had control over their accents. Seventy-eight participants provided answers that could be considered (four answers were excluded from the analysis due to misunderstanding the question). The majority (72%) of the participants expressed confidence in their ability to control their accents, whereas 28% felt that they lacked control. Those who responded negatively did not provide a reason. The positive

responses are categorized in Table 13 to show how students believed they could control their accents.

Table 13. Ways of controlling the accent according to participants

Ways of controlling accent	**% of students mentioning it**
Concentrating on it	42%
Imitating native speech	17%
Listening to native speech	16%
Focus on specific aspects of speech	12%
Speaking	3%
Shadowing	3%
Singing	1%
Requesting feedback	1%
Talking to oneself	1%

The participants mentioned a variety of strategies for accent control. Among those who offered a more detailed explanation, most students (42%) agreed that controlling their accents was possible by focusing and paying attention. Other suggestions included imitating native speech (17%), listening to it (16%), or refining specific aspects of speech (12%) such as intonation, stress, and pronunciation in general or specific sounds. A small number of participants emphasized the importance of speaking (3%), shadowing (3%), singing (1%), requesting feedback (1%), and talking to oneself (1%).

4.2 Discussion of Study 1

This section discusses the findings of Study 1, occasionally supported by direct quotes from the questionnaire, to gain a more comprehensive understanding of participants' attitudes and beliefs regarding accents and sounding native-like. First, students' accent preferences, accent imitation habits, and underlying reasons will be discussed, along with themes that emerged during the qualitative analysis. Next, students' beliefs about the necessity and possibility of having a native-like accent will ensue, reviewing the themes that emerged during the qualitative analysis. Finally, the students' views on the controllability of their own accents are analyzed.

It is worth noting that, when discussing accents, participants often used a definite article that implied the belief that there was only one British and one American accent. This suggests that unless otherwise specified, they may have been referring to Received Pronunciation (RP) and General American (GA) when they wrote "(the) British" or "(the) American", as evidenced by some of the direct quotes as well. This indicates that most of the participants were aware of the fundamental differences in the way native speakers from the UK or USA sound. However, only some students demonstrated a clearer understanding of the topic by naming specific accents according to the region in which they are spoken. This is supported by Püski's (2023) results, which indicate that universities are the setting in which many students first hear about the diversity of accents. The present dissertation did not evaluate students' ability to recognize specific accents or assess their knowledge of accents. However, international research shows that learners of English struggle to identify accents correctly (Kelch & Santana-Williamson, 2002), even if they wish to emulate them (Scales et al., 2006). Therefore, an indefinite article was used whenever it was unclear which specific accent the participants referred to.

4.2.1 Discussion of Part A

4.2.1.1 Accent preferences and reasons

As indicated by the results in Section 4.1.1.1, most students who had a preferred accent chose a British accent, followed by American accents. However, there were also a few examples of Australian, Irish, Scottish, Indian, Russian, and African American accents. This preference for British accents is consistent with findings from other European studies conducted in Spain (Cenoz & Garcia Lecumberri, 1999; Carrie, 2017), Denmark (Ladegaard, 1998; Jarvella et al., 2001; Ladegaard & Sachdev, 2006), and Austria (Dalton-Puffer et al., 1997). Another study

conducted among Hungarian high school students indicated a similar preference for British and American varieties, and suggested that students' accent preferences may depend on their identity and personal and cultural affiliations (Feyér, 2012). In another study conducted among high school students in Hungary (Fekete, 2015), participants seemed to prefer American English strongly, whereas, in a more recent case study (Fekete, 2023b), the participant (an interpreter) showed a strong preference for British accents, considering them more prestigious than American English.

The positive associations participants used in connection with a British accent in the present study were positive affective evaluations such as *sophisticated*, *elegant*, *nice*, *pleasant*, *beautiful*, *articulate*, *polite-sounding*, *soft*, and *better-sounding,* or reflected the standard language ideology with expressions such as *pure* or *the true English accent*. Similar words associated with British English have been reported by Mompeán Gonzalez (2004) and Fekete (2015, 2023b). In contrast, the main appeal of American accents were *clarity* and *ease of production and understanding*, along with associations such as *calm*, *cool*, *pleasant*, *neutral*, and *characterful*. Students sometimes mentioned why they were not fond of an accent. Hence, some negative concepts attached to British accents (*difficult* and *hard to understand*) and American accents (*lazy* and *not easy to understand*) emerged. Positive notions associated with an Australian accent were *happy*, *bubbly*, *funny*, and *pleasant to listen to*; for Irish, *funny*; and both were also considered *difficult*. The term used for Scottish was *interesting*, and for Indian, *very cute*.

As Preston (1996) explains, individuals who are not linguists tend to rely on sociocultural information rather than linguistic information when commenting on an accent: "The identification between language use and social groups may be so intense as to result in what Irvine (1996) calls 'iconicity'. That is, the language itself has attributed to it characteristics assumed about the group with which it is associated" (Preston, 1996, p. 72). Such associations might explain why expressions in the data are more suitable for describing a person than for describing a language. For instance, positive associations with Australian, Scottish, or Irish could come from encounters with people from these countries or a particular movie or TV character they had in mind (some participants actually mentioned such examples) when considering the accent.

The reasons indicated by participants show that the content students watch or listen to in their free time (cf. Nikolov, 2003; Fekete, 2015; Jakšič & Šturm, 2017), admiration for a celebrity who has a particular accent, and exposure to accents through classroom instruction or course materials (Fekete, 2015) may influence their preferences. Some students preferred

certain sound phenomena characteristic of a particular accent (e.g., rhotic or non-rhotic /r/). While the present dissertation does not focus on further reasons associated with the preference or rejection of a particular accent (as some students did not or could not disclose their reasons), it is likely that further underlying reasons named in Hungarian and other European studies may also apply to the present study (and some of these did emerge in the comments among the reasons for trying to imitate an accent in Section 4.2.1.2). For example, the geographical proximity of Britain or the teacher's perspective of accents, as suggested by Dalton-Puffer et al. (1997), a preference for a particular culture (see Csizér et al., 2004; Feyér, 2012), and the personality traits of students, among other factors, could all contribute to this choice.

Several globally recognized coursebook series have been widely adopted in schools in Hungary. Studies that examined some of the most popular textbooks from different perspectives observed that they tend to represent Inner-Circle accents (Tajeddin & Pakzadian, 2020), with a particular focus on RP and GA (Tsang, 2019). However, non-standard accents (Hilliard, 2014) and non-native accents (Kopperoinen, 2011) were underrepresented. Although Lindsey (2019) notes that as of the 21st century, RP can be referred to in the past tense, middle- and upper-middle-class accents of the south of England are still pervasive in the media, in public life, and in teaching materials, often referred to as "General British," even though, as he explains, "It's socially and regionally far less general than General American is in North America. It's an accent of England, and certainly not representative of Scotland, Ireland, or the former British colonies, where pronunciation is substantially different" (Lindsey, 2019, p. 4). As such, the term "general" is only representative of a small group, yet, it is heavily present in many places, potentially leading students to aspire towards imitating it.

Scales et al. (2006) note that according to research, Expanding-Circle learners still prefer and want to imitate Inner-Circle models. However, they caution against assuming that "learners are simply naïve and need to have their consciousness raised about what accents of English are most appropriate for them" or that the "EIL argument is elitist and out of touch with students' practical needs" (p. 719-720). Luk (1998) emphasized the role of educators in preparing students to navigate the diverse Englishes they may encounter in real-life situations "by encouraging a more open-minded attitude toward accented speech of whatever kind" (p. 104). The results presented in this dissertation reinforce the significance of these insights. The majority of teacher trainees demonstrated clear preferences for specific accents, with reasons for their choices. While these reasons may be influenced by various factors, the mere fact that they have a preference is also noteworthy. As prospective teachers, it is crucial to comprehend

how these preferences may impact their learning and teaching and whether participants hold expectations for their students. Part B of Study 1 offers further insight into this question.

4.2.1.2 Imitating an accent and reasons

Approximately two-thirds of participants claimed that they were trying to imitate accents. Nearly half expressed a preference for imitating a British accent, followed by an American accent, while an additional 10% claimed to produce a blend of the two. In the following section, the underlying themes are explored further to explain the reasons behind students' inclination (or lack thereof) to imitate accents. The themes that emerged, namely, *familiarity*, *imitation for fun*, *personal preferences*, *difficulties of imitation*, *accent as an added advantage*, and *rejection of an accent*, were analyzed and elaborated upon in detail.

Familiarity

The prevalence of British and American accents in the responses is not unexpected given that these are the varieties with which L2 speakers tend to be more familiar (see Ladegaard, 1998; Jarvella et al., 2001). Research has also shown that the more familiar listeners are with an accent, the more they understand and appreciate it (Buckingham, 2015). It is reasonable to assume that Hungarian teacher trainees hear these accents most frequently in the classroom (cf. Huber, 2021; Püski, 2023), whereas exposure to Australian, Irish, or Scottish English may be less common. This is illustrated by the answer of one participant who tried to emulate an accent because it was the one they heard in school (see Excerpt 1).

> *(1) When I was in school, the dominating variety was the British, although many of us students "sounded American" because of the media. So, I tried to adjust my speech to the British pronunciation, but I couldn't really use only one variety. That way, my speech is not really native-like, although I sometimes try to imitate the native speakers.*

According to Excerpt 1, school played a significant role in shaping the accent of the participant. Bayard et al. (2001) predicted that due to its dominance in the media, Standard American English would eventually surpass Receive Pronunciation in popularity among learners of English. Although this may not have occurred entirely, the influence of American English cannot be denied. As Excerpt 1 suggests, many students may prefer American over British content during their free time (e.g., Jakšič & Šturm, 2017), emphasizing the crucial role of

extramural learning in students' language use and learning objectives. The participant in Excerpt 1 refers to the conflict between their personal accent goals and the one they imposed on themselves based on perceived expectations at school and a possible desire to fit in with a particular group (cf. Marx, 2002), navigating between accents to construct and project different identities inside and outside the classroom. If teachers assess their students' pronunciation goals and, as suggested by Sung (2016), provide them with options and acknowledge their agency in setting their pronunciation goals, such inner conflicts can be brought to light and potentially avoided or resolved. British accents may be more prevalent in the classroom environment, which could cause students to feel pressured to conform. The participant in Excerpt 1 attributed their lack of a native-like accent to the conflict between their personal preferences and the accent used by the teacher and the learning material (a phenomenon discovered in other European countries as well, as described by Henderson et al. (2012)). Carrie (2017) highlighted that collecting data on attitudes can assist in developing materials that align with learners' goals and act as complements rather than change or negate their independent learning.

Regarding the motivation behind wanting to imitate an American accent, participants cited various reasons, such as its *familiarity because of its prevalence on TV, exposure to it through a teacher*, *personal affective preferences* (e.g., "pleasant"), and *perceived ease*. One participant elaborated on the latter reason (see Excerpt 2).

> *(2) It is the most frequently heard/used accent, and I think this is why it is easier to learn even for those who have no chance to study in an English-speaking country. [...] If you do not live in a native environment, accents are hard to learn, especially the British. So, this is why I am trying to use American accent.*

As seen in Excerpt 2, imitating an American accent is perceived as more attainable by many than a British accent, which might be viewed as more challenging. Consequently, an American accent may seem a natural option for some students.

One participant shared an interesting reason for imitation: they started imitating the Scottish accent as they found it difficult to understand. Imitation helped them become more familiar with the accent, facilitating understanding later (Adank et al. (2010) found that imitation can aid accent comprehension). As Australian, Scottish, and Irish English are probably less frequent in textbooks than other native varieties such as American and British, their peculiarities or unusual sounds may contribute to their appeal. For French and Russian English accents, it may be the characteristic L1 sounds still present in the accent that students find interesting or strange. Even native speakers tend to find foreign accents challenging to understand and attribute less status and solidarity to some of their speakers, while still making

distinctions among them, evaluating certain varieties, such as French and German, above others, such as Arabic, Farsi, or Vietnamese (Dragojevic & Goatley-Soan, 2020). Thus, finding accents strange and associating stereotypes with them, a topic further explored in the next section, is not exclusive to language learners.

Imitation for fun and personal preferences

Further reasons for imitating other accents, such as Scottish, Irish, Australian, Russian, and French, include *finding them amusing* or *personal preferences*. After a brief search on the world's most popular video-sharing platform, it is apparent that many creators aim to showcase their talent by imitating various native and non-native English accents. These videos feature monologues or lines intended to entertain viewers. According to Mühleisen (2005), imitating accents is considered to be funny because "the source of humour drawn from the imitation of speech patterns of particular segments of society is, of course, not the accent itself, but its power to evoke characteristics stereotypically associated with that group" (p. 225), such as stereotypes in connection with an accent or a linguistic style. These stereotypes, as Mühleisen notes, are not individual, but rather part of the cultural memory of a society. Media often helps remember, reinforce, and even create stereotypes in viewers:

> *A good case in point for this would be, for instance, the invention of Manuel, the waiter from Barcelona' from the popular 1970s comedy series Fawlty Towers. For decades, an imitation of the central features of the speech of this television figure - a 'Spanish accent' or even a simple 'Que?' - has been sufficient as a cue to set generations of British television viewers laughing. Here, the media event is itself the origin of the humorous effect of the foreign accent.* (Mühleisen, 2005, p. 226)

The cited quote provides an example from half a century ago, but contemporary instances of media using accents for comedic effect have also been reported (e.g., Antony, 2013; Casillas et al., 2018). When these portrayals appear regularly in the media, mocking, ridiculing accents, or merely using them to create a comedic effect can further reinforce stereotypes. A solution to this issue could involve incorporating non-native English varieties more frequently in textbooks and listening materials, allowing students to become more familiar with these accents in everyday scenarios and contexts and to better understand their speakers.

Several students noted that they only occasionally try to imitate accents, for example, when they are with specific people (such as friends) or when they encounter something they like or want to test while watching TV (see Excerpts 3 and 4).

(3) When there's a British character in a show I'm watching for a few days, I unconsciously copy the way they speak.

(4) I just try to imitate if I hear interesting and huge differences between British and American.

The above excerpts indicate that some students are not necessarily committed to imitating particular accents, but are more interested in imitating the characters or actors they admire. They may do so to experiment with specific sounds or to test their abilities. Watching a popular TV series over multiple seasons can potentially influence an individual's daily language use. In such a scenario, the personal preferences, distinctive qualities, and charisma of the actors, including their voice and personality, could be a more decisive factor in student's choices and preferences than any linguistic or sociocultural reason related to accent preferences. However, imitation is not necessarily related to positive feelings, as indicated by the topic in the next section.

The difficulties of imitation

Some participants expressed experiencing difficulties and uncertainties in connection with imitating (see Excerpt 5).

(5) I try to imitate the American accent from time to time, but I have several problems with it; I don't really know how and where to start practicing in an effective way.

The participant in Excerpt 5 appears to be contemplating the most effective way to practice or imitate accents. A thorough focus on the characteristics of a particular accent is a lengthy task that could be challenging to incorporate into school curricula given the limited time available for teachers. However, introducing students to accent differences and focusing on particular sounds may be sufficient to spark their interest in discovering the characteristics of accents they listen to, admire, or wish to imitate. As research continues to accumulate, an increasing amount of information is available on the aspects of pronunciation (segmental or suprasegmental) that are worth focusing on, depending on the desired outcome (e.g., Derwing & Munro, 2005; Saito, 2021). With this knowledge, teachers can decide how to use classroom time efficiently and address queries, goals, and uncertainties that students may have to ensure optimal learning outcomes.

Four comments reflected on the perceived difference in difficulty between British and American accents (see Excerpts 6-9).

> *(6) I try to speak with a British accent, although I do not succeed. It is much easier to do an American accent. But I do not give up because my favorite accent is the British accent.*
>
> *(7) I am trying to acquire the American. It is the most frequently heard/used accent, and I think this is why it is easier to learn, even for those who have no chance to study in an English-speaking country.*
>
> *(8) I have some friends who are using British accent, but I find it far-fetched, and I can tell it does not come naturally. And they also sound annoying. If you do not live in a native environment, accents are hard to learn, especially the British. So, this is why I am trying to use American accent.*
>
> *(9) It bothers me that, in my opinion, it is hard to copy their [British] pronunciation. I have not really met with Hungarians whose British accent would not have irritated my ears. I know it takes a lot of time to learn and improve a British accent (and almost every type of accent), but most of the time, their way of speaking sounds forced and unnatural.*

The idea that American English is "easy to understand" also emerges in other studies (e.g., Scales et al., 2006), as does the observation that a British accent is more difficult or challenging to imitate (Janicka et al., 2008; Carrie, 2017). As Scales et al. (2006) and Carrie (2017) noted, a preferred accent may be the one that students find easiest to understand, which aligns with the ideas expressed in the four comments mentioned above. Excerpts 8 and 9 touch on the "fakeness" and "forcedness" of imitating a British accent, which may explain why some participants do not find it desirable or feasible. The participant in Excerpt 6 abandoned their initial aim of replicating a British accent, and instead opted for an accent that they perceived to be easier. The participants in Excerpts 8 and 9 comment on the "less-than-perfect" sounding accents of others. All three comments suggest an underlying belief that deviating from a British accent during imitation attempts results in an inferior version, discouraging them from even attempting its imitation. Notably, however, this perspective is only applied to a British accent, as the participants in Excerpts 6 and 8 feel self-assured about their ability to imitate an American accent. Their comments, therefore, may also reflect the British native speaker's perceived superiority, who is regarded as the benchmark against which others are evaluated or compared (Cook, 1999). Two students (Excerpts 10 and 11) recognized the difficulty of perfectly imitating an accent and acknowledged that, although exposure to accents can affect speech, the effect of L1 persists.

(10) I can't. I try to pronounce the words to the best of my ability and accurately. My accent will always be a mixture of Hungarian accent and random things I picked up.

(11) For me, it is important [...], but I have habits that are too difficult to overcome because of the way I speak in Hungarian as well. For example, intonation and pronunciation are extremely difficult for me since my tongue gets twisted a lot, and it is difficult for me to convey emotions by intonation. Thus, my speech can sound boring and bland.

Some comments (see Excerpts 12 and 13) indicated negative feelings of fear and anxiety regarding accent imitation.

(12) I don't force these things because I feel uncomfortable with it.

(13) I haven't got enough courage to do this. I would be very happy if I wasn't afraid of it. But first, I want to have some kind of strength in the basic things; then, I will work on my accent, too.

These participants expressed discomfort or fear regarding imitating (or possibly even improving) their accent or pronunciation. Research suggests that this anxiety may be caused by external negative feedback (Price, 1991; Baran-Łucarz, 2011). However, when specifically asked about negative feedback elsewhere in the questionnaire, these two participants did not report any memorable experience. In her study, Baran-Łucarz (2011) found that anxiety may stem from the participants' perceived pronunciation level rather than their actual pronunciation skills. Without reported negative experiences, the fear of attempting to improve could be due to internal anxiety related to self-perception regarding pronunciation abilities. Some participants mentioned that they felt comfortable imitating an accent when they were alone (such as the participant in Excerpt 14).

(14) Not when I'm speaking to someone, but on my own, I've tried doing British accent several times. In the end, I'd really want to sound British, but I know I wouldn't do it in public if I'm not entirely pleased with my accent.

These remarks suggest that, while students may aspire to mimic native speakers, they may lack the confidence to use the accent in actual conversation. Furthermore, the excerpt also indicates the idea that an accent can be activated or deactivated (in public and at home), so that it may be used once a state of "perfection" is reached.

Accent as an added advantage

Although not a common belief, some students seem to view accent and pronunciation as the "icing on the cake," which is neither essential nor necessary or too tiring to focus on before achieving fluency in English (as reflected in Excerpt 15).

> *(15) No, I don't consciously imitate an accent yet, as my current goal now is to speak fluently.*

This perspective suggests that pronunciation can be put on hold until all other skills are developed, even though mistakes may become ingrained by that time. It is essential for future teachers to understand that even if a particular accent is not the goal, pronunciation development, like any other skill, is a gradual process. In contrast to those who felt that a native-like accent was a bonus, a smaller group of students expressed the belief that it was an unnecessary bonus (see Excerpts 16 and 17).

> *(16) It is possible that I subconsciously imitate an East Coast accent, but I don't have it in me to put extra time and energy to consciously imitate an accent.*
>
> *(17) I have tried to imitate British accent several times, but it was so hard, and I sound so weird that I stopped.*

While not outright stating a lack of interest in sounding native-like, the student in Excerpt 15 appears to see no immediate benefits in doing so. However, unlike the previously cited respondents who expressed anxiety or negative feelings about their current accents, this participant did not exhibit such concerns. Another participant (Excerpt 16), on the other hand, expressed resignation over the perceived inability to imitate the desired accent or, as Kim (2021) puts it, "a reluctant compromise [they] had to make after striving for a native-like accent in vain" (p. 9).

Rejection of the L1 accent

When a person speaks, their pronunciation and accent are often the first things listeners notice and form impressions of (Moyer, 2013). Past research has shown that an L1 accent of a less prestigious variety can put a person at a disadvantage in the job market (e.g., Giles et al., 1981) or education (Anderson-Clark et al., 2008). Negative attitudes (on measures of status and solidarity) have been demonstrated towards foreign accents in the US (Ryan & Sebastian, 1980, towards a Spanish accent; Ryan & Bulik, 1982, towards a German accent). Foreign accents may

activate stereotypes, preconceptions, and judgments, which may explain why some students expressed the desire to avoid sounding too Hungarian (see Excerpts 18 and 19).

> *(18) My goal is the not-strong-Hungarian accent because that is not the best for a teacher to have." (30)*
>
> *(19) No, it is not natural. I just try not to sound too Hungarian-like.*

Excerpts 18 and 19 reflect avoiding a native-like accent while simultaneously avoiding overtly displaying one's L1 through speech, the desire to have "no accent", which, explaining the response of one of her participants, Kim (2021) refers to as "an accent that fails to closely resemble any of the native-speaker varieties yet does not manifest the L2 speaker's sociolinguistic background in an obvious manner" (Kim, 2021, p. 9). The emerging teacher identity of the participant in Excerpt 18 is an important aspect to explore from the perspective of accents, and will be discussed in Section 4.2.3.1. It might also reflect a desire to accommodate the imagined expectations of the professional environment they will join.

Regarding the desire to reduce or hide the accent, addressing the differences between pronunciation and accent reduction, Thomson (2014) notes that "the term accent reduction seems to imply that (1) accent is a liability and something that needs to be eliminated and that (2) the focus of instruction should be on every feature of a foreign accent. This would necessitate addressing features of pronunciation that, despite contributing to an accent, may not actually lead to difficulties in communication." (Thomson, 2014, *Pronunciation Myth 6*). Research has shown that accents do not necessarily hinder intelligibility and comprehensibility (Munro & Derwing, 1995), which is a crucial aspect for future teachers to understand. Lindemann et al. (2014) argue that apart from the fact that a native-like accent is unattainable for most adult learners of English, "attempts to change a learner's accent in order to shield learners from prejudice can confuse the true source of prejudicial attitudes. […] Language attitudes may appear to be about features of language but are often intertwined with broader sociopolitical and sometimes racist ideologies", and add that although "more native-like speech may be better received by L1 interlocutors, […] attitudes towards L2 accent are in fact manifestations of prejudices related to ethnicity and nationality." (p. 184). In fact, participants desire not to sound Hungarian may reflect a desire to distance themselves from their cultural or linguistic background that could lead to such stereotyping.

The present study and earlier attitude studies rely on the reported preferences of learners. Studies have demonstrated (as do the responses provided in the present dissertation) that learners may not be entirely aware of what native-like speech means (Hu & Lindemann, 2009;

Scales et al., 2006) or identify accents correctly (Kelch & Santana-Williamson, 2002; Scales et al., 2006). Lindemann et al. (2014) note that there are a number of sociolinguistic issues that learners are unaware of and argue that decisions in pronunciation pedagogy should not be based solely on language attitudes but should consider learners' goals and the contexts in which they are going to use the language.

4.2.2 Summary of Part A

The findings and analysis presented in this section revealed that Hungarian teacher trainees share a common inclination with learners across several other European countries: a strong preference for native-like accents, particularly British accents, in this dataset. The data revealed that these trainees associated perceived positive attributes with British accents, which reflect qualities such as pleasantness, elegance, softness, and formality. However, the results also reflect the standard ideology associated with British accents and the view that they are challenging to imitate. In contrast, American accents were often associated with intelligibility, "calmness," and "naturalness" and were also viewed as easier to replicate. It is worth noting that the descriptors used to describe accents in this study reflect not only the perceived quality of accents, but also human characteristics, indicating the presence of stereotypes.

The motivations for imitation included familiarity, personal preference, and perceived benefits, such as sounding more refined or sophisticated. Imitation was also viewed as an enjoyable activity. However, the challenges of imitation, such as insecurity, fear of criticism, and inability to reach certain goals, were also evident, which were frequently mentioned reasons for choosing not to imitate accents. Moreover, the belief that an L1 Hungarian accent is something to be eliminated appears, although only sporadically.

The results underscore the need for teacher educators to familiarize learners with questions and issues of accent imitation, rejection, and stereotypes. This can help them understand why they wish to sound in a certain way and to what extent that is even a realistic goal. After all, as Lindemann et al. (2014) note, "Working with both L1 and L2 speakers' beliefs about pronunciation to the same degree as pronunciation itself is not merely idealistic; it is a practical way to deal with negative attitudes" (p. 189). Next, we turn to the results and discussion of Part B of Study 1, which reveals more about students' beliefs regarding native-like accents, complementing and further explaining attitude data.

4.2.3 Discussion of Part B

Part B discusses the results regarding the beliefs about the importance of a native-like accent for teacher trainees and for learners of English in general, as well as their beliefs on the controllability and attainability of a native-like accent.

4.2.3.1 Beliefs on the necessity of a native-like accent

Students were asked two related questions concerning sounding native-like: whether they believed it was important for themselves and whether it was important for language learners in general. The results showed that regarding the necessity of a native-like accent in their own case, 69% of students believed it was important, while 31% did not. The perceived importance of a native-like accent is in line with previous research by Simon (2005), Nowacka (2012), and Kim (2021). As the responses were divided into those who gave a positive answer and those who gave a negative one, the themes emerging from each group are discussed separately. First, themes from the positive answers are explored, followed by the themes emerging from the negative ones.

Sounding native-like is important

Among those who prioritized sounding native-like, four key topics emerged that merit further discussion: their *emerging teacher identity*, *the pursuit of perfection*, sounding native-like as a *valuable asset* in certain contexts, and *personal preferences*.

Emerging teacher identity was a significant factor in their desire to sound native-like since almost half (47%) of those who felt that a native-like accent was important gave this as a reason, (as seen in Excerpt 20).

> *(20) If the students think that you're not good enough or do not speak the target language well enough, they will not respect you. In Hungary, it is important for students to know that they can rely on your proficiency and that they can believe that what you say is true because you are a master of the language.*

This participant emphasizes the importance of being proficient in all aspects of the language, "a master of the language", as the participant puts it, for respect and credibility. Excerpts 21-23 echo this idea.

(21) Students will hear and learn pronunciation based on my accent. I have to be a good example and a solid language basis. I want to be respected, and I really do not want my knowledge to be questionable (as my accent is not as good).

(22) I think my students will accept me easier as a "good English teacher" if I sound native-like. Nowadays, students gain most of their knowledge (outside the classroom, of course) from watching films and listening to music in English, so if I don't sound native-like, they will think I don't have enough English knowledge.

(23) I think it is important to sound native-like when you teach because you are showing [setting] an example to your students, and it has an influence on their pronunciation as well, so you should try to give the best example.

In Excerpts 21-23, the teacher's role is perceived as a model of pronunciation and accent for the student. The concern that students may question the teachers' knowledge or suitability for their role based solely on their accents is evident. This is particularly pronounced in Excerpt 22, where the student explicitly remarks that students have numerous sources to compare the teachers' accents to and can determine whether and to what extent the teacher sounds or does not sound like the native speakers they listen to. As a result, the participant feels compelled to sound native-like. This worry may not be unwarranted; international research has found that teachers who were thought to be native speakers received higher attitude ratings, for example, in terms of education or training (Kelch & Santana-Williamson, 2002). In another study, students only considered non-native English speaker accents as acceptable models when they misjudged their speakers to be native English speakers (Buckingham, 2015). Therefore, while students do not necessarily expect the teacher to have a native or native-like accent (Tsang, 2020; Ballard, 2013), there are instances when it is preferred (e.g., Luk, 1998; Buckingham, 2014; Candan & Inal, 2020), particularly when it comes to pronunciation improvement (Kelch & Santana- Williamson, 2002; Walkinshaw & Oanh, 2014). Tsang's study (2020) revealed that those students who preferred a teacher speaking with RP or GA themselves strove to achieve this goal, viewing the teacher as a model for their learning. Therefore, for many students, NESTs are the only acceptable model for developing their pronunciation skills. Additionally, when learners are more proficient, they are less accepting of non-native accents (Dewaele & McCloskey, 2015). One interesting finding indicates that non-native speakers may be even "stricter" in this regard: Hendriks et al. (2021) found that Dutch and international listeners evaluated moderately non-natively accented lecturers more negatively compared to lecturers with slight or native accents, whereas native English listeners had the same attitude towards differently accented lectures. Therefore, if the participants quoted above have observed or themselves experienced the rigor with which Hungarian students scrutinize teachers'

pronunciation, it is not surprising that they deem good pronunciation and native-like accent to be essential components of teachers' perceived professionalism.

Tsang (2020) raises the question whether teachers "cannot enjoy the latitude to speak with whatever accents they want and must stick to RP/GA if their learners desire them to do so" (p. 9). Tsang explains that while students expect their teachers not only to know but also to be able to use grammatically correct utterances, when it comes to accents, there lies a "tension between professionalism (i.e. the teachers' abilities to perform targeted accents) and choices (i.e. being users of English, teachers are at liberty to choose to speak with whichever accents they like)" (Tsang, 2020, p. 9). The participants only expressed perceived expectations in relation to their future selves and did not elaborate on their own (past) expectations of their teachers. Their current beliefs regarding the necessity of a native-like accent for a teacher may stem from the expectations they had towards their own teachers who did not have a native-like accent or they are modelling their teacher-self on their former teachers who had an accent they admired. That is, they may define emergent teacher identity based on past experiences or against those past experiences. Further research on how elementary and high school students perceive teachers with non-native accents and how they saw their own teachers' accent could provide insight into whether participants and teacher trainees are warranted in worrying about student expectations and, if so, how to address these concerns.

The second theme that emerged from the analysis was the link between sounding native-like and the pursuit of perfection during the process of language learning. Some students used expressions such as "better" or "professional" in connection with sounding native-like (see Excerpts 24-28).

> *(24) For me, if someone sounds native-like for some reason it equals better English.*

> *(25) Sounding native-like can help other people understand you better and it also signals high knowledge and skills.*

> *(26) Yes, I think I am a better English speaker if I communicate like a native speaker.*

> *(27) It is really hard and complicated because now I am transforming and changing my own accent to a native-like accent during my university studies. I think it is a really good opportunity to learn a language and speak like a professional.*

> *(28) Yes, I want to sound appropriate and precise.*

For the participant in Excerpt 24, striving for a native-like accent is a means of "presenting desirable self-images as competent English speaker/users" (Sung, 2016, p. 59). The use of the

phrases such as *better*, *appropriate*, *precise*, *high knowledge*, *better English speaker*, and the association of a native-like accent with *speaking like a professional* in the remaining excerpts suggest a belief that sounding native-like in English is linked to the highest possible level of proficiency, a belief also present in Sung's (2016) study. University students in Jenkins' (2013) study also viewed a native version of English as a better version and saw their own English as a worse version. Furthermore, certain students expressed that sounding like a native speaker boosted their confidence (as seen in Excerpts 29-31).

> *(29) It gives me confidence that I'm better at English speaking. The sound is more beautiful.*
>
> *(30) Personally, I want to sound like a native speaker. I feel more confident in speaking the language if I can pronounce the words the way native speakers do. Also, who wouldn't feel proud if their pronunciation was praised?*
>
> *(31) Yes, I think you should respect the targeted language, and it also helps to become more confident during speaking.*

Associating sounding native-like with confidence suggests that learners may believe that expressing themselves in a manner that is easily comprehensible to others can prevent rejection or misunderstanding with conversational partners, or even garner praise (as seen in Excerpt 30). However, Moyer (2004) noted that "confidence in ability, real ability, and actions undertaken to improve ability are all related in circular fashion" (p. 144). Therefore, students associate confidence with a native-like accent, but their confidence is also contingent upon their actual ability, any accomplishments and failures based on which they may adjust their self-concept (Moyer, 2018), and the actions taken to improve themselves. Therefore, students may expect that a native-like accent gives them confidence, but it is important to raise awareness of the complexity of the factors that affect one's confidence and the importance of seeking input and practice (Moyer, 2018).

On the other hand, some viewed a native-like accent as a valuable asset for practical reasons, reflecting instrumental motivation (as per Excerpts 32-33).

> *(32) If I speak fluently, I have better opportunities to work abroad in or out of the field.*
>
> *(33) Yes, I find it important to sound native-like. My motivation for this is my intention to work abroad in an English native country. I think fitting in would be much easier if I could speak like a native person.*

In Excerpt 32, the participant replaced the term "sounding native-like" with "speaking fluently", suggesting their belief that fluent speech and a native-like accent go hand in hand. Both participants in the excerpts placed a high value on a native-like accent in professional settings. While the participant in Excerpt 32 viewed it as a means to better job opportunities, the other participant also noted the importance of blending in, which indicates integrative motivation. It also reflects the desire to gain cultural acceptance (cf., Marx, 2002), or the possible fear of discrimination, viewing their L1 accent as a factor that could, as Moyer (2018) noted, "hinder one's assimilation into the majority culture and society, affecting social and economic status over the long term (p. 99). It is worth noting that these two participants were the only ones to express instrumental motivation in their pursuit of a native-like accent.

Apart from the participants who referenced their teacher identity or the idea of perfection, several personal reasons also played a significant role in motivating participants to sound native-like (see Excerpts 34-36).

> (34) *For me, it is important because I like to play with the language. Also, the imitation of a particular accent makes any learning process more fun, and that can facilitate e.g. the learning of new vocabulary.*

> *(35) It is very important for me. Speaking a language with the best accent you can achieve is like acting. You can imitate someone else's intonation. By having the ability to sound like a native-like speaker, I feel as if I had another personality in English, German, and Russian.*

> *(36) Yes, it is important for me to sound like a native, just to prove to myself that I am able to do it.*

The participant in Excerpt 34 highlights the already mentioned "fun" aspect of imitation, which has been discussed in Part A. However, it is important to note that if students enjoy the imitation process, they may be more invested in reaching their learning goals, which is why its application is worth considering in the classroom (such positive reactions were frequent in the case of the shadowing task, as described in Study 4). In Excerpt 35, the participant likens accent imitation to acting and, and thus refers to being able to construct new identities via the new language (cf. Kramsch, 2009; Fekete, 2023a). Finally, in Excerpt 36, the participant views sounding native-like as a personal challenge, which can increase their motivation to improve themselves.

Sounding native-like is not important

Among those who did not prioritize sounding native-like, the dominating view was that being understandable was the most important (see Excerpts 37 and 38).

> *(37) I fully embrace the fact that I am not a native speaker and I am proud of my abilities, even if I don't sound like a native.*

> *(38) I don't think it's that important. I think the point is to understand each other but if someone wants to sound like a native speaker, they can of course practice it.*

The participants in Excerpts 37 and 38 demonstrate an awareness that having an accent does not hinder comprehensibility and intelligibility (Derwing & Munro, 1997, 2015; Munro & Derwing, 1995). Other responses (Excerpts 39 and 40) indicate the presence of the belief that the attainment of a native-like accent may be a difficult or impossible goal.

> *(39) I think it's not important; we can't expect anyone to sound like a native speaker because neither the environment nor the biological factors enable it. Of course, if somebody has a very strong accent, it can be hard to understand it but sounding native-like should not be the expectation because in most cases people can live/work/study with accent as well. I can make myself clear the way I speak.*

> *(40) As English is my second language and only started to learn at age 10 or so, I think I will never be able to sound native-like. I did not grow up or spend any time abroad, where English is the native language. I think I will always have an accent. For me, the most important to know the language and use it correctly. To know as many words as possible, use grammar perfectly, and be able to communicate without any problem.*

Both participants cite environmental (Hungary is a country where English is a foreign language and students are not surrounded by it) and biological factors (the difficulty of having a native-like accent for adult speakers of English) as reasons why attaining a native-like accent is difficult. The participant in Excerpt 39 acknowledges the potential for strong accents to cause misunderstandings. However, they highlight the importance of not forcing anyone to pursue goals that may not be necessary for them. The focus of Excerpt 40 is on aspects of language that are considered more important, such as grammar, communication, and vocabulary.

However, a smaller group of students admitted lacking interest, energy, or motivation or who were satisfied with how they currently sounded (see Excerpts 41 and 42).

> *(41) It isn't important for me because I want to sound like how I naturally speak.*

(42) It's not important for me to sound like a native speaker. I like it when others try to guess where I'm from. My accent interests others, and it's fun. I'm proud of my Hungarian accent I'm just trying to be more understandable with it.

Excerpts 41 and 42 reveal that the participants have no desire to hide their L1 identity by attempting to imitate native-like speech. As Celce-Murcia et al. (2010) explain, "accent is connected to personal identity and can represent identification with or membership in a particular group" (p. 275). Changing their accent might lead participants to feel like they would renounce this membership. The participant in Excerpt 42 enjoys the way other speakers try to guess their nationality based on accent, and may feel that their L1 accent is part of their identity (Fekete, 2023a), and a "piece of their own history" (Moyer, 2013, p. 66), making them "interesting as a person from somewhere else" (Piller, 2002, p. 194).

In Excerpts 43 and 44, students expressed conflicting views within the same response or phrased their response in a manner that revealed a conscious or unconscious preference for a native-like accent.

(43) I think speaking fluently is more important than sounding native-like. Nonetheless, I want my English to sound natural, native-like, but if I could speak fluently without searching for the right words in my head, I would still be happy because native-like sound is not the priority for me.

(44) I'm pretty interested in the different English accents, especially Scottish, Irish, English, Welsh, and Australian. I like imitating them. It would be great fun to sound like a native speaker, but I'm OK with my Hungarian accent with some British or Australian features. I guess I wouldn't be perfectly native-like anyway.

The first participant acknowledges the importance of fluency over sounding native-like but finds that sounding native-like is "natural" and desirable. Coppinger and Sheridan (2022) found similar results among French university students, many of whom viewed a native-like accent as desirable, even if not necessarily a priority. The participant in Excerpt 40 expresses interest in and enjoyment of various accents but ultimately settles for a compromise with their L1 accent containing native-like features. Overall, it can be concluded that only a minority (22%) of students were entirely indifferent to sounding native-like, while the majority aspired to achieve this goal.

In conclusion, most participants expressed a strong desire to achieve a native-like accent, which can be explained by their future teacher identity, the perceived superiority of native-like accents, viewing them as a valuable asset, and personal preferences. Those who did not prioritize this goal still recognized the importance of comprehensibility and demonstrated

an awareness of obstacles like age and the EFL environment. Some also embraced their L1 accent and did not wish to change it. Overall, the reasons for their beliefs showed great variation, but as the quotes demonstrate, many of them had very clear ideas and reasons for their views, and many students seemed to purposefully project a specific identity with the choice of their accent goals. Moyer (2018) highlights that understanding and acknowledging these beliefs is important: "we should ask how they want to use the target language now and in the future and help them set benchmarks for their progress, while offering an array of practice activities that support their individual needs" (p. 107).

4.2.3.2 Beliefs on the necessity of a native-like accent for a language learner

This section discusses teacher trainees' beliefs regarding the importance of sounding native-like for language learners. In this case, 38% of students believed it was important for language learners to sound native-like, while 44% held the opposite view, and 18% remained undecided. Those who favored having a native-like accent cited similar reasons to those discussed in the previous section: sounding native-like is associated with proficiency, motivation, confidence, perceived positive impressions, and potential benefits. As comprehensibility was a reason in all three groups, it is discussed in more detail in this section, along with the acceptance of the L1 accent. These are followed by themes such as the timing of focusing on accent, a native-like accent as a characteristic of proficiency, and the ability to pass as a native speaker.

Comprehensibility

Approximately half of the respondents expressed the view that achieving a native-like accent was not important for language learners, as the primary objective of language learning was to ensure that one is comprehensible. Accordingly, many participants expressed the idea that as long as a speaker can be understood, sounding native-like is not a priority because learning a language itself is an accomplishment. Excerpts 45 and 46 illustrate these views.

> *(45) It's important to pronounce words as well as we can, but there are certain limits that we may not be able to overcome. I don't think it's impossible to understand someone just because they have an accent, so there's no need to push ourselves to meet some almost unrealistic standards just to sound native-like. I think the most important thing for a speaker is to be able to express their thoughts accurately, if they are able to do that, then they succeeded. I also think it's a great*

statement [achievement] just to be able to speak a foreign language, even if it's not exactly native-like. It expresses the great work and knowledge that comes with learning a language.

(46) I believe that most people have accents and there is no problem with that. Even though many think that native speakers are going to judge their pronunciation, that is very far from the truth. It is respectable if someone takes the time and energy to learn your language and communicate with you in it.

At the same time, it was emphasized that correct pronunciation was crucial, indicating that many students understood comprehensibility to include correct pronunciation. A possible reason, as Coppinger & Sheridan (2022) suggest, might be that "pronunciation can be considered a language skill as any other that can be practiced and refined, whereas accent is perhaps not as easy to alter and also has connections with identity and self-image" (p. 16). Baran-Łucarz (2017) found that highly anxious students prioritize communicating proficiently over sounding native-like, which they perceived as unnatural or strange. In contrast, if a student was motivated to have a native-like accent, they also showed positive attitudes toward target language pronunciation and perceived their own pronunciation positively. Although anxiety was not the focus of the present dissertation, it may explain why students consider other aspects, such as fluency, more desirable than focusing on pronunciation or sounding native-like. In addition to emphasizing the importance of comprehensibility, participants believed that grammar, vocabulary, fluency, correct pronunciation, or giving one's best effort were more important than sounding like a native speaker. Sobkowiak (2002) also found that lexis and grammar were prioritized compared to pronunciation, whereas Majer et al. 's study (2002) demonstrated that pronunciation errors were not considered as grave as other errors by teacher training college students. This suggests that other aspects of language learning may take precedence over pronunciation development if time for language learning is limited.

Interestingly, comprehensibility was also the reason why participants considered a native-like accent important, for the clear communication between NNSs, between NSs and NNS, or simply to avoid being misunderstood. Two examples which illustrate this perspective are seen in Excerpts 47 and 48.

(47) Some speakers of other languages (...) speak well grammatically...sort of, but with the accent, there can be a misunderstanding. A lot of people are used to the accent they hear from the audio in high school, and if he or she goes abroad, poor person won't understand a thing they say. I think learning the accent is necessary as well.

> *(48) Once, I participated in an Erasmus + project and talked with several people from different countries. There were some people whom I could not understand because of their accent. For example, there was a person who spoke English but with a strong Italian accent and it was terrible for me. I had to re-ask every second sentence they said.*

Excerpt 47 highlights an interesting point regarding comprehensibility, as the student notes that exposure to only native accents in the classroom may make it challenging for students to understand other non-native speakers of English, even if their English is grammatically correct. Excerpt 48 provides an example which supports this belief. Research conducted by Verbeke and Simon (2023) supports the concerns expressed by the student in Excerpt 47, as they found that Dutch-speaking EFL learners found Inner Circle accents to be more comprehensible than non-Inner Circle accents, with Expanding Circle accents being more comprehensible than Outer Circle accents. Additionally, the last sentence of Excerpt 47 suggests that exposure to various non-native accents in the classroom can improve students' ability to understand them, preparing them for future encounters with these accents. This notion has been backed up by studies such as those conducted by Bradlow and Bent (2008), Kennedy and Trofimovich (2008) or Schoonmaker-Gates (2018) which demonstrate that exposure can enhance comprehension. In addition, Canagarajah (2006) argued for the need for what he refers to as multidialectal competence:

> "To be really proficient in English today, one has to be multidialectal. This does not mean that one needs production skills in all the varieties of English. One needs the capacity to negotiate diverse varieties to facilitate communication. The passive competence to understand new varieties is part of this multidialectal competence." (p. 233).

Some participants echoed this notion, emphasizing the significance of and celebrating the diverse nature of Englishes worldwide, which they view as something that ought to be preserved (see Excerpts 49-51).

> *(49) The notion of native-like in connection with English is quite problematic because English is spoken worldwide and is a native language of several countries with different accents.*
>
> *(50) Such an attempt [imitating native accents] may decrease the diversity of World Englishes.*
>
> *(51) Non-native speakers don't have to sound like native speakers because diversity makes everything interesting.*

These comments emphasize the importance of retaining the multifaceted nature of Englishes, an awareness also demonstrated in Kontra & Csizér's study (2011) among Hungarian BA students in connection with ELF.

Accepting one's L1 accent

Some students referred to the importance of accepting one' NNS status (see Excerpts 52-55).

> *(52) We are Hungarians. It is okay to have a Hungarian accent.*
>
> *(53) We do not have to sound like a native speaker because we are not native speakers.*
>
> *(54) I don't think it's important because if I'm not a native speaker, then I'm not a native speaker. There is nothing wrong with it.*
>
> *(55) No, I object to pressuring learners to sound native-like because I see no point in it.*

Excerpt 52 emphasizes the importance of accepting the L1 accent as part of one's identity (cf. Fekete, 2023a). Excerpts 53 and 54 highlight the unchangeable nature of our NNS status and the need to embrace it, while Excerpt 55 advises against pressuring learners to attain a native-like accent against their will. Therefore, if a learner does not sound like a native speaker, it should be assumed that it may happen by choice, and it does not necessarily indicate their inability or lack of interest (Gatbonton et al., 2005). As Sung (2016) notes, "There is a need for language teachers to be aware of the role of identity in the acquisition and use of L2 pronunciation and provide learners with a greater element of choice in terms of pronunciation targets" and stresses the importance of treating L2 speakers as "agents in their language use including their accent preferences and choices in ELF communication" (p. 63). It is also important to acknowledge that deliberately avoiding a native-like accent may indicate a desire to fit in with a particular group. as one participant noted in response to a separate question about past experiences (see Excerpt 56).

> *(56) Sometimes it was just funny how I was trying to pronounce the words right in high school. My schoolmates were laughing at it, but it is what it is. Sounds funny but you have to pronounce it like that.*

The participant in Excerpt 56 appears to be unfazed by the laughter and insisted on pronouncing the word correctly despite their classmates' reaction. However, anyone may choose to revert to

a different pronunciation to avoid such reactions which indicate that classmates viewed the participant as an outsider compared to how they sounded and possibly not a model to follow, regardless of the fact that her pronunciation was correct. As Murphy (2010) noted, “A speaker who chooses to discard a particular accent rather than acquire one may demonstrate an equally powerful identification with (or rejection of) a given social, national or ethnic community” (Murphy, 2010, p. 190).

Other reasons

This section will focus on the responses regarding the timing of the focus on a native-like accent, a native-like accent as a characteristic of proficiency, and passing for a native speaker.

Many respondents agreed that sounding native-like should not be a priority for beginners. However, they thought that once a student has reached a certain level of proficiency, it is important to emphasize this aspect of language learning. Chela-Flores (2001) stresses the importance of gradual pronunciation teaching, which should start at a beginner level and be integrated into the teaching process. This helps overcome three common problems: “insufficient time in class, mis-targetting of lessons to intermediate and advanced students, and lack of awareness by students and teachers of the connection between pronunciation teaching and effective aural-oral communication. (Chela-Flores, 2001, 99). Respondents also noted that there are certain contexts where sounding native-like is viewed as an advantage, such as in academia, abroad, or if someone is working with foreigners or native speakers. Similar views of the necessity of a native-like accent have been expressed in other studies (Hansen Edwards, 2015; Kim, 2021)

A prevalent notion among the responses was that sounding native-like is a fundamental characteristic of a proficient speaker, and it is the duty of learners to strive towards achieving this goal. This concept is congruent with research conducted by Dewaele and McCloskey (2015), which found that proficient learners are less tolerant of foreign accents. Additionally, several respondents emphasized the importance of paying equal attention to pronunciation, sounds, and accents as they are all crucial components of language acquisition (see, for example, Excerpts 57-59).

(57) We learn a foreign language to know it in the best way we can.

(58) A language learner tries to learn the original language and not something different.

(59) Next to the methods and rules of a language, we have to learn about every single aspect of a language, like stress, intonation, and also pronunciation. (...) I think in a foreign language, we have a totally different voice and features of our communication than our mother tongue, so it is also significant to get used to, develop, and accept this new part of our personality.

In addition, Excerpt 59 makes the connection between pronunciation phenomena and "a totally different voice". Their comment might be both literal and metaphorical: a changed pitch, and an intonation range and stress patterns different to that of our L1, but these many changed features together may convey a new personality, a shift in sense of identity (Marx, 2002) The idea of being mistaken for a native speaker is something that quite a few learners view as a positive experience. For example, as Excerpt 60 demonstrates, it is an idea that would fill the participant with pride:

(60) I think it's the greatest honor for a language learner when no one tells him or her that the language which he or she speaks isn't his or her mother tongue.

McCrocklin and Link' study (2016) also found that participants expressed a desire for this, citing pride, excitement, and the possibility of connecting with native speakers through their native accent or even assimilating with them. However, the study also pointed out that "without experiencing the loss of a foreign accent, students may not recognize ways in which accent can contribute to identity" (McCrocklin & Link, 2016, p. 139). This is supported by Piller's study (2002), where students who had passed as native speakers experienced struggles in connection with their identity. As McCrocklin and Link (2016) noted, their participants also had not experienced passing as a native speaker and may have had limited perspective on the matter. Based on the studies above, students who have not undergone the experience might expect positive feelings attached to it. However, their assessment may change once they experience the various feelings it elicits.

In conclusion, most participants believed that comprehensibility takes precedence over a native-like accent for language learners according to the quantitative results. However, the qualitative analysis of the responses revealed a more nuanced perspective. The number of those in support of and against the question is close, and participants often cited the same reason for different opinions. This could be due to the differences in their language learning experience, language proficiency, and the goals of their former teachers. While some students still viewed pronunciation as an aspect of language learning that is less important than others, they were not

the majority. The reasons some participants provided regarding the importance of comprehensibility showed a thorough understanding of crucial issues in pronunciation learning and teaching research. Further exploration of views on all sides of the debate could provide more clarity on the matter for both researchers and students.

4.2.3.3 Beliefs on the attainability and controllability of a native-like accent

Participants were asked to express their views on the possibility of achieving a native-like accent. Students who believed it was impossible to attain a native-like accent seem to echo the views and reasons described by previous research, namely age factors, the effect of the L1, and the differences between the L1 and L2. However, the majority of participants (85%) believed that a native-like accent is achievable, and more than half of this 85% emphasized the importance of conscious practice, and the dedication of time, effort, and energy to achieving this goal. It has been suggested by various studies that motivation plays a role in improved pronunciation and accent (Suter, 1976; Moyer, 1999, 2014a). Interaction with native speakers was also highlighted as a crucial element in achieving a native-like accent, which is also supported by research findings (Suter, 1976; Flege et al., 1995; Trofimovich & Baker, 2006; Moyer, 2013). The perceived importance of conversation with native speakers aligns with Cenoz & Garcia-Lecumberri's (1999) findings, who reported that students consider contact with native speakers important in acquiring pronunciation.

The remaining participants proposed a more passive approach to achieving a native-like accent, recommending listening to native input or living among native speakers. The latter option could naturally involve seeking opportunities to socialize with them, although this was not explicitly stated. However, both approaches indicate that the desired pronunciation can happen naturally if the necessary input and context are available. While exposure to the L2 is important in the acquisition of L2 phonology (Derwing et al., 2007), motivation and actively seeking opportunities for practice are also essential (Moyer. 2018).

Regarding the controllability of accents, 72% expressed their belief that accent control was a matter of concentration. What concentration implies is difficult to grasp. It could indicate that one can be in control of the accent they produce if they concentrate on their articulation. Alternatively, it may suggest that students feel that their accents change when they are not entirely focused. An important prerequisite for successfully imitating accents according to other students is a conscious imitation of native speech and listening to plenty of native speech. The remaining responses imply that at least some degree of conscious focus is necessary on the

following: pronunciation, intonation, and stress. Some students considered shadowing as an important tool in controlling an accent, others mentioned singing, requesting feedback, and engaging in self-talk.

One participant implied that no special ability is required to imitate an accent (Excerpt 61) whereas others refer to the ease of using/controlling or not using/controlling an accent according to the context (see Excerpt 62-64).

> *(61) Everyone can learn British accent with practice and with listening.*

> *(62) I simply just use whichever I feel to sound better in certain situations.*

> *(63) I have no problem not using Hungarian accent, because of the tremendous amount of media I consume in English. I really don't think about it all. Using English for me in a standard-like way became natural.*

> *(64) I basically don't think I have that rough accent, like many of the Hungarians. That's why I don't really deal with the accent or try to control it.*

It is worth noting that the use of the word "everyone" in Excerpt 61 can be problematic for future teachers, as it reinforces the belief that whoever cannot imitate an accent are solely responsible for their difficulties. Excerpts 61-63 showcase learners who have had no issues with pronunciation and accent imitation, and as a result, they might not consider imitation and pronunciation improvement as a potential difficulty for students. Excerpt 65 reflects on the difficulty of prolonged imitation or control of an accent:

> *(65) I can mimic Irish, Scottish, Jamaican, Cockney varieties, … but I could not speak in those accents accurately for very long. I cannot make a glottal stop mid-word naturally.*

Based on the responses obtained regarding the attainability and controllability of a native-like accent, therefore, the following conclusions can be made: the great majority of students are optimistic about the ability to imitate accents and perceive accent as an attribute that can be consciously controlled. Some students seem to believe that accent is a matter of choice. Others thought that plenty of exposure to authentic language is necessary as a starting point (be it through listening or talking to native speakers). Subsequently, conscious focus on specific aspects of the language like stress, certain sounds, intonation, and some specific techniques such as immediate repetition of words or texts, or shadowing were mentioned. Such learning strategies are instrumental in helping students achieve their accent-related goals (Moyer, 2018).

However, the assumption that accent imitation can be achieved merely by making a conscious decision is one that needs to be discussed and clarified in more detail during participants' studies.

It is promising that students feel like achieving their desired goals of imitation is an option. However, it is unclear whether their ability to imitate and control accents is real, or it is rather a description of an Ought-to L2 self (Dörnyei, 2005) who can produce native-like accents through concentrated effort and actively engage in improving their pronunciation and accent. However, the data indicated that this belief is present in many students. Still, even those students who exhibit such optimism often feel that success can only be achieved under particular circumstances and that they are left to their own devices in achieving their goals, as most of the options mentioned refer to individual work and effort. While individual work in pronunciation improvement is crucial, this belief could prevent them from feeling responsible for aiding future students in attaining their pronunciation goals. Research highlighted experienced teachers' important role in achieving positive pronunciation changes (Derwing & Munro, 2005). Therefore, in addition to being aware of the importance of spending time in a context where the L2 is spoken, and communicating with native speakers in social situations as often as possible, prospective teachers of English must also explore additional techniques that can be employed when the above opportunities are not readily available for a student.

4.2.4. Summary of Part B

The results of part B indicated that participants prioritized adopting a native-like accent for themselves due to their emerging teacher identity, the perceived superiority of a native-like accent, and the increased comprehensibility it provides. However, they did not consider sounding native-like important for learners of English, placing a greater emphasis on aspects such as comprehensibility, grammar or vocabulary. Interestingly, participants were more divided on the second question than the first, often supporting opposing views with the same reasons. While still in a minority, some participants considered an L1 accent as acceptable. Participants not only aspired to have a native-like accent but also believed in its attainability and controllability. They acknowledged that exposure to the language and native speakers played an important role in the attainability of an accent, while concentration and invested time and practice were believed to be key to controlling it.

4.3 Results of Study 2

Study 2 focused on Hungarian English-language teacher trainees' beliefs about pronunciation. The results comprise four main themes: teacher trainees' beliefs about their pronunciation, their beliefs about the challenges of pronunciation learning, the factors influencing pronunciation, and the importance and frequency of pronunciation learning in the classroom.

4.3.1 Self-evaluation of pronunciation

During the 2021 and 2022 data collections, participants (n=82) were surveyed for their perception of their English pronunciation. In a previous study by Baranyi-Dupák (2022c), 46 participants were asked about the most challenging aspect of L2 speech (although the data from that study are not included in the present dissertation). Interestingly, pronunciation was not a challenging aspect, and less than half of the participants expressed the need to improve it. However, after listening to their recorded speech samples, more than half of the participants reacted negatively to aspects of their pronunciation, intonation, and accent. Based on these findings, in the revised version of the questionnaire, teacher trainees were asked whether they thought their pronunciation was good, without requiring them to listen to their own speech. Of the 82 participants who answered this question, 43% were satisfied with their pronunciation, whereas 18% were dissatisfied. The remaining 39% felt that their pronunciation was sometimes better or sometimes worse. Participants were asked to justify their opinions, which revealed that many found it challenging to make a clear decision. The key themes identified in the teacher trainees' responses are summarized below (see Table 14).

Table 14. Self-evaluation of pronunciation

<table>
<tr><th colspan="2">Satisfied (43%) (n=35)</th><th colspan="2">Undecided (39%) (n=32)</th><th colspan="2">Dissatisfied (18%) (n=15)</th></tr>
<tr><th>Reason</th><th>%</th><th>Reason</th><th>%</th><th>Reason</th><th>%</th></tr>
<tr><td>Based on positive feedback</td><td>26%</td><td>Many problematic words</td><td>28%</td><td>Hungarian accent</td><td>33%</td></tr>
<tr><td>Comparison to native speakers</td><td>23%</td><td>Improvement in intonation is needed</td><td>19%</td><td>Intonation problems</td><td>27%</td></tr>
<tr><td>No difficulties</td><td>20%</td><td>Improvement of accent needed</td><td>19%</td><td>Not native-like enough</td><td>13%</td></tr>
<tr><td>Comprehensibility</td><td>17%</td><td>New words problematic</td><td>16%</td><td>Lack of confidence</td><td>13%</td></tr>
<tr><td>Not sounding Hungarian</td><td>11%</td><td>General improvement needed</td><td>13%</td><td>Problems during speech</td><td>13%</td></tr>
<tr><td>No reason given</td><td>9%</td><td>Improvement of stress needed</td><td>9%</td><td>Problems with stress</td><td>13%</td></tr>
<tr><td rowspan="5">Frequent speaking</td><td rowspan="5">6%</td><td>No reason</td><td>9%</td><td>No reason</td><td>13%</td></tr>
<tr><td>Problems when speech is fast</td><td>6%</td><td>Problem with a specific sound</td><td>7%</td></tr>
<tr><td>Effect of fatigue</td><td>3%</td><td rowspan="3">Lack of opportunity to practice</td><td rowspan="3">7%</td></tr>
<tr><td>Effect of anxiety</td><td>3%</td></tr>
<tr><td>Certain sound combinations</td><td>3%</td></tr>
</table>

If participants were satisfied with their pronunciation (n=35), most indicated positive feedback as a reason, received from a teacher, fellow student, or native speaker (26%). One participant noted that their teacher had never suggested improving their pronunciation, which led them to believe that they had good pronunciation. Native speakers were also a re-occurring reference point for some participants: they claimed to sound close to how a native speaker sounded or said that the reason for their good pronunciation was that while learning the language, they often listened to native speakers (23%). Another reason was that the participants felt that they could perfectly pronounce most of the words and did not have problems with them (20%), as well as the fact that they thought other people had no difficulty understanding them (17%). Some participants (11%) used a Hungarian accent as a reference point against which they could define why they thought their pronunciation was good: not sounding Hungarian or not having a Hungarian accent and sounding better than an average Hungarian speaker. Three students gave no reason (9%), whereas two claimed that speaking helped them in some way (6%), either in class or talking to native speakers. A subset of the 35 participants (n=15) who expressed satisfaction with their pronunciation also identified areas for improvement, including intonation (9%), difficulty with new words (9%), traces of a Hungarian accent (6%), specific sounds (6%),

room for further improvement (6%), effect of fatigue (3%), anxiety (3%), and lack of sufficient practice (3%).

Among those who did not provide a simple "yes" or "no" response (n=32), 39% believed their general pronunciation was good but identified some recurring challenges that affect it, such as specific words (28%), intonation (19%), accent (19%), new vocabulary (16%), room for general improvement (13%), stress (9%), unspecified issues (9%), fast speech (6%), fatigue (3%), anxiety in front of native speakers or those with a pronunciation considered superior to that of the student (3%), and specific sound combinations (namely, word-final -sts) (3%).

Participants who expressed dissatisfaction with their pronunciation (n=15) also provided their reasons. Five students (33%) attributed their dissatisfaction to having a Hungarian accent. Some students were unhappy with their intonation (27%), while others cited a desire to sound more native-like, lack of confidence, difficulty focusing on pronunciation while speaking, or trouble with stress (13% each). In addition, some specific issues were mentioned, such as the need for more practice or improving a specific sound (7% each).

4.3.2 The most challenging aspects of pronunciation

The students were asked to evaluate the difficulty level for each aspect of pronunciation on a scale ranging from 1 to 5 (1=very easy, 5=very difficult). After analyzing the responses of the 65 students, the following results emerged (see Table 15):

Table 15. Perceived difficulty of different aspects of pronunciation

Aspect	**M**	**SD**	**Scale range**
Vowels	2.37	1.054	1-5
Consonants	2.60	.844	1-4
Stress	3.22	1.053	1-5
Intonation	3.38	1.085	1-5

The results indicate that vowels are perceived as the least difficult by participants (M=2.37, SD=1.054), followed by consonants (M=2.60, SD=.844), which are also considered easy (albeit closer to moderately difficult). In contrast, stress was considered to be moderately difficult (M=3.22, SD=1.053), and intonation was deemed the most difficult (M=3.38, SD=1.085) (although it still did not reach the average of 4, the value for "difficult"). A more detailed display of the ratios is shown in Figure 8. The figure reveals that vowels were considered easy by the

highest number of participants (n=20); however, almost as many students chose moderately difficult (n=19). A similar trend can be observed in the case of consonants, which were considered easy by most participants (n=26), closely followed by the number of students who chose moderately difficult (n=24). The figure also indicates that, although stress and intonation did not reach an average of 4, the value for difficult, more students found them difficult (n = 27 for stress and n = 25 for intonation) than moderately difficult (n =19 for stress and n =16 for intonation).

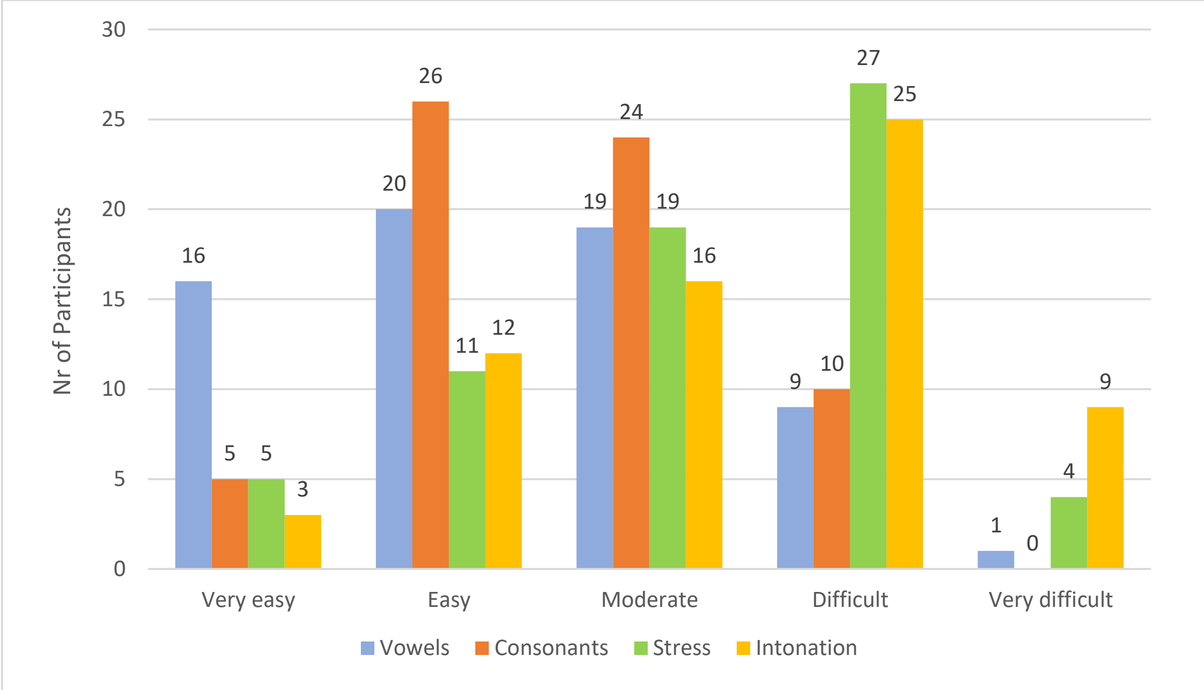

Figure 8. Perceived difficulty of different aspects of pronunciation

4.3.3 Factors affecting the improvement of pronunciation

Teacher trainees (n=81) were asked to rate the factors that they believed had the greatest and least impact on improving pronunciation on a scale from 1 to 10, with higher scores indicating a greater impact on pronunciation improvement. Table 16 presents the teacher trainees' beliefs regarding the key factors influencing pronunciation improvement.

Table 16. Factors affecting pronunciation

		M	SD	Scale Range
1	L2 country	9.19	1.718	1-10
2	Speaking to native speakers	8.95	1.139	5-10
3	Individual motivation	8.22	1.703	3-10
4	TV shows, videos	7.84	1.436	4-10
5	Proficiency in English	7.35	2.11	1-10
6	Specific training	7.23	1.832	1-10
7	Ability to mimic	6.52	2.27	1-10
8	Transcriptions	6.23	1.995	1-10
9	Ear training	6.09	2.057	2-10
10	Musical ear	5.51	2.521	1-10
11	Phonetic theory	5.43	2.208	1-10
12	Knowledge of other languages	4.57	2.079	1-9

The data suggest that learners highly valued immersion in a country where the L2 is spoken (M=9.19, SD=1.72) and interaction with native speakers to improve their pronunciation (M=8.95, SD=1.14). Individual motivation (M=8.22, SD=1.70) and English language media (M=7.84, SD=1.44) were also considered as influential factors. On the other hand, proficiency in English, specific training, and the ability to mimic were assumed to contribute moderately, with factors such as transcription, ear training, and musical ear having a somewhat lower impact. Additionally, knowledge of other languages was considered to have a comparatively low impact on pronunciation (M=4.57, SD=2.079). The standard deviation levels indicate that the group was most unanimous about the impact of speaking to native speakers (SD=1.14) and least unanimous about the importance of having a musical ear (SD=2.52).

4.3.4 Importance of teaching pronunciation

Participants (n=127) were asked to express their beliefs about the importance of allocating time to improve pronunciation skills in the classroom. The results are shown in Figure 9.

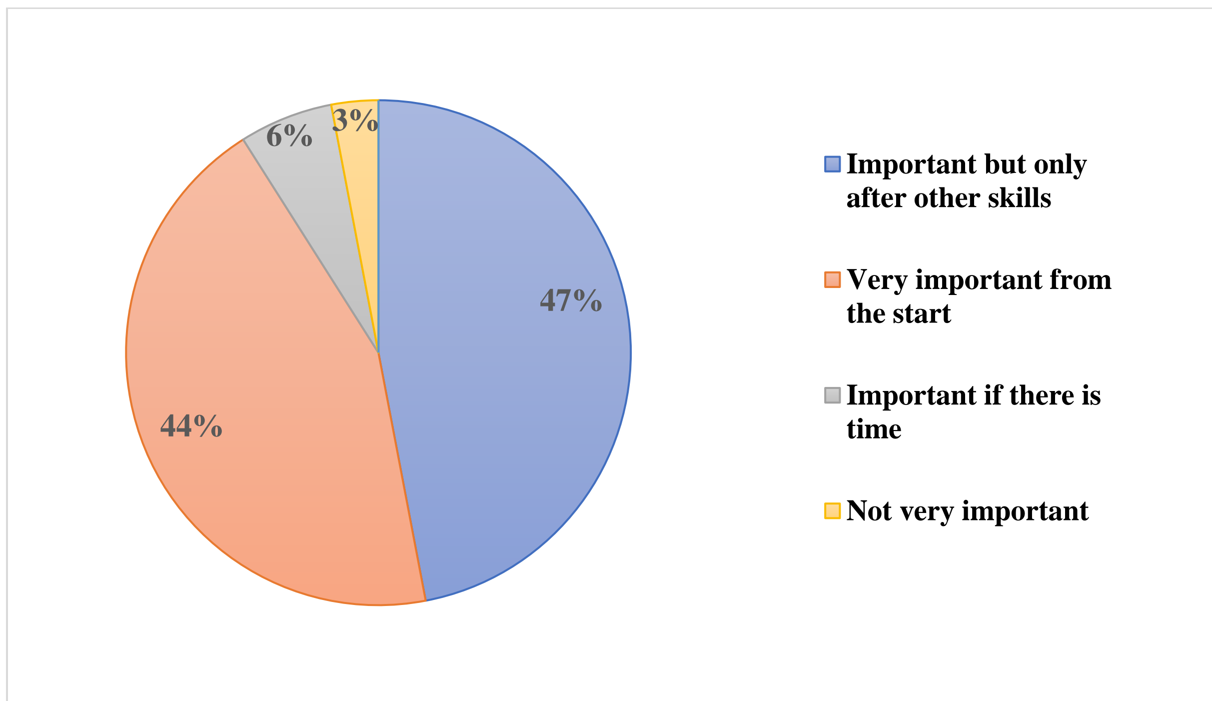

Figure 9. Views on the necessity of teaching pronunciation

Teacher trainees' viewpoints were somewhat mixed regarding two possible responses: 47% considered it important, albeit only after other skills had begun to develop, while 44% deemed it essential from the outset. A mere 6% of the respondents would focus on pronunciation only if adequate time was available, and 3% expressed that teaching pronunciation held little importance. However, no participant believed that pronunciation should be disregarded in the classroom.

4.3.5 Dedicating time to pronunciation in the classroom

Participants (n=127) were surveyed on their beliefs about how much time was necessary for pronunciation improvement during a 45-minute lesson, and with what frequency. The results are presented in Table 17.

Table 17. Necessary time for pronunciation development in the classroom

Time and frequency of pronunciation practice	%
5-10 minutes regularly	46%
About 5 minutes regularly	24%
Half a class regularly	16%
A 45-minute class regularly	12%
A 45-minute class from time to time	4%
No need for regular pronunciation practice in the classroom	2%
Less than 5 minutes a week	1%

The results show that most participants (46%) would dedicate 5-10 minutes to pronunciation regularly, followed by approximately five minutes or less regularly (24%). The following two options, which were to dedicate half a class or an entire class regularly to pronunciation, were chosen by 16% and 12% of participants, respectively. A small number of participants chose the remaining options: 4% preferred a 45-minute lesson from time to time, 2% believed there was no need for regular pronunciation practice in the classroom, and 1% said they would dedicate less than five minutes a week to pronunciation.

4.4 Discussion of Study 2

4.4.1 Self-evaluation of pronunciation

Although more students reported being satisfied with their pronunciation (43%) than not (19%), the results still indicated that less than half of the participants considered their pronunciation good. In deciding, most of them relied on someone whose opinions they valued, such as a teacher, friend, or native speaker, which highlights the importance of feedback. It is interesting, however, that some students believed their pronunciation was acceptable, because nobody claimed the opposite (Excerpt 66):

> *(66) I 'd rather say my English pronunciation is okay. I think this is mainly based on the feedbacks I have received from my teachers, as there has never been a case when they ever mentioned that I should improve it.*

Although self-assessment is a pedagogical tool used and viewed positively among teachers (Noonan & Duncan, 2005), learners might find the process difficult (Dlaska & Krekeler, 2008). In addition, anxiety also affects the self-assessment process (MacIntyre et al., 1997; Szyszka, 2011), leading students to underestimate or overestimate themselves. There can also be discrepancies between objective measures and self-assessment performances (Dlaska & Krekeler, 2008; Trofimovich et al., 2016) and between general and task-focused self-assessment (Baranyi-Dupák, 2022c), which urges teachers to use self-assessment cautiously in their teaching process. However, as Excerpt 66 suggests, providing regular feedback on pronunciation helps students see their performance more clearly.

Another factor that contributed to students' favorable assessment of their pronunciation was their belief that they pronounced most of the sounds and used intonation like native speakers or because they learned through listening to native speakers. Thus, native speakers were used as reference points (the previous sections indicated that many participants valued native speaker models and aspired to sound like them). Of the eight participants who expressed this view, six provided specific examples of feedback in an earlier question, indicating that external input played a role in their self-evaluation.

Many participants (39%) expressed optimism about their pronunciation while admitting some weaknesses and difficulties; others seemed undecided about the quality of their pronunciation. It is interesting to observe the reasons behind this lack of complete satisfaction: encountering new words could cause doubts about the correct pronunciation; specific areas such

as intonation, accent, and stress placement were considered problematic; and even those who believed generally having good pronunciation felt that there was always room for improvement. Some students admitted that their pronunciation performance might be influenced by anxiety or nervousness (cf., Szyszka, 2011; Derwing & Rossiter, 2002), state of mind, and tiredness (cf. Mercer, 2012), or even the need to speak faster than usual, or pronounce specific sounds or sound combinations. The most problematic sounds mentioned were dental fricatives [ð] and [θ], which are missing from Hungarian. Bloem et al. (2016) indicate that Hungarian speakers tend to replace [ð] with [d] in the words *these* and *the*. Generally, the proportion of undecided participants was greater than that of dissatisfied participants, suggesting that they are currently struggling with some aspects; however, they may develop a more favorable outlook with further improvement. The insights gained from Study 4, which shed more light on students' pronunciation-learning habits, can provide information on whether they address their areas of difficulty and, if so, how.

The main reasons contributing to dissatisfaction were having a Hungarian accent, intonation problems, not sounding native-like, lack of confidence, inability to focus on pronunciation during speech, and stress, as Excerpts 67-70 demonstrate.

> *(67) Two days ago, I would have said that my English pronunciation was acceptable, but then I recorded myself speaking English, and I had to realize that I have a painful accent. So, I would like to speak with a less audible Hungarian accent.*
>
> *(68) I don't think so. I would like to get rid of my Hungarian accent when speaking English.*
>
> *(69) I think with some words my pronunciation has improved a lot, but by looking at the whole picture, I would say it is bad. Because of this, I would like to improve the way I pronounce different sounds and words, and I'd like to try and overcome my horrible Hungarian accent while speaking English.*
>
> *(70) Not really. I have a Hungarian accent, which is worse when I am nervous. Sometimes, I cannot pronounce the "th" sound, or my intonation is really wrong. I want to improve both.*

The challenges mentioned in the excerpts are not uncommon, as acquiring English stress patterns and intonation tends to be difficult for Hungarian learners of English (Section 4.4.2, discusses this aspect in more detail). The negative feelings attached to "sounding Hungarian" appear in each of the above excerpts, along with expressions such as "painful" and "horrible." The positive feeling associated with not sounding Hungarian was also a frequent theme in the

answers, as indicated by excerpts 71 and 72, serving as a reason for being satisfied with one's pronunciation.

> *(71) I would say that among all my English skills, my pronunciation is outstanding. I think that I do not talk with a strong Hungarian accent and my pronunciation is not forced and artificial, I do not want to emulate anybody.*

> *(72) I think it's relatively good, but there is a lot to improve. I have heard pretty bad accents over the years, and I always try to sound better than those. I think I sound OK because I try to pronounce every sound accordingly and try to sound less Hungarian. There's still much to improve because in exam situations, all of a sudden, I sound definitely like a Hungarian speaker.*

Participants' preference for native-speaker pronunciation and occasional rejection of an L1 accent were demonstrated and discussed in Study 1 (67% of the participants expressed the desire to sound native-like) and in other Hungarian studies. Feyér (2012) also revealed that Hungarian participants preferred native-speaker pronunciation and were critical of non-native and Hungarian English. Similarly, Püski (2023) reported that university students with strong perceived Hungarian accents were more motivated to sound native-like, often taking issues with non-native speech. Except for the participant in Excerpt 70, however, all the participants also demonstrated a desire to improve not only by reducing their accents but also by targeting various problematic aspects. The next section describes students' consideration of the problem areas in pronunciation learning.

4.4.2 The most challenging aspects of pronunciation

Participants were asked to evaluate the difficulty of four aspects of pronunciation: two segmental (vowels and consonants) and two suprasegmental (stress and intonation). Since the participants had not yet studied Phonetics and Phonology (which, as described in Section 2.4.2, is due in their fourth year), they likely relied on their knowledge and past experiences when making their evaluations. The results showed that vowels were considered the easiest, whereas intonation was perceived as the most difficult. It is worth noting, however, that even the "easy" values associated with vowels and consonants were quite close to "moderately difficult", indicating that participants demonstrated an awareness of the difficulty of English pronunciation. This question (with slight modifications) was based on a previous study by Cenoz and Garcia Lecumberri (1999), who compared Basque and Spanish L1 students' beliefs regarding this question. They found no significant differences between the two groups

regarding the perceived difficulty of segmentals and suprasegmentals; both groups were aware of their difficulty. The results of the present study differed slightly in that Hungarian teacher trainees viewed suprasegmentals, especially intonation, as more challenging.

Several descriptions exist regarding the characteristics of the English spoken by Hungarian speakers (e.g., Balogné Bérces & Szentgyörgyi, 2006; Nádasdy, 2006; Piukovics, 2021). Piukovics's (2021) dissertation, in particular, offers a detailed overview of the differences between English and Hungarian segment inventories. Although the present study does not aim to explore these differences in detail, some general observations can shed light on the results. Notably, some consonant sounds that exist in English are absent from Hungarian; some have allophonic variants in English, whereas others exist in both languages. However, there is a phonetic difference between them, or they may differ in distribution. Regarding vowels, however, most English monophthongs are absent in Hungarian, as are diphthongs (some of which might pose problems, others do not). In light of this, it is surprising that most participants in this study viewed consonants as more complex than vowels. However, it is not surprising that stress and intonation were perceived as more complex than consonants and vowels, given the differences in the Hungarian and English intonation and stress patterns. As Varga (2002) explains, "Hungarian *lexical words* (i.e., non-function words), whether simple (…) or derived (…) have a single primary stress, which falls on the first syllable of the word, and they have no secondary stresses" (p. 130). By contrast, English stress placement is notably more complex and governed by several rules and exceptions, making it challenging for learners to master. Regarding stress, the omission of weak forms or even the complete disregard of English stress patterns is characteristic of Hungarian English speakers (Piukovics, 2021). Finally, differences in pitch range and the locus and frequency of pitch change in the sentence between English and Hungarian (Kovács & Siptár, 2010), as well as the different functions of tones (e.g., the low-rising tone used in questions for Hungarian but never in English (Nádasdy, 2006)) may contribute to the perceived difficulty of intonation. Issues with stress and intonation were later observed in the shadowing task (as detailed in Sections 4.9.4.3 and 4.9.4.4), where both were often cited as problematic.

Some studies, such as Baker (2011) and Couper (2016, 2017), have noted the difficulty that many teachers encounter when teaching intonation. While teacher trainees may not be able to determine the level of difficulty in teaching these aspects, their own struggles with intonation, for example, may affect their ability to teach it effectively. O'Brien (2021) suggests that determining problematic areas in pronunciation teaching could be done by measuring improvement after training. However, due to the variations in training, methods of elicitation,

and ways of measuring improvement, reaching a consensus on what constitutes successful improvement would be difficult. Nevertheless, studies have shown that instruction (Saito & Plonsky, 2019) or even perception-only training (Sakai & Moorman, 2018) can positively impact pronunciation in controlled tasks, indicating the importance of dedicating time to improving pronunciation. While some studies show that predicting L2 pronunciation problems based on L1 and an L2 can bring conflicting results, other studies indicate that some features are so easy for learners that they do not need to be trained (see O'Brien, 2021; Derwing & Munro, 2022). However, as Derwing and Munro (2022) noted, it is becoming increasingly evident that individual differences are more important than previously assumed (e.g., Munro, 2021).

Assessing learners' perceived difficulties is crucial for identifying the areas that require intervention. A comprehensive analysis of perceived difficulties could inform researchers about emergent beliefs based on early experiences and years spent in school. However, this dataset suggests a potential underestimation of the difficulties of vowel production among Hungarian teacher trainees, which might stem from the fact that they have not yet learned this aspect of phonetics and phonology, and therefore, may not yet be aware of the significant differences that exist between the Hungarian and English vowel systems. However, it is also worth noting, as Figure 8 (and the standard deviations) demonstrate, that these perceptions are highly varied across individuals and cannot be generalized. Derwing and Munro (2022) emphasized the importance of "examining individual learner trajectories" and urge carrying out needs analyses for students. This, as they note, requires a thorough understanding of phonetics and phonology and good listening skills so that they can isolate problems that require intervention (p. 150). Therefore, it is crucial to provide teacher trainees with knowledge of phonetics and phonology as well as adequate training in their ability to listen to and perceive phonetics and phonology-related phenomena. The shadowing task described in Study 4 can be particularly useful in improving this ability.

4.4.3 Factors affecting the improvement of pronunciation

The responses from teacher trainees regarding the factors considered influential in improving pronunciation mirrored the strong belief that immersion or spending time in the country where the target language is spoken is the most effective way to improve one's pronunciation, followed by contact with native speakers. This question partially drew on Cenoz and Garcia Lecumberri (1999). While the list of factors to choose from was expanded in this

study, the perceived importance of speaking to native speakers is congruent with their findings and previous studies (Suter, 1976; Derwing et al., 2007; Szyszka, 2015). When spending time in a country in which the target language is spoken, one might assume that being surrounded by the language would improve one's pronunciation. However, while it was initially considered important (Purcell & Suter, 1980), length of residence (LOR) was later perceived as less significant than language use (Flege et al., 1995). Exposure can also occur in an EFL context by watching and listening to English language media, which is also considered important by both the participants of the present study and previous research (Rogerson-Revell, 2011; Jarosz, 2019). Szyszka's (2018) study among Polish university students also found that watching English language media was considered a crucial factor affecting the acquisition of pronunciation.

Another similarity between the present study and Cenoz and Garcia Lecumberri's (1999) is the perceived significance of individual motivation in improving pronunciation. Previous studies have suggested that motivation can positively impact one's L2 accent (Moyer, 1999, 2007; Polat, 2011). Given that teacher trainees, as future teachers, are responsible for fostering their students' motivation, their belief in and understanding of its importance bodes well for their future role in promoting their students' motivation to improve pronunciation. As Jarosz (2019) noted:

> "The role of the teacher cannot be overestimated or neglected in this respect, as it is the teacher who provides learners with guidance and helps them set realistic short-term goals, which can be achieved in a particular time and context. Attaining the goals, unquestionably, contributes to enhancing learners' motivation and provides them with a feeling of success." (p. 58).

A noteworthy finding of this study is that the ability to mimic and having a musical ear were considered less influential factors than those mentioned above, with the ability to mimic being moderately important and having a musical ear barely reaching the average. Similarly, participants in Cenoz and Garcia Lecumberri's study (1999) did not consider this factor as significant as others. It has been noted by studies and is likely observed by many learners that certain individuals possess a natural talent to imitate accents or pronounce words accurately. This talent is often referred to as having a "good ear", in more professional terms, "greater auditory discrimination ability and a better oral mimicry ability" than others (Jarosz, 2019, p. 55). It has also been suggested that good phonological short-term memory (Ellis, 1994) and phonetic coding ability (Carroll, 1981) are crucial factors in success in this respect. It is unclear whether this result indicates a belief in the influence of instruction or exposure over natural

abilities or whether it suggests a lack of belief in the existence of "talent" regarding pronunciation, not giving it the same significance as other factors (as suggested by Suter, 1976). Additionally, proficiency was deemed an important factor in improving pronunciation (consistent with Cenoz and Garcia Lecumberri, 1999), potentially indicating the belief that more proficient learners typically exhibit better pronunciation (although research suggests that lower-proficiency learners progress more rapidly than advanced learners, as demonstrated by Sakai and Moorman (2018)).

Another interesting finding is that targeted training in the context of pronunciation skills was considered to moderately affect pronunciation, while transcribing and ear training received even lower rating. The importance of phonetic theory only slightly exceeded the average and surpassed only knowledge of other languages. This outcome is concerning, especially considering that the participants were teacher trainees. The results suggest a relatively weak conviction among trainees regarding their responsibility to enhance pronunciation. However, this can be attributed to a lack of phonetic training. Previous studies have demonstrated the importance of explicit form-focused instruction and corrective feedback (Saito & Lyster, 2012; Saito, 2013). In an EFL setting where exposure to English is limited, the teacher's role is essential, not only in providing instruction, but also in serving as a model for students. The standard deviations indicate that students' answers were not uniform, and the fact that some participants did not consider pronunciation training as important as exposure, motivation, or proficiency may also stem from personal experience.

4.4.4 The importance of teaching pronunciation and time allocated to pronunciation in the classroom

Given the similarity and content overlap, the results from Sections 4.3.4 and 4.3.5 will be discussed together. The vast majority of participants (n=97%) considered teaching pronunciation important to some degree, in line with previous studies (Waniek-Klimczak 1997; Breitkreutz et al., 2001; Pawlak, 2008; Foote et al., 2011). However, the participants were divided on when to start instruction. Nearly half of the participants (47%) prioritized other skills first, preferring to begin teaching pronunciation at a more advanced level. Early encounters with the phonology of the L2 are encouraged, especially given that lower-proficiency learners might progress more rapidly in pronunciation than advanced learners (Sakai & Moorman, 2018). Studies indicate that beginner-level learners also express a desire to be taught

pronunciation (Baker, 2011). Zielinski and Yates (2014) recommend a systematic approach to teaching pronunciation to beginner students, first focusing on developing listening and awareness, then moving on to control, practice, and extension. They emphasize the importance of focusing on the spoken aspect of pronunciation, such as listening to a conversation rather than practicing reading its transcript out loud or facilitating the understanding of the features of pronunciation relying on auditory, visual, and kinesthetic modalities. They also stressed the importance of providing feedback in a manner that encourages confidence.

Regarding the frequency of practice, the majority (70%) of participants favored short but regular practice sessions ranging from five to ten minutes. A smaller percentage (28%) preferred longer practice sessions, such as dedicating half or an entire class to pronunciation. A few participants (5%) deemed occasional practice necessary, while a small minority (2%) saw no need for pronunciation practice. Zielinski and Yates (2014) recommend consistently incorporating pronunciation instruction in every class tailored to learners' needs, making it a natural part of classroom activity. As these participants were in training, whether these preferences translate into effective teaching practices remains to be seen. Previous research has shown that teachers may not always prioritize pronunciation teaching (Ellis et al., 2001; Foote et al., 2016), or the frequency of their pronunciation teaching practice does not mirror their beliefs (Basturkmen et al., 2004). Nonetheless, most participants recognized the importance of pronunciation teaching and believed that it should be an integral part of the language teaching process. It falls upon the teacher education program to reinforce this belief and equip trainees with effective strategies for incorporating pronunciation into their teaching.

4.5 Summary of Study 2

In summary, the results of Study 2 indicated that more participants were satisfied with their pronunciation than not, while less than half of the participants expressed clear satisfaction. Many students felt that they should improve in certain areas, leading to indecision or dissatisfaction with their pronunciation of individual words, intonation, and stress. For many, having a Hungarian accent presented a problem, and they used its presence or absence as a reference point to assess the quality of their pronunciation. Stressful situations and anxiety were also believed to negatively affect their pronunciation. According to their evaluations, stress and intonation were the most challenging aspects of pronunciation learning. However, many students seemed to underestimate the difficulty of vowels, which could pose challenges for

Hungarian learners of English, based on the existing literature. Students attributed great importance to study-abroad opportunities, conversing with native speakers, and listening to English-language media. While individual motivation was highly valued, targeted pronunciation improvement ranked low, possibly indicating the belief that pronunciation cannot be improved as effectively in a classroom setting. However, the students expressed the belief that focusing on pronunciation in the classroom is important, with divided opinions on the time of onset of instruction. Most students favored regular pronunciation instruction, with shorter class sections dedicated to it.

4.6 Results of Study 3

Study 3 focused on Hungarian English language teacher trainees' past experiences with formal and informal pronunciation learning and accent change. The results highlight participants' positive and negative encounters with pronunciation feedback, along with their experiences related to factors contributing to the improvement of their pronunciation.

4.6.1 Positive or negative feedback on pronunciation

Participants were asked about their experience of receiving positive or negative feedback on their pronunciation. As this was an open-ended question, the participants could provide their own answers. Of the 125 responses that could be analyzed, 91% (n=114) reported receiving feedback on their pronunciation, while 9% (n=11) reported receiving no feedback. Of the 114 participants who did, 60% (n=69) claimed to have received positive feedback, 23% (n=26) received negative feedback, and 17% (n=19) received both.

Participants who received positive feedback typically commented on the source, form, or content (Tables 18 and 19). Positive feedback typically came from a variety of sources (Table 18), including teachers (26%), other people (not specified who) (17%), native speakers (9%), non-native speakers (8%), friends (5%), classmates, and family members (1% each). Of the 26 cases in which negative feedback was reported, 58% attributed it to the teacher (Table 18). Other sources of negative feedback included classmates (laughing at incorrect pronunciation), friends, or strangers (48%).

Table 18. Source of feedback participants received

<table>
<tr><th>Positive feedback</th><th>%</th><th>Negative feedback</th><th>%</th></tr>
<tr><td>Teachers</td><td>26%</td><td>Teachers</td><td>58%</td></tr>
<tr><td>Other people</td><td>17%</td><td>Classmates</td><td rowspan="6">48%</td></tr>
<tr><td>Native speakers</td><td>9%</td><td>Friends</td></tr>
<tr><td>Non-native speakers</td><td>8%</td><td rowspan="4">Strangers</td></tr>
<tr><td>Friends</td><td>5%</td></tr>
<tr><td>Classmates</td><td>1%</td></tr>
<tr><td>Family members</td><td>1%</td></tr>
</table>

Regarding the form of positive feedback (Table 19), participants mentioned being mistaken for a native speaker (4%), receiving praise for the pronunciation of certain words (2%), achieving a top score on an oral exam (1%), and being asked to read aloud because the teacher liked the accent (1%).

Table 19. Form and content of feedback participants received

Positive feedback	%	Negative feedback	%
Not specified	6%	Not specified	8%
Form			
Being mistaken for a native speaker	4%	Correction	58%
Praise for accurate pronunciation of words	2%	Harsh criticism	8%
Reading aloud because of pronunciation	1%	Laughter	8%
Maximum score at an oral exam	1%	Unclear feedback	4%
Content			
Clear and understandable	14%	Sounding Hungarian	31%
Native-like accent	8%	Strange accent	20%
Good intonation	3%	Not good enough	15%
Improvement in pronunciation	3%	Problem with comprehensibility	12%
		Problem with intonation	8%
		Problem with specific sounds	8%
		Mixing accents	4%

In terms of the feedback content (Table 19), the following categories emerged: clear and understandable pronunciation (either after a presentation [5%] or in general [9%]), a native-like accent (8%), good intonation (3%), and improvement in pronunciation (3%). In 6% of cases, the participants indicated receiving positive feedback without specifying its content. In two cases, participants received comments from non-native speakers complimenting their "cute" or "lovely" accent. When evaluating these comments, participants were undecided whether these were compliments or negative remarks. However, one of the two participants found the comment motivating to be motivating.

Regarding the form of negative feedback, participants reported that the most common type was correction by either a teacher (54%) or friend (4%). Although some participants pointed out that they did not consider teacher corrections as negative feedback, most viewed it negatively. Additionally, in 8% of the negative cases, participants mentioned receiving harsh criticism from high school teachers, and one university instructor suggested that pronunciation should be "softened" (4%). The most severe form of negative feedback was classmates laughing at incorrect or even correct pronunciation (8%).

The typical content of the feedback was accent sounding Hungarian (31%), need for improvement and practice ("not being good enough") (15%), being difficult to understand (12%), intonation issues (8%), or trouble with a specific sound (8%). Some feedback also mentioned an accent that bothered other people or was perceived as strange (native and

Hungarian feedback) (20%), and the mixing of accents (4%). In 8% of negative cases, receiving negative comments was mentioned, but their content was not specified.

4.6.2 Participants' experiences with factors influencing their pronunciation

Participants were asked about the factors that influenced their pronunciation (Table 20). This question is similar to the one in Section 4.3.3 which asks participants to rate the various factors impacting their pronunciation on a scale of 1 to 10, focusing on pronunciation improvement in general. This question expands on their own experiences, including education and the option to mention additional examples beyond the list provided. Most students (71%) attributed their pronunciation skills to exposure to film and music. More than half of the students (56%) credited their university courses to influence their pronunciation, even though those courses were not explicitly focused on pronunciation improvement. Other factors that impacted students' pronunciation included their high school teacher (51%), YouTube videos, and TV shows (48%), followed by the category other (detailed below the table). Elementary school teachers were the least influential, with only 23% of participants identifying them as factors in their pronunciation skills.

Table 20. Factors influencing pronunciation

Activity of factor	**%**
Films	71%
Music	71%
University course	56%
Teacher (high school)	51%
TV shows/YouTube videos	48%
Other	28%
Teacher (elementary school)	23%

Under the category "Other," students listed various people and activities that helped improve their pronunciation beyond the options provided in the questionnaire. Out of the participants, eight indicated that spending time abroad, working in a target language country, or an exchange program contributed to their improvement. Six mentioned conversing with friends in English, followed by five who found opportunities to talk to Erasmus students when they visited the country or when the students went on an Erasmus program. Four students attributed positive changes to talking with native speakers, while three had native speaker friends with whom they regularly spoke. Three students found that family members who spoke English were helpful, while two mentioned volunteering, which helped them improve. Two

students also mentioned video games. Finally, one student mentioned social media, classmates, and watching videos on pronunciation as helpful tools.

4.6.3 Pronunciation learning experiences in school

In the last version of the questionnaire (2022), a new question regarding pronunciation learning experiences in school was added. Therefore, only 44 of 128 participants in the present study answered this question. Students were asked to write about how their teachers, either in elementary school, high school, or university, dedicated in-class time to improving their pronunciation. Of the participants, 70% (n=31) provided examples of pronunciation-related activities. In comparison, the remaining 30% had no recollection of pronunciation practice or claimed that there was no specific focus on pronunciation in their English classes.

Among those who reported having dealt with pronunciation in class, the most popular technique used by teachers was repetition (65%). This included the repetition of sentences, words (especially new ones), parts of the listening material, or the whole class repeating a particular student's mistake. In addition to repetition, several participants mentioned that their teachers corrected their pronunciation while speaking (23%) or when they mispronounced a word while reading aloud (6%). Only a few students reported doing pronunciation exercises in their coursebooks or being taught the International Phonetic Alphabet (IPA) (10% in each case). Some students mentioned types of shadowing (13%); two participants mentioned stress practice (6%); and one participant reported practicing intonation, rhythm imitation, and marking pauses (3% each). Finally, one student reported receiving positive feedback on good pronunciation (3%).

4.7 Discussion of Study 3

4.7.1 Positive or negative feedback on pronunciation

One of the solutions that Macdonald (2002) suggested in his article on current pronunciation issues in teaching is to monitor speech and provide feedback on pronunciation. It is promising that teachers were the primary source of positive feedback on pronunciation in this study. However, in relation to the total number of participants (n=128), the percentage of those who received praise from a teacher was still modest (14%), including not even a quarter of all participants. This suggests that teachers mostly or only praise students if their pronunciation is good overall, missing several opportunities to provide feedback on improved pronunciation of a sound, a type of intonation, stress patterns, and words. While it is possible that the participants did not recall having been praised, their detailed description of the positive and negative feedback they received indicated that they may not have received noteworthy positive feedback if they did not remember. This outcome is both surprising and concerning. In their review of 25 years of research on oral and written corrective feedback, Li and Vuono (2019) conclude that "[oral] CF has significant effects on L2 learning, with the magnitude of the effects ranging from medium to large" (p. 97). Therefore, systematic feedback must be an integral part of the teaching process. When it is, however, feedback seems to be more focused on grammar. In his meta-analysis, Brown (2016) pointed out that in the reviewed studies, only 22% of corrective feedback was aimed at pronunciation errors, as opposed to 43% for grammar. Therefore, teachers must pay more attention to pronunciation feedback whenever possible.

Interestingly, several students mentioned receiving compliments on their pronunciation after a presentation. Presentations are typically the only occasions when students have an extended period to speak, allowing teachers to hear students' pronunciation mistakes, identify areas for improvement, and provide feedback. Therefore, including class presentations in the curriculum can benefit the students.

Feedback on pronunciation is a sensitive issue; it is often highly subjective, and may have long-lasting effects on students. For this reason, it is vital to establish a positive atmosphere in the classroom, which participants may appreciate and remember. This is evident in the case of one participant, who describes the significance of such an occasion (see Excerpt 73).

> *(73) One particular example that I can recall is when, at the beginning of my academic studies, one of my teachers complimented my pronunciation and how I*

sounded and made me read a whole slide full of information aloud because she liked a lot how I sounded. She also told me that I should become a voice actor.

The student in Excerpt 73 found the experience motivating, but it may not be suitable for all students to be in the spotlight in this way. However, if a teacher knows that a student feels comfortable with it, it can be an incentive and motivation to continue improving their pronunciation.

The primary source of negative feedback was, once again, teachers, although it should be noted that there was no consensus among participants on whether corrective feedback should be considered negative. Some students found their teacher's occasional corrections helpful, while others clearly perceived corrections as negative feedback. Since pronunciation is a delicate aspect of language (Guiora et al., 1972), teachers should be cautious when providing feedback. At the same time, teachers should communicate to students that corrective feedback is not necessarily criticism if it is delivered appropriately. Two examples of how extremely negative feedback affected the participants can be seen in Excerpts 74 and 75.

(74) I received a lot of negative comments on my English and my knowledge, and trying was never enough. I was constantly corrected during my oral presentations and made to repeat the phrases and words correctly. The most specific and most "memorable" negative comment I got was when my teacher advised me to listen to English songs (...) because my pronunciation is terrible (this is the exact words she used). This happened in 12th grade before the school leaving exam. I felt extremely demotivated and sad. By that time, I had given in [submitted] my application for university (...).

(75) One of my English teachers said I not only have the worst grammar she had seen in her life, but my pronunciation is just not English and that I'll never be able to learn any language. It was when I was 14.

Both are examples of harsh criticism that failed to specifically guide students in improving their pronunciation and damaged their confidence. It seems that both teachers believed that improving pronunciation was solely the responsibility of the students, without acknowledging their own role in the process. While there are many resources for language learners today to work individually, every student has unique abilities and learning styles, and teachers should provide guidance and support in achieving the pronunciation goals students set for themselves. Recent literature provides many materials that facilitate this, such as the works of Murphy (2017), McGregor and Reed (2018), and Jarosz (2019).

In some cases, teachers gave constructive feedback, but this was not always understandable (see Excerpt 76).

(76) A university instructor said that my pronunciation should be softened.

Feedback is ineffective if it is too vague and subjective; therefore, clear and explicit guidance is necessary for students to progress. While pronunciation improvement involves plenty of individual effort, the classroom is an excellent place to start with exercises that promote group practice and avoid singling out individual students, followed by practicing individual utterances if the group feels comfortable.

Varying degrees of objectivity can be observed in terms of the content of the reported feedback. Feedback that indicates incomprehensibility due to problematic pronunciation, intonation, or a mispronounced sound helps students to understand and improve the challenging aspects of pronunciation. Fraser (2001) suggests that learners should not necessarily imitate native speakers' production but practice *critical listening*, which "involves learners' listening to learners' pronunciation, as opposed to that of native speakers, and learning to judge whether the pronunciation is 'acceptable' (by whatever standards are appropriate in that particular class) or not" (p. 55). She emphasizes that learners should "listen to recordings of their own voices, and especially if they can be recorded saying similar things several times, and then listen back to see if they can pick the versions that are correct or incorrect" (p. 55). Therefore, comparing their own recordings to themselves would be more realistic than comparing themselves to a native standard. However, feedback indicating that "the accent sounds Hungarian", that it "bothers" people, that it is "a mixture of accents", or that pronunciation is "not good and requires work" is not only vague and subjective but also suggests that there is a perfect standard of which students fall short. Constructive feedback regarding pronunciation problems that affect intelligibility and comprehensibility is necessary; however, phrases such as *too*, *not enough,* and *bothering* can be unhelpful and subjective. It is important to acknowledge that other English speakers or native speakers may have their own views and (mis)conceptions about language learning and accents and may give feedback accordingly, which cannot be controlled. Instead, students can be taught that many Englishes are spoken worldwide, and that they can learn to differentiate between constructive criticism and subjective opinions to prevent negative feelings and insecurity.

4.7.2 Participants' experiences with factors influencing their pronunciation

This question explored a topic similar to that presented in Study 2, where students evaluated the factors that they believed contributed to pronunciation improvement in general

(see Section 4.3.3 for the results and 4.4.3 for the discussion). However, while that question aimed to understand their beliefs, this one sought to uncover the influencing factors behind participants' own pronunciation and gather more information about their personal experiences. Students were given predetermined options but were allowed to expand on any unlisted factors under the option "Other." English-language films and music emerged as the most popular options (each chosen by 71%). This finding aligns with earlier studies (Szyszka, 2018), indicating that, while spending time in a country where the target language is spoken was deemed the best way to improve pronunciation in general, English language media and music were readily accessible substitutes that the participants in the present study had the opportunity to use.

One of the main aims of this question was to gain greater insight into participants' educational experiences. Their responses revealed that university courses influenced more than half of the students' pronunciation. This is a positive development, particularly considering that the students did not take courses specifically focused on pronunciation. This suggests that instructors who may have been native speakers or non-native speakers with impressive pronunciation skills, or general course activities that may or may not have focused on pronunciation, played a crucial role. On the other hand, one might question whether pronunciation was not a priority before students' university years and what this means for students who are not English majors or who do not attend university. Upon closer examination of the data, it was discovered that out of the 56% (n=71) who reported that their university instructors played a role in improving their pronunciation skills, for 59% of the participants (n=43), the university was the only educational setting that contributed to this progress. In other words, approximately one-third of the participants in this study did not feel that their teachers had contributed to improving their pronunciation skills at any stage of their primary and secondary school English studies. Among those who selected more options (n=48), the majority chose high school teachers and university instructors (n=28), followed by elementary and high school teachers (n=10), elementary school and university teachers (n=5), and all three options (n=5). This means that only 38% of the students felt that their teachers focused on pronunciation in more than one educational setting during their academic journey, and only five students reported that they received instruction on pronunciation throughout their entire academic career. In contrast, for 28 students, teachers focused on pronunciation for an extended period, but this happened only after their elementary school years. Therefore, it can be concluded that only a few students felt that their teachers had contributed to improving their pronunciation skills from the beginning of their studies until data collection. University instructors played the most

significant role in enhancing pronunciation skills, followed by high school teachers, and those who selected both. This suggests that pronunciation is an area primarily focused on by secondary and tertiary education teachers, and elementary school teachers may not emphasize this aspect of English.

According to a study conducted among Polish university students by Szyszka (2018), EFL students perceived the pronunciation of primary school teachers to be significantly worse than that of high school teachers. Although Szyszka noted that this is a subjective perception (in contrast to teachers' own evaluations in studies such as Henderson et al. (2012) and Szyszka (2016)), she presented two possible explanations for this phenomenon. First, primary education may be less demanding than high school education, resulting in less emphasis on improving L2 pronunciation proficiency. Alternatively, primary school teachers may intentionally simplify their language and pronunciation. Another possible explanation provided by Szyszka is that elementary school teachers' pronunciation indeed needs improvement. The results of this dissertation do not clearly explain why the students did not feel that elementary school teachers influenced their pronunciation learning. It is possible that inadequate knowledge or a lack of confidence in their knowledge prevents teachers from teaching pronunciation (Breitkreutz et al., 2001; Macdonald, 2002). Nevertheless, this issue needs to be further explored and addressed, especially given the importance of early work on pronunciation (Zielinski & Yates, 2014) and the need for continuous pronunciation development at all levels of education.

Regarding the other influencing factors, TV shows and YouTube videos exerted almost as strong an influence on students as their high school teachers did. In the "Other" category, activities like spending time abroad for work or exchange programs, conversing with friends in English, talking to native speakers of family members in English, volunteering, playing video games, social media, and audiovisual pronunciation teaching content were listed. Interestingly, activities that were highly valued by students among the factors affecting pronunciation in Section 4.3.3 (such as spending time abroad) were mentioned by eight students only, and conversation with native speakers by seven students. This suggests that only a small number of students can practice the language in the way they believe it is most effective for pronunciation learning, as these activities are not feasible for most students. Watching English language media and listening to music are reported to be popular extramural learning activities among students learning English (Sundqvist & Sylvén, 2016). These activities offer access to a wide range of accents and a chance to notice and become more aware of the pronunciation features of the language. Pennington (2021) notes that many kinds of technology are useful for pronunciation, whether designed for that purpose or not, but one of the things she emphasizes as a limitation

of technology is the lack of individualized feedback that a teacher can provide. As she points out, “it is nevertheless hard to justify not incorporating technological resources into language teaching, since the array of contemporary technologies can provide access to many different kinds of input for students that would otherwise not be available and since students are generally eager to learn with technology” (Pennington, 2021, p. 7) It is noteworthy that despite the wide range of apps and software at disposal for pronunciation learning, none of the participants mentioned using any of these, indicating a possible lack of awareness of the existence or usefulness of these tools. As Pennington and Rogerson-Revell (2019) noted in their detailed overview of existing technology for pronunciation teaching, learning, and assessment:

> “As with other areas of language instruction, teachers need clear guidance and more knowledge of the benefits and uses of CAPT, so that they can make informed, critical choices about which resources are most useful for their learners and can integrate technologies meaningfully into language teaching.” (p. 274)

Whether and to what extent they are being used in education in Hungary is a question that remains to be explored (Hungarian studies that reflect on the importance and difficulties of pronunciation teaching include Sztahó et al. (2014) and László (2014)). However, the next question could provide insight into the forms of in which pronunciation teaching and learning took place for participants within the Hungarian educational context.

4.7.3 Pronunciation learning experiences in school

In 2022, a new question was added the questionnaire (Appendix A, Question 16) to uncover whether pronunciation learning occurred during the participants' primary and secondary education and how it was taught. Of the 44 participants, 70% (n=31) recalled learning pronunciation in the classroom during their studies. Regarding the type of exercise, more than half (65%) reported repetition. Students did not always specify what they were required to repeat, but words and sentences were mentioned separately in approximately 50% of cases. This supports previous research showing that teachers prefer phoneme- and word-level repetition (Baker, 2014; Buss, 2016; Foote et al., 2016.) Such decontextualized drills, as Sardegna and McGregor (2022) note, allow “learners to make changes to their pronunciation with the help of pronunciation learning strategies, repetition, and speech models at their own pace and in a safe environment” (p. 118). However, they also noted that the next step should be contextualized practice because, ultimately, these types of tasks enable skill transfer into spontaneous speech. Seven participants mentioned having been corrected while speaking (although they did not

specify when or how), indicating signs of contextualized practice. It is important to note that the students may not have remembered other pronunciation-focused activities. However, the popularity of repetition tasks in this dataset emphasizes the need to clarify the role and function of these exercises and to introduce other possibilities for teachers to focus on.

About a quarter of the students mentioned examples of what could be identified as explicit instruction or perceptual training, such as teaching IPA symbols, intonation, stress, rhythm, and pauses, or doing related pronunciation exercises. One participant, in particular, recalled the learning of IPA symbols as follows (Excerpt 77):

> *(77) The most boring way possible. They tried to show us the symbols of phonemes with drawings behind them. (…) I don't recall more information because I tend to forget boring things."*

According to the research done in seven European countries by Henderson et al. (2015), 82% of the English teachers in their study taught symbol recognition to their students, and 40% focused on symbol writing. Of course, the opinion expressed in Excerpt 77 should not be taken as representative of every student's view of the matter. However, this raises the issue of the necessity for students to understand the significance of learning these symbols and how such knowledge could enhance their perception, and, ultimately, the production of the sounds of the target language.

Based on participants' responses, it appears that teachers tend to rely on textbook materials for pronunciation practice. Only one participant reported that their teacher used a news channel to improve their pronunciation. In Henderson et al.'s (2015) study, teachers preferred language-learning websites and YouTube, none of which was mentioned by the participants in the present study. As textbooks might not be the most appropriate for the context or specific problems, teachers should strive to find engaging and innovative materials beyond simple repetition to make pronunciation learning more memorable. Despite this, some students found ways to hone their pronunciation skills using online materials. Teachers should guide and assist them in this activity by recommending appropriate websites and content that aligns with their learning objectives. The final study in this dissertation uncovers how participants organize and manage their individual pronunciation learning.

4.8 Summary of Study 3

To summarize, the results of Study 3 indicated that participants did not receive adequate feedback on their pronunciation in educational settings. Although teachers provided feedback (participants recalled positive feedback slightly more often than negative feedback), the total number of participants who received feedback from them was relatively low, with feedback being somewhat vague and nonspecific in nature. Negative feedback was often centered on issues of accent rather than pronunciation, often in the form of criticism. It is important to note that these are only reported cases, and a more direct observation of teacher feedback in the classroom is needed to gain a complete understanding. However, it is evident that students require more specific and constructive feedback. By addressing the issues and misconceptions that emerge in connection with student beliefs, the experiences of future learners of English can already be improved. However, providing feedback on pronunciation requires a sensitive approach, and must be taught accordingly.

Regarding the reported factors influencing participants' pronunciation, the strong influence of English language media on their pronunciation is not surprising. However, it is concerning that many students felt that their pronunciation was affected only by their high school and/or university studies. Elementary school teachers play an important role in pronunciation teaching, especially because of the age factor. Obtaining Hungarian teachers' perspectives on this issue and why they neglect pronunciation teaching could provide valuable insights for teacher education and could be used to help teachers overcome these issues. Given the importance of English language media in students' lives, it is necessary to establish a closer link between students' individual learning activities and classroom learning to enhance their motivation and engagement, and improve the quality of their individual learning.

The findings regarding pronunciation learning in the classroom were based on data from a small set of participants. Although the data suggests that pronunciation is an area of focus in most cases, the teaching methods used tend to rely on repetition. A larger sample size and direct classroom observations may contribute to the generalizability of the results. However, there is a pressing need to educate future teachers on a greater range of techniques to teach pronunciation effectively.

4.9 Results and Discussion of Study 4

Study 4 focused on Hungarian English language teacher trainees' reported pronunciation learning strategies as well as pronunciation learning strategies used in connection with completing a specific task, namely, shadowing. Because the latter is a large study containing several tables forming a cohesive unit, the structure used in the first three studies will be slightly changed to facilitate understanding and avoid breaking up the data presentation. Instead of presenting all study results and discussing them separately, reported pronunciation strategies will be presented first (results and discussion), followed by shadowing-related pronunciation learning strategies (results and discussion).

4.9.1 Reported pronunciation learning strategies: Results

The participants (n=128) were asked whether they had made conscious efforts in the past to improve their pronunciation. Of these responses, 27% (n=34) indicated no particular actions; the remaining 73% (n=94) provided specific examples. These examples were then categorized into 13 main types of pronunciation-learning tactics, listed in Table 21. Additionally, a more detailed explanation of the precise content of some tactics is provided below.

Table 21. Tactics used for improving pronunciation

Tactic Nr	Tactic	%
1	Watching/listening to English	39%
2	Repeating aloud	28%
3	Looking up/learning about pronunciation (dictionary, videos, classes)	24%
4	Imitating other people	13%
5	Speaking with NSs, NNSs, or friends	10%
6	Singing	6%
7	Speaking to oneself	6%
8	Reading aloud	5%
9	Recording oneself	3%
10	Memorizing conversations, poems, texts	2%
11	Shadowing	2%
12	Studying aloud	1%
13	Learning tongue-twisters	1%

The most widely used tactic was watching or listening to English (Tactic 1, reported by 39%). This included watching or listening to English-language media (movies, TV shows, YouTube videos, Ted Talks) (26%), listening to podcasts and music (11%), or listening to class audio files multiple times (2%). The next most frequently used tactic was repetition (Tactic 2, reported by 28%) in the form of pausing and re-watching parts of films or videos, as well as trying to repeat what the speaker said (13%) or repeating new words aloud until the pronunciation was close to the original (11%). Some participants also reported doing repetition exercises with a teacher (2%) or from coursebooks (2%). Another tactic (Tactic 3, reported by 24%) included searching for phonetic transcription and audio pronunciation of words in the dictionary, then listening to them and practicing them (16%). Participants also found watching videos dedicated to improving pronunciation helpful (6%). Additionally, some participants focused specifically on vowels and consonants that were problematic for Hungarian speakers (1%) and attended classes related to pronunciation (1%).

The next tactic (Tactic 4) used by participants was imitation (13%), which involved imitating whole monologues or lines from comedy routines, TV shows, movies, or musicals (7%), or imitating certain native speakers (6%). Another tactic (Tactic 5, reported by 10%) was engaging in conversations with native speakers (5%), foreigners (3%), or friends (2%).

Further tactics (6–13) included singing (6%), speaking in English to oneself (6%), reading aloud (5%), recording and listening to oneself (3%), memorizing conversations, poems, and texts (2%), shadowing everyday conversations or movies (2%), studying aloud (1%), and learning tongue-twisters (1%).

The above-mentioned 13 main groups of tactics belong to the following pronunciation learning strategies (Table 22) (based on the PLS taxonomy provided by Szyszka, 2017 in Section 2.3.6.2):

Table 22. Reported pronunciation learning strategies

Pronunciation Learning Strategy	**Nr of tactic categories belonging to the strategy**	**%**
Cognitive	7	53.8%
Memory	3	23.07%
Compensation	1	7.69%
Metacognitive	1	7.69%
Social	1	7.69%
Total	**13**	**100%**

Slightly over half of the tactics used (53.8%) belong to the cognitive pronunciation learning strategy group, followed by memory strategies (23.07%). The remaining examples included

compensation, metacognitive, and social strategies, each representing 7.69% of the total. However, the dataset did not include any examples of affective pronunciation-learning strategies.

While five students mentioned not prioritizing pronunciation, they made additional remarks. One student claimed to pay attention to corrections given by others, while another reported working on their pronunciation during school, but not practicing independently. Another participant expressed surprise that pronunciation development had not been emphasized in previous classes. At the same time, another claimed that, since they had received compliments on their pronunciation, they did not feel the need to be concerned about it. Finally, one participant expressed skepticism that focusing on pronunciation would have made a difference to them.

4.9.2 Reported pronunciation learning strategies: Discussion

Remarkably, 73% (n=94) of participants consciously tried to improve their pronunciation. The tactics students reported belonged to five strategies (Szyszka, 2017), the majority of which were cognitive and memory strategies (Table 22), which is consistent with the findings of previous studies (e.g., Pawlak & Szyszka, 2018). Interestingly, 39% of all the reported strategies consisted of listening to media as a means of improving pronunciation (this tactic was also reported to be frequently used by participants in Szyszka, 2015). As previously discussed, immersion is crucial for improving pronunciation and accent (e.g., Trofimovich & Baker, 2006). However, while watching English language films and videos can be helpful, as learners may observe and notice new pronunciation phenomena, it does not provide the necessary interaction that could contribute to pronunciation in a foreign language setting. Some learners may rely on listening to "surround" themselves with the language. One participant noted that they listened more attentively when watching a show or video for study purposes than when watching for enjoyment. While there is an abundance of English language material available for streaming and listening, some learners are still dissatisfied with their accents, suggesting that while listening to songs, watching movies, or watching TV shows can be helpful, it may not be the best solution for everyone seeking to improve their pronunciation. While some participants mentioned alternative tactics for developing pronunciation than just watching movies, many cited this as their only strategy. Repetition accounted for 28% of the tactics, while others focused on learning more about pronunciation from dictionaries, videos, or taking classes (in line with the findings of Pawlak, 2011, who also reported the frequent

application of repetition and dictionary use). Some participants also reported listening, imitating other speakers, or talking to native speakers.

Regarding the participants who claimed not to actively improve their pronunciation in any way, three comments stood out. One student found it odd that there was no course in their university program dedicated to pronunciation development (and several others noted that shadowing to be done in class was the first exercise in their lives that they considered active development of pronunciation). As previously mentioned, teacher trainees at the University of Szeged receive their first formal phonetics and phonology training in the fourth year. While pronunciation may appear as a part of different courses, research suggests that it is not necessarily addressed systematically in university programs (Burgess & Spencer, 2000). However, the fact that some participants only began addressing pronunciation issues so late in their language learning experience (as also reflected in the results of Study 3 regarding pronunciation learning experience in school) indicates the lack of pronunciation teaching in some schools.

Two seemingly opposing comments are also worth noting: one participant felt that as they had never had problems with pronunciation, it did not seem necessary to focus on it. Another participant believed that working on pronunciation would not have made a difference for them. Sardegna et al. (2017) found that awareness of the linguistic and practical values of learning pronunciation increased the possibility of students worrying about it and taking action to improve it. Saito (2021) highlighted that while instruction might not improve accentedness, a balanced focus on different aspects of L2 could contribute to improved comprehensibility. Therefore, working on pronunciation is still worthwhile, even for those who sound less optimistic about it, as there are gains that might not be immediately apparent to them, or that manifest in unexpected ways. These two examples may represent common opinions among future teachers. Research has shown that some individual differences, such as motivation and effort (Moyer, 2007; Nagle, 2018), musical aptitude (Slevc & Miyake, 2006; Milovanov et al., 2010), or higher working memory capacity (Darcy et al., 2015), can help some students achieve exceptional results. Students with a natural ability to easily improve their pronunciation may not see this as a struggle. However, without having experienced the specific nuances of pronunciation development, these students may underestimate its difficulty for other people or be unable to advise their future students.

4.9.3 Pronunciation learning strategies used in connection with a specific task, Shadowing: Results

The pronunciation learning strategies used in connection with the shadowing task were derived from a particular section of the shadowing diaries, where students described how they overcame difficulties encountered during practice. To shed light on these challenges, the problematic aspects of the practice are first outlined, followed by the corresponding strategies employed to overcome them.

4.9.3.1 Problematic aspects during practice

As a first step of the analysis, the answers given to the question of what caused participants' difficulties were coded and grouped, resulting in ten emergent categories: speed, pronunciation, problems with a specific sentence, intonation, performance, stress, other, negative reactions and feelings, accent, and focus/attention. One student could indicate more than one problem in their diary and mention the problem type more than once. Students' notes on problematic aspects were also quantified to determine which aspects were the most and least frequently addressed (see Table 23).

Table 23. Problematic aspects during practice

	Problematic aspect of practice	**Frequency**	**Incidence compared to the total number of comments**
1	Speed	143	32.80%
2	Pronunciation of words and sounds	81	18.58%
3	Problem with a specific sentence	73	16.74%
4	Intonation	37	8.49%
5	Performance	26	5.96%
6	Stress	22	5.05%
7	Other	19	4.36%
8	Negative reactions/feelings	12	2.75%
9	Accent	12	2.75%
10	Focus/attention	11	2.52%

The speed of the recording and problems stemming from speed constituted the largest category among all the comments (32.80%), followed by problems related to pronunciation (18.58%). The next category refers to sentences highlighted as problematic for unspecified or specified

reasons (16.74%); most participants indicated the exact sentence or the part where they experienced problems (to be discussed in Section 4.9.4.4). Fourth were intonation problems (8.49%), followed by performance-related issues (5.96%). Less frequently mentioned but still, characteristic problems were the ones related to stress (5.05%), other types of problems (to be specified in the next section) (4.36%), negative reactions or feelings (2.75%), accent-related difficulties (2.75%), and focusing on or paying attention to a particular aspect of the shadowing process (2.52%).

Each of the above categories was further divided into subcategories to better understand the exact nature of the problems mentioned (Tables 24 and 25). The categories and subcategories in each table are listed based on their frequency of occurrence in the comments.

Table 24. Detailed problematic aspects reported by the students during shadowing (Part 1)

Source of difficulty	**Specific problem**	**Nr of times mentioned**	**%**	**% of cases**
Speed	Speech too fast	67	15.37%	62.62%
	Problems with breathing	32	7.34%	29.91%
	Pause distribution	24	5.50%	22.43%
	Skipping words	17	3.90%	15.89%
	Following the changing speech rate	3	0.69%	2.80%
	Sub-total	**143**	32.80%	133.64%
Pronunciation	Mispronouncing unnamed words	31	7.11%	28.97%
	Mispronouncing specific words	39	8.94%	36.45%
	Mispronouncing a specific consonant	5	1.15%	4.67%
	Mispronouncing unnamed consonants	3	0.23%	0.93%
	Saying a homophone instead of the word	1	0.69%	2.80%
	Length of vowels	1	0.23%	0.93%
	Linking	1	0.23%	0.93%
	Sub-total	**81**	18.58%	75.70%
Problem with a sentence	Problem with a specific sentence	73	16.74%	68.22%
	Sub-total	**73**	16.74%	68.22%
Intonation	Imitating intonation	35	8.03%	32.71%
	Sounding monotonous	2	0.46%	1.87%
	Sub-total	**37**	8.49%	34.58%

The categories that yielded the most problems were speed, pronunciation, problems with specific sentences, and intonation. In the category of speed, participants were struggling with the speed of speech in particular, and many also mentioned that they ran out of air because they

were so focused on imitation. Another aspect that seemed to confuse many participants was the inability to follow where the pauses were at first. Finally, because of the speed, some participants mentioned having to skip words to keep up with the speaker, as well as difficulty trying to imitate how their speech rate changes during spontaneous speech.

When it comes to pronunciation, in many cases, participants did not specify what caused their difficulties; they merely indicated that they had problems pronouncing certain words or consonants. Other students, however, named the exact words or consonants that caused the problems. One person mentioned that they sometimes ended up saying a different word than what they were supposed to (a homophone), and another mentioned having problems with the length of vowels, and appropriately linking words. Apart from problems with specific words, many students pinpointed the exact parts or sentences of the recording in which they felt they were struggling.

The problems related to intonation were not specified in detail. In fact, except for two participants, everyone indicated the source of the problem to be imitating the speaker's intonation. At the same time, two students mentioned that they noticed sounding monotonous, even after plenty of practice.

Table 25. Detailed problematic aspects reported by the students during shadowing (Part 2)

Source of difficulty	Specific problem	Nr of times mentioned	%	% of cases
Performance	Lack of progress/regression	6	1.38%	5.61%
	Listening to oneself	5	1.15%	4.67%
	Performing worse because of tiredness	3	0.69%	2.80%
	Struggling with perfectionism	2	0.46%	1.87%
	Lack of confidence to try alone	2	0.46%	1.87%
	Desire to become better	2	0.46%	1.87%
	Losing motivation	2	0.46%	1.87%
	Disliking accent	1	0.23%	0.93%
	Disappointment in performance	1	0.23%	0.93%
	Overconfidence	1	0.23%	0.93%
	Sounding natural	1	0.23%	0.93%
	Sub-total	**26**	**5.96%**	**24.30%**
Stress	Stress placement	17	3.90%	15.89%
	Stressing specific words	5	1.15%	4.67%
	Sub-total	**22**	**5.05%**	**20.56%**
Other	Rhythm of speech	14	3.21%	13.08%
	Imitating hesitations/incomplete sentences	4	0.92%	3.74%
	Lack of punctuation in the text	1	0.23%	0.93%
	Sub-total	**19**	**4.36%**	**17.76%**
Negative feelings/reactions	Anxiety	7	1.61%	6.54%
	Frustration	4	0.92%	3.74%
	Disliking the text/speaker	1	0.23%	0.93%
	Sub-total	**12**	**2.75%**	**11.21%**
Accent	Imitating the assigned American Accent	8	1.83%	7.48%
	Imitating the assigned British accent	4	0.92%	3.74%
	Sub-total	**12**	**2.75%**	**11.21%**
Focus/attention	Focusing on all the difficulties at once	7	1.61%	6.54%
	Talk and listen at the same time	4	0.92%	3.74%
	Sub-total	**11**	**2.52%**	**10.28%**

The next category (Table 25), performance, includes various types of problems, such as lack of progress or regression despite abundant practice, the difficulty of listening to oneself, being tired and performing worse, struggling with perfectionism, lack of confidence to leave the recording turned off and tried to do the shadowing alone, expressing the desire to improve,

losing motivation, disliking one’s own accent, being disappointed about one’s performance, admitting being overconfident and realizing that the task is more complex than anticipated, and the problem of not sounding natural, as the participants put it.

Regarding stress-related difficulties, the main problem seemed to be stress placement in general, and four students specified the words they had trouble stressing.

The category “Other” contains three problems. The first one, the rhythm of speech, was assigned to this category because, from the diaries, it seemed that students had a different understanding of the concept of rhythm than how it is defined in the literature, and in light of this, it is unclear how the students would have worded the related problems differently if the meaning of the term had been clear to them. The second refers to the difficulty of imitating spontaneous speech because it is full of hesitations, and the speaker is constructing their message on the spot, which can cause challenges during shadowing. The third might be linked to any other aspect above, namely, the lack of punctuation in the text. However, as the participant did not specify why exactly they felt it was problematic, it was not assigned to any of the above categories.

Regarding negative feelings or reactions, students expressed anxiety about having to shadow; others mentioned being annoyed or angry by not being able to accomplish the task as imagined. One student in particular even said that they had started hating the speaker. Some students mentioned feeling frustrated or anxious during practice, while one student expressed a growing dislike for the text and how the speaker spoke the more they practiced.

In the penultimate category, the difficulty of imitating another speaker’s accent is pointed out. In the category related to focusing and attention, one problem was paying attention to everything the participants noted as difficult. The other problem is particular to shadowing, namely, listening to a recording while simultaneously talking and reading aloud.

4.9.3.2 Tactics for addressing problems

Having coded the problematic categories, the next step in the analysis was to codify and categorize participants' actions to improve their performance and solve specific problems. The tactics resulting from the analysis do not entirely match the problematic aspects of practice (Table 23). The reason for this is that, during practice, the nature of the problem sometimes changed, or students realized what they were struggling with more specifically. In addition, some tactics could not be assigned to any previously created category, so they were listed under the category of *general improvement,* as they did not mitigate a specific problem but improved

the quality of the whole shadowing process. Once again, the categories and subcategories are listed based on their frequency of occurrence in the comments.

The aspects of shadowing that required the application of the most extensive variety of tactics were speed and pauses (see Table 26).

Table 26. Tactics for addressing speed- and pause-related problems

Problem	Tactic Nr	Tactic used	Count	%
Speed and pauses	1	Marking the pauses	18	9.18%
	2	Introducing extra pauses	15	7.65%
	3	Isolating problematic sentences	10	5.10%
	4	Multiple repetitions	7	3.57%
	5	Reading aloud without the recording	6	3.06%
	6	Highlighting faster parts	4	2.04%
	7	Increasing speed	4	2.04%
	8	Memorization	3	1.53%
	9	Gradually increasing speed	1	0.51%
	10	Relaxing the jaw	1	0.51%
	11	Read ahead while reading the script aloud	1	0.51%
	12	Reducing speed	1	0.51%
	13	Highlighting typically skipped words	1	0.51%
		Total	**72**	**36.73%**

To know where they needed to stop, the students marked the pauses (9.18%). This was followed by trying to mark the parts where so-called extra breaths could be taken (7.65%); that is, if the runs between two pauses were too long, the students reported adding small pauses where they inhaled again to finish the sentence. To address the problem of being unable to keep up with the recording, isolating problematic sentences and practicing them separately proved to be the most frequently used solution (5.10%). The fourth most frequent tactic was performing multiple repetitions of shadowing (3.57%), and the fifth was reading aloud without the recording to bring the shadowing up to a comfortable speed (3.06%). Apart from this, highlighting the parts where the speaker spoke faster and increasing the speed of the shadowing were equally frequent tactics (2.04% each). Finally, solutions such as memorization of the location of the fast parts (1.53%), gradually increasing the speed of the recording, relaxing the jaw when the speed was too high, trying to read ahead a little while reading the script during shadowing, reducing one's own speed if it was too fast, and highlighting skipped words were also used by some students (0.51% each). The next section addresses the general problems (see Table 27).

Table 27. Tactics for addressing general problems

Problem	Tactic Nr	Tactic used	Count	%
General improvement	14	Abundant practice to memorize the text	21	10.71%
	15	Dividing text into sections	9	4.59%
	16	Listening to recording multiple times	9	4.59%
	17	Recording oneself during shadowing	8	4.08%
	18	Whispering first	5	2.55%
	19	Over-practicing	3	1.53%
	20	Focusing on the difficult part only	3	1.53%
	21	Highlighting problematic parts	2	1.02%
	22	Recording oneself reading aloud	1	0.51%
	23	Reading the problematic sentence aloud several times	1	0.51%
	24	Treating the recording as if it were a song	1	0.51%
	25	Mental preparation for difficult parts	1	0.51%
		Total	**64**	**32.65%**

The tactics applied for general improvement (Table 27) were not related to one particular aspect of practice, but seemed to be general solutions to various types of difficulties. These included practicing so many times that students would eventually memorize the text (10.71%), dividing the whole text into two or more sections (4.59%), listening to the recording multiple times before even starting shadowing (4.59%), recording the practice sessions to spot mistakes (4.08%), not starting shadowing out loud but whispering first (2.55%); over-practicing and focusing on complex parts only (1.53% each), highlighting the problematic parts in the transcript (1.02%), recording oneself while practicing reading aloud and reading the problematic sentences aloud several times, imagining that the recording is a song with lyrics to make it easier to memorize, and mental preparation for the problematic parts (0.51% each).

As in the case of speed, isolated practice (4.59%) of problematic words was a tactic chosen by most students in the case of pronunciation-related problems (see Table 28). Some participants claimed that abundant practice eventually improved their pronunciation without extra focus on specific aspects (1.53%). Other tactics include phonetic transcription (1.02%), overdoing pronunciation, reading the text aloud without the recording, flexing the facial muscles to experience how the sounds are pronounced, memorizing the text so that the pronunciation of words does not cause problems, focused listening to observe pronunciation, and watching videos to improve the pronunciation of problematic consonants (0.51% each).

Table 28. Tactics for addressing pronunciation- and stress-related problems

Problem	Tactic Nr	Tactic used	Count	%
Pronunciation	26	Isolating problematic words	9	4.59%
	27	Abundant practice	3	1.53%
	28	Phonetic transcription	2	1.02%
	29	Overdoing pronunciation	1	0.51%
	30	Reading aloud	1	0.51%
	31	Flexing the facial muscles	1	0.51%
	32	Memorizing the text	1	0.51%
	33	Focused listening	1	0.51%
	34	Watching videos	1	0.51%
		Total	**20**	**10.20%**
Stress	35	Marking stress placement	11	6.63%
	36	Focused listening	1	0.51%
	37	Focused practice	1	0.51%
	38	Using a dictionary	1	0.51%
		Total	**14**	**8.16%**

Stress placement also caused difficulties for some, and the most popular tactic used to overcome any stress-related problem was to mark stress placement on the transcript (6.63%). Further solutions included focused listening to observe stress placement, focused practice of stress placement in speech, and even double-checking whether the stress markings were correct when noticing a lack of improvement (0.51% each).

The next cluster (Table 29) comprises tactics used for addressing intonation, as well as tactics used for improving students' overall performance, tactics that belong to the category other, and addressing anxiety problems.

Table 29. Tactics for addressing intonation-related problems, performance, anxiety, and other

Problem	Tactic Nr	Tactic used	Count	%
Intonation	39	Marking intonation	7	4.08%
	40	Abundant practice	2	1.02%
	41	Lowering voice to hear intonation better	1	0.51%
	42	Focused listening	1	0.51%
	43	Watching videos	1	0.51%
		Total	**12**	**6.63%**
Performance /Delivery	44	Imagining the speaker's personality or the situation	3	1.53%
	45	Acting	2	1.02%
	46	Introducing hand gestures	1	0.51%
		Total	**6**	3.06%
Other	48	Asking for help	3	1.53%
	49	Smiling to adjust the pitch	1	0.51%
		Total	**4**	2.04%
Anxiety	47	Ignoring deadline	1	0.51%
		Total	**1**	0.51%

Regarding intonation, the tactic used most often was to mark the intonation on the transcript (4.08%), followed by practice, which led to improvement in intonation (1.02%), focusing on intonation, sometimes by shadowing with a lowered voice to hear the intonation better, and watching general videos on intonation (0.51% each). A category that only a few participants mentioned was performance-related tactics (3.06%), namely, that to place themselves more in the situation, participants imagined that they were the person speaking and they were participating in an actual interview (1.53%) or that they were acting (1.02%). One participant mentioned introducing hand gestures that facilitated their performance (0.51%).

The “other” category includes two tactics (Tactic 48 and 49) unrelated to any of the categories mentioned above. First, three students said that when they were feeling stuck in their progress, they sought a fellow student for advice and reassurance, which helped them move on with practice and improve, or a family member to listen to them and give them feedback (1.53%). The second is related to pitch. One participant mentioned having noticed that their pitch changed slightly by smiling, and that they sounded more like the speaker (0.51%). Finally, anxiety arose once among the tactics (0.51%), where the student mentioned that not focusing on the deadline made it easier for them to practice.

4.9.4 Pronunciation learning strategies used in connection with a specific task, Shadowing: Discussion

In this section, the discussion of problems follows the order presented in Tables 24 and 25, with matching tactics applied to address the problems. As they do not belong to any particular problem, general improvement, performance/delivery, anxiety-related tactics, and non-reported strategies will be discussed in a final, separate sub-heading (4.9.4.6).

4.9.4.1 Speed- and pause-related problems and tactics

When students started the shadowing process, more than one-third of the diaries contained entries that indicated difficulties with the speed of the recording, which was also a principal reason for negative reactions in Sumiyoshi and Svetanant's (2017) study. The impression of difficulty seems to stem from the fact that, as part of long interviews, both recordings contained sentences with long runs between pauses. Another problem was that they had to learn where the pauses were due to the uneven distribution of the length of runs (which participants had not yet mapped out at the beginning of their practice). Another phenomenon that could cause difficulties with speed was pointed out by one comment (see Excerpt 78).

> *(78) Imitating the speaker was again almost impossible after the first attempt because the speaker used chunks of words, which is normal when someone speaks, but to imitate the speech to the fullest, I also have to imitate those pauses and chunks of words that she did not finish.*

In Excerpt 78, by "chunks," the student seems to be referring to false starts, pointing out that while false starts are a natural part of speech, they are very unnatural to shadow for someone who is not in the situation. Indeed, spontaneous speech is full of fillers, repetitions, and false starts; in American English, it has been reported that six out of a hundred words are disfluent (Shriberg, 1994), and in British English, 36% of conversational speech is repetition (Lickley, 1994). Lai et al. (2007) suggested, however, that "listeners use strategies to discard disfluencies in order to process speech successfully" (p. 2345). It follows from Excerpt 78 that one tends not to pay conscious attention to these disfluencies when listening to spontaneous speech, even though they are very typical. Also, it is understandable why students lament having to shadow these particular phenomena in the recording if otherwise they would discard it when trying to understand speech. Therefore, disfluencies are further speech phenomena to which shadowing has the potential to draw attention.

As the long runs made it difficult to inhale where one would normally have wanted to, breathing was perceived as a problem, with many participants indicating observations such as "She speaks so fast I can't breathe". However, a smaller percentage of students noticed that the above phenomenon is not entirely a problem of breathing but rather of pause distribution, which are the actual words they used. The fact that students struggled with pausing at places where pausing may have come naturally for native speakers underlines the already-known phenomenon that there are differences between the pause distribution of native and non-native speakers. As research suggests, owing to a lack of automatization, non-native speakers speak slower and make longer pauses more frequently than native speakers (Riggenbach, 1991; Temple, 1992; Towell et al., 1996). Highly fluent and native speakers tend to make pauses at syntactic junctures, whereas less fluent non-native L2 speakers pause within boundaries, too, which are perceived as hesitation pauses by the listener (Deschamps, 1980; Freed, 1995; Kahng, 2014). The observation in connection with breathing signals a gap in many students' ability to grasp and name concepts related to L2 speech, which is natural given that at this point in their studies, they had not been required to analyze speech from a linguistic perspective. The final problem mentioned was that, while practicing, they felt like they had to skip some words, a natural consequence of wanting to keep up with the recording.

As Table 26 shows, students relied on various tactics to solve the problems mentioned above, such as isolating sentences and practicing them separately, repeating not just the sentences but also the whole problematic part multiple times, introducing extra pauses in order to break up too long sentences, colors to highlight the parts in the text that they perceived to be faster, turning the recording off and reading the problematic part or even the whole text aloud, at their own pace, and playing with the speed in two different ways: in four cases, students tried to read even faster than the recording so that the original felt slower compared to it, and in one case, a participant applied the tactic of slowing the recording down with software to a pace that they found suitable and went back to the original speed only after becoming comfortable with the slower version. In one diary, memorization was mentioned as a solution to speed-related problems. This method of shadowing is called *post-shadowing* (Hamada & Suzuki, 2022), that is, shadowing only after learning the content, enabling one to focus on speed-related issues instead of individual words. Another diary mentioned that they found consciously relaxing their jaw useful for practicing faster parts and, finally, reading ahead, which, according to one student, meant that while following the script, the student was trying to look not only at the part of the text being shadowed, but also to keep the upcoming part in their focus so that they knew what was coming next. Most of the tactics reported here are subsumed under the category of

cognitive strategies because the material was analyzed and manipulated (highlights, transcript manipulation/notes, and recording manipulation), and reading aloud and repetition occurred. Pawlak (2008) and Pawlak and Szyszka (2018) also noted a preference for cognitive strategies among learners.

4.9.4.2 Pronunciation-related problems and tactics

The second most frequent problem after speed was pronunciation. As Hamada and Suzuki (2022) note, shadowing can potentially improve pronunciation features if learners notice their weaknesses and improve them through shadowing. Although some students did not specify which words caused them problems, others named the phrases ("invisible disability," "if I'm angry, if I'm cranky," "sick child," "a catch-22 situation," "the 90s") and the words that they struggled with (that, awareness, opportunity, delivery, responsibility, deathbed). However, in some cases, it is possible that the actual problem was not pronunciation but rather stress-related (e.g., in the case of invisible disability, awareness, opportunity, delivery, responsibility), as none of them contained consonants that would typically be difficult for a speaker with L1 Hungarian (cf. Bloem et al., 2016; Piukovics, 2021). In Hungarian, word-initial stress is characteristic, and if anyone tried to say "invisible disability" with the incorrect stress pattern at high speed in fluent speech, they would likely experience problems with it. These difficulties could stem from the Hungarian students' tendency to omit weak forms or even disregard English stress patterns (Piukovics, 2021). In addition, the quick succession of sibilants in "sick child" and "catch-22 situation", the voiceless dental fricative /θ/ in "deathbed", and the second /n/ in "nineties" could also prove to be difficult in fast speech. Two students named the consonants they had difficulty pronouncing, namely /t/, / θ/, and /r/; one mentioned that, for some reason, they regularly used a different word from what they were supposed to. In one diary, a student reported that despite several practice sessions, they had a problem with vowel length, which is a remarkable example of how shadowing increased their awareness of this phenomenon.

As in the case of speed problems, isolating problematic words appeared to be the most popular tactic in pronunciation practice (Table 28). Some students also mentioned that repeated shadowing seemed to resolve their pronunciation problems. If the problem did not disappear, they turned to tactics such as phonetic transcription or pronouncing problematic words much more prominently or dramatically, so that they felt how the word was uttered. With phonetic transcription, students unconsciously used elements of *IPA-shadowing*, which indicates

shadowing with transcription in IPA form or the combination of the text and IPA transcription (Hamada, 2018). This type of shadowing, as Hamada notes, improves comprehensibility and segmental features of pronunciation. One student mentioned reading aloud without listening to the recording themselves as a solution to improve pronunciation, as they could hear themselves better this way. Conscious attention to the facial muscles was another tactic one student mentioned, and another noted that trying to memorize the text could help them solve their pronunciation problems. One student mentioned that they tried listening to problematic words repeatedly, and another reported looking for videos to learn more about how the sounds she was struggling with were supposed to be pronounced. Working on pronunciation mainly required cognitive strategies, including detecting mistakes and practicing transcriptions, repetition, and reading aloud, but compensation and memory strategies also appeared.

Despite the abundance of reported tactics, it remains unclear whether students eventually overcame their difficulties. Only three students indicated successful results with a specific pronunciation tactic: repeated practice (Tactic 27). Hamada and Suzuki (2022) suggested that teacher feedback can help students recognize their weaknesses. Pair-monitoring shadowing is another possible source of feedback for students during the shadowing process. However, if shadowing is self-monitored through recordings, as Hamada and Suzuki (2022) suggest, it allows participants to review and analyze their performance as well as develop listening skills (Hamada, 2015). Although measuring improvement is outside the scope of this dissertation, some student diaries provide evidence of awareness of their pronunciation problems during practice. To gain further insight into participants' perceived difficulties, future investigations could ask students to specify the nature of their pronunciation problems in detail, which could highlight the exact source of the problem and provide insight into why students felt they struggled with it.

4.9.4.3. Intonation-related problems and tactics

Many students noticed that they had difficulties imitating the speaker's intonation, but did not specify what they struggled with. Therefore, the shadowing task seemed to reinforce many students' belief that intonation can cause difficulty (Study 2). It is outside the scope of the present study to compare the intonation of the English and Hungarian languages (for a detailed description of the characteristics of Hungarian intonation, see Fónagy, 1998; for a comparison of Hungarian and English intonation, see Varga, 2002), but two important observations are worth mentioning in connection with the issue. First, Varga (2002)) points to the importance of

language-specific prosodic limits in foreign language teaching since “the average pitch range of English intonation is wider than that of Hungarian intonation” (p. 21). Second, “the intonation contours that reflect attitudes are conventional, and so they may differ from language to language in form or meaning” (2002, p. 23); that is, even if the same intonation patterns exist in both languages, they may not convey the same attitude. It is of utmost importance, then, to call students’ attention to potential differences, showing them in what ways they could be misunderstood should they ignore these differences. It is possible that students who indicated intonation as problematic did not engage with the topic on a deeper level during their studies and only now did they notice these differences between their L1 and L2.

The main tactic applied for improvement was marking intonation, which was indicated in five diaries. In a course taught to students during the semester preceding data collection, intonation and its types were briefly introduced in connection with tag questions. However, it is uncertain whether these five students had the requisite knowledge of intonation markings. Nevertheless, they indicated that they used some type of marking to signal to themselves how intonation changes in a particular place. Practicing multiple times seemed to solve intonation-related problems for two students. One student applied the tactic of lowering their voice while shadowing to hear intonation better, and another simply tried to focus on intonation by listening to problematic parts several times. The same student who indicated that they tried to find videos on the internet once again reported using the same tactic for intonation. Observing and noticing the differences between Hungarian and English intonation and then working on their intonation indicates a cognitive strategy that students were required to use here, which in turn made them reuse or invent ways of signaling intonation changes in their transcript. Marking intonation for themselves (Tactic 39) and repeated practice (Tactic 40) were reported to have successfully improved students’ intonation.

4.9.4.4. Problems with specific sentences and stress placement

Some participants reported problems with a specific sentence (see Table 23). However, there was no sentence or part that everyone unanimously complained about, giving the impression that what feels difficult in an exercise like this is decided subjectively, based on whether the person who performs the shadowing normally speaks slower, has problems with pronunciation, or stress placement. Students indicated where their problems occurred, which, in most cases, appeared to be speed, pronunciation, and intonation. However, the students did not always clearly state why they struggled with a specific sentence or part.

The other problematic aspect was stress placement in general, and one student named the stressing of specific words problematic. The differences between Hungarian and English stress placement have already been referred to in Study 2. Stress placement is not always equally crucial for intelligibility; however, evidence suggests that it plays an important role. For example, Jenkins (2002) found that misplaced nuclear stress can affect intelligibility in English as a lingua franca (ELF) interaction. However, stress shift in noun-word pairs, a topic often featured in coursebooks as a typical pronunciation problem, has little impact on intelligibility (Cutler, 1986). Therefore, although stress might not impact impressions and intelligibility in the way intonation does, it could still cause difficulties, so it is important to raise students' attention to how stress placement in English differs from their L1 stress placement. Eleven diaries mentioned stress as an area to improve, and shadowing was useful for this purpose in the present study. The strategies used included cognitive, metacognitive, and compensatory strategies. The main tactic applied was marking stress placement; however, one student indicated that they also tried listening to how the word was stressed multiple times. Another student noted that they practiced the problematic part until they felt it was acceptable. The last tactic mentioned was to use a dictionary to check the accurate stressing of a given word.

As in the case of intonation, students went through the phases of noticing that there was a difference between the stress patterns of their L1 and L2, or if they already knew it, they still had to identify the problems and apply cognitive, metacognitive, and compensation strategies to overcome them. It is not entirely clear to what extent they were able to mark alone or whether they used a dictionary, but they did not report this information. Still, it is clear from some diaries that many students became more aware of stress patterns in English and felt the need to improve their stress placement by practicing shadowing.

4.9.4.5 Problems with shadowing and performance

The last two categories include problems that seem to be connected to the shadowing task and process in particular. Talking and listening simultaneously is an inherent difficulty in shadowing, and anyone who has not tried simultaneous interpreting before will likely find it new and unusual. However, only three diaries mentioned this. Another difficulty mentioned was that with all the minor details, the students indicated for themselves in the transcript, paying attention to them became overwhelming at one point. This could also make the students realize the many facets of imitating a one-minute segment of someone else's speech.

The last category, related to performance, was not mentioned by many of the students. Still, it deserves a place in the list of difficulties mentioned because it is not only the technical aspects teachers should consider when assigning a task like this, but also the emotional ones. For example, two students mentioned that the activity required them to listen to themselves multiple times, and that they found it difficult to get used to it. Another interesting aspect was raised by two other students, who pointed out that when shadowing, the background audio gave confidence and support that they found it difficult to let go of to start reading aloud alone or recording themselves. Another comment related to the desire to sound natural. What this means for the student is not specified, but what they possibly meant here was sounding effortless rather than forced. Finally, one student reported being frustrated that no matter how practice went that day, they still had the feeling of being able to improve later and never really felt satisfied with their progress.

Three students mentioned the difficulty in imitating the American/British accent. These students realized that they were not simply struggling with general pronunciation problems. However, they also saw it as a goal to imitate the speaker's accent. Munro and Derwing (2011) argued that the amount of emphasis on accentedness is not justified, as accent does not necessarily hinder intelligibility. It has been demonstrated that speakers can be intelligible and comprehensible, even with a strong accent (Derwing & Munro, 1997; Munro & Derwing, 1995). As indicated by Suenobu et al. (1992), a possible reason for this is that context helps a great deal in comprehensibility, even when speech is accented. Despite this, language learners still seem to be attracted to the idea of sounding like a native speaker, as the results of the present study demonstrated, along with other studies (Kang, 2010; Scales et al., 2006; Timmis, 2002). By nature, shadowing has the potential to reinforce students' desire to imitate accents. In fact, two students indicated that they started imitating because of the shadowing task, which they thoroughly enjoyed. One of their comments can be seen in Excerpt 79. However, the participant in Excerpt 80 wondered whether their imitated accent could be transferred to other contexts.

(79) This is a great way to acquire British or American pronunciation.

(80) I'm a little bit afraid that I won't be able to use this accent later, but now I find it interesting to learn.

However, some diaries pointed out that what shadowing made them realize was that perfectly imitating an accent was simply not possible (see Excerpt 81):

(81) Personally, I think that it is almost impossible to imitate an actual native speaker, especially with all her words or parts of words and where she takes breaths, and where she pauses. I know that pronunciation and intonation is important, but it is not the most important component of language learning, in my opinion.

It is difficult to predict what reaction the task elicits in students, and whether it can change their beliefs. However, it could undoubtedly urge them to reconsider their goals regarding the desire and possibility of sounding native-like.

In the final category, the lack of punctuation in the transcript provided to participants was indicated as a problem in a single diary. As mentioned above, the transcript was a blank worksheet in the form of non-punctuated text that the students could mark according to their own needs. Pointing this out as a difficulty implies that the student either did not enjoy working on this aspect of the task or that punctuation marks could carry helpful information regarding where the pauses were in an exercise like this. Another phenomenon that appeared here was the rhythm of speech. Nolan and Jeon (2014) differentiated between two types of rhythm: coordinative/periodic and contrastive. The first type is a temporal view, one that is regular and can be likened to heartbeat, sawing, or the kind of Western music we can tap or clap to, and in speech, this "would arise from the organization of sounds into groups marked by phonetic cues and synchronized in time with the objective regularity" (para 3). Contrastive rhythm, on the other hand, is "the alternation of stronger and weaker elements (…) and in the case of a language such as English, it is natural to map this 'non-temporal' definition of rhythm onto the alternation of stressed and unstressed syllables" (2014, para 4). Although it could be assumed that what the students referred to in their diaries was the contrastive rhythm of speech, based on the tactics they reported using to solve their problems, they may have, in fact, meant the tempo of speech. Participants seemed to struggle with places where the tempo was faster or slower, and until they were able to identify and memorize the problematic parts, they referred to them as difficulties.

4.9.4.6 General, non-reported, and performance-related tactics

The last subsection discusses general, non-reported, and performance-related tactics. The tactics labeled here as general tactics were not specifically indicated to have been used for solving a particular problem, but were related to cognitive and metacognitive strategies applied to manage and facilitate the shadowing process.

When one starts shadowing, not only do they read the text but they also try to adapt to the rhythm and speed of the original speaker's speech. This can indeed be very difficult, and those who are not ready to start reading at the risk of skipping words to stay on track may choose another approach: whispering. Doing this gave students the feeling that they were already trying, but did not have to listen to their imperfect performance. This stage of the shadowing practice is referred to as *Mumbling* (Kadota & Tamai, 2004), which, in the initial stages, "prepares students to practice with louder and clearer mouth movements" (Hamada & Suzuki, 2022, p. 5). Another initial tactic was listening multiple times before starting shadowing, which was probably used by cautious students. The next tactic applied belonged to the category of cognitive strategies, namely recording oneself. Students were only required to record themselves when the final performance was ready; however, some students realized that frequent recordings gave them immediate feedback on where they were in the process. One student indicated that they gradually discovered new problems because of these recordings that they may not have heard otherwise. As a result, they had to consider further tactics to improve some aspects of their performance.

Five diaries indicated improvement related to a specific problem but never specified how they achieved that improvement, and two diaries did not mention anything that could be identified as a strategy but merely noted actions like "I recorded myself" and "I uploaded the recording." Important information was lost in these diaries, which is why there is a need to further clarify what students must do during such an exercise. Some students could still prove uncooperative, but in the present case, the diaries implied that some students misunderstood what their task was in sharing the details of their practice sessions; they may not have practiced too much and did not have information to share; they did not fill in the diary immediately after the practice sessions and were unable to name tactics in retrospect; or they were so focused on the final product that it did not occur to them to reflect on the tactics at all.

Three students mentioned two interesting ideas in connection with the performance/delivery of the task: in order to perform better, they tried to imagine the speaker's personality or the communicative situation (Excerpt 82), and another student mentioned that

they imagined acting, pinpointing tactics that can be considered meta-cognitive. One participant even noted the absence of a visual aid that would have helped identify with the speaker (Excerpt 83).

> *(82) In my opinion, shadowing requires a form of immersion that no other task in the uni requires. To improve my recordings, I had to imagine myself speaking with the radio hosts and whatnot.*

> *(83) Seeing the video instead of the audio only would have been helpful, what the person looks like and their facial expressions.*

These students seemed to have taken the purpose of shadowing to another level, pointing out that imitating speech also means imitating and identifying with situations and personalities.

Finally, anxiety surfaced as well, although only in a single case. One student mentioned that they were frustrated by the deadline, and only by ignoring its existence were they able to practice more freely. Anxiety was not dominant in this part of the diaries; however, it generally loomed over the task for many students, which became apparent from how they reported on their first and overall impression of the task, an aspect of the diaries that was reported in a previous study (Baranyi-Dupák, 2022a). Many students handed in exceptional performances in which they shadowed the original speaker almost perfectly, and it was clear from the diaries that, in many cases, plenty of work went into the final product. Many boundaries were pushed to improve, and this was not necessarily a pleasant experience for certain types of learners. The main difficulty with shadowing is that it is not a task that can be easily broken down into clear steps, and the performance can vary daily, sometimes even depending on one's mood or level of tiredness. For this reason, it is not easy to decide when practice can be considered enough, and one can safely say that the final product will no longer improve. Tamai (2002) and Shiki et al. (2010) have indicated a ceiling effect in shadowing after four or five trials in, as also demonstrated by the participant in Excerpt 84.

> *(84) This was a good exercise, but I did not enjoy it by the end of it. I can see the progress in my accent and maybe my tempo, but the fact that I was unable to do the shadowing properly after so many attempts made me very anxious. My "best attempt" is barely decent, but I doubt that I could do better than that.*

An interesting observation at the end of the analysis was that only three students reported what could be considered social strategies (Tactic 48), and there were no evident affective strategies. The humorous wordings of some diaries, which indicate a more relaxed and less anxious attitude, could be viewed as an affective strategy to ease anxiety (Excerpts 85-88).

(85) Acting is not for me, that's for sure.

(86) If I had hair, I would have ripped some out.

(87) Sadly, now I know that I will never be able to become a rapper.

(88) Sometimes, I do not even understand myself, and I need to laugh at myself.

However, it is not clear whether the use of humor was a recurring characteristic of the learner in all areas of learning, or only a temporary approach applied specifically to this task. In addition, only three students reported having used any strategy or tactic that could be considered social (for example, asking for help from friends and family members). There are two possible reasons for this. First, the students indeed considered shadowing to be an individual task and treated it as such, never contacting their peers about the problems they encountered, or if they ever did, they may not have reported it in their diaries (except for the three mentioned cases). Another reason is that the first two rounds of data collection occurred during the pandemic when everything happened online, and socialization between students was minimal or much less than usual. This indicates that, although under regular circumstances, they might have talked about their practice and experiences to others or asked for help, they simply did not have as many opportunities to do so because this special circumstance. In the last year of data collection, one participant (Excerpt 89) mentioned talking about the task to other people (however, it was in the overall impressions section of the diaries, not among the tactics).

(89) That was a great exercise to do because it became almost my daily routine to practice the shadowing; I told everyone about it, and a lot of people found it strange to do but admitted that it must be challenging.

Future research could show whether data collection carried out at a time when in-person learning occurs would yield different results in this respect.

4.10 Summary of Study 4

Regarding the reported ways of improving pronunciation in the questionnaire, the results indicated that most participants made a conscious effort to improve their pronunciation. They mostly relied on cognitive and memory strategies to achieve this goal. More than one-third of the reported tactics involved watching and listening to English-language media. While some participants used a wider range of tactics, many relied solely on listening. Repetition was

also a common tactic applied by the participants. These results indicate the necessity of familiarizing students with a wider range of tactics that could lead to more active pronunciation practice.

The shadowing diaries made it possible to gain insights into various aspects of the shadowing process that might not have been revealed in an in-class pronunciation training session. Although in several cases it was clear that students' phonetics- and phonology-related concepts were not yet crystallized, some diaries presented clear signs of students becoming more aware of certain pronunciation-related phenomena and their meaning, such as stress patterns, intonation, and pronunciation issues connected to certain vowels and consonants. Students also seemed to have become more aware of the difficulties and possibilities for improving these aspects of language. In some students, shadowing also initiated reflections on what it means to imitate someone's speech and whether imitating a chosen accent is an achievable goal.

With regard to strategies, students seemed to rely most on cognitive strategies and, to a lesser extent, metacognitive strategies (with some examples of memory and compensation strategies), which aligns with previous findings. The preference for these strategies could be attributed to the nature of the task, as it requires plenty of repetition; reading aloud; the isolated practice of words, phrases, or sentences; focus on pronunciation and intonation rules, and planning. More important were, however, the variety of tactics (some very specific to the present task) participants were required to employ, some of which certainly equipped them with the experience necessary for further autonomous practice. Their hands-on experience with relying on various strategies could enable the re-application or transfer of these strategies to other areas of pronunciation learning and help them better understand the related theoretical issues.

Finally, conscious reflection on the success rate of strategies and tactics could aid students in their future teaching practice and hopefully provide an incentive to make pronunciation improvement a regular goal in their future classrooms. As was evident during the analysis, there were several cases where the information in the diaries was not entirely clear or could be interpreted differently. In addition, there is always the possibility that information is not entered or lost because it is not written down during the practice session. However, further reflections on diaries from the students in the form of interviews could open a broader perspective on how they experienced the task and how conscious they were of the strategies and tactics they applied, as well as what practices they would keep in the future based on their experience.

5. Conclusion

5.1 Introduction

This study provided a detailed account of Hungarian teacher trainees' attitudes and beliefs about accent and pronunciation. It also shed light on the various aspects of their pronunciation learning experiences and practices. The choice of teacher trainees as participants provided a threefold perspective revealing recent experiences in high school, beliefs and attitudes as language learners and language majors, and emergent teacher cognition of pronunciation learning and teaching. The study contributed to our understanding of two areas that receive less research attention, particularly within the context of Hungary: beliefs about pronunciation learning and teaching, and the use of pronunciation learning strategies during a specific task.

Based on the questionnaire results, Study 1 revealed the participants' preference for listening to British accents. Many saw it as a symbol of elegance, beauty, confidence, eloquence, softness, formality, and articulateness, which they connected with affective terms and standard ideology. By contrast, American accents were associated with ease, pleasantness, and calmness. The participants also demonstrated a desire to imitate accents, with a preference for British accents closely followed by American accents. The data revealed that the reasons for imitation were familiarity, amusement, personal preference, or perceived benefits. The study also explored why some participants chose not to imitate accents. The second part of Study 1 focused on participants' beliefs about the importance of having a native-like accent from two perspectives: for themselves and a learner of English. The change in perspective revealed different beliefs, as participants considered it necessary for themselves because of their teacher identity and the perceived superiority of the native-like accent. However, they were more divided when expressing their general beliefs regarding language learners, emphasizing the importance of comprehensibility and other aspects of the language rather than sounding native-like. A small minority of students recognized the acceptability of an L1 accent and the complexity of the question. Finally, participants also believed that non-native speakers of English could achieve a native-like accent and control their accent with concentration and conscious imitation.

Study 2 revealed general satisfaction among the participants regarding their pronunciation skills, albeit with some areas identified for improvement. The main reason for dissatisfaction was the presence of a Hungarian accent. Although suprasegmentals were considered challenging, it is possible that the difficulty of vowels was slightly underestimated.

The impact of spending time in the country where the L2 is spoken, interaction with native speakers and English language media, and individual motivation were highly regarded in enhancing pronunciation. In contrast, instructed pronunciation was valued less despite participants acknowledging its significance.

The findings of Study 3 on students' experiences indicate the need for additional and more specific feedback on pronunciation in classroom settings. Negative feedback was centered around students' accent. Participants reported relying on English-language media to improve their pronunciation. They did not feel that their early education played a significant role in this regard, with many of them citing high school or university as their first opportunity to focus on pronunciation.

Study 4 revealed the strategies employed by the participants in terms of pronunciation improvement, indicating their preference for cognitive strategies. It also analyzed the pronunciation learning strategies used during the shadowing task. The participants' diaries provided insights into their challenges during practice and the solutions they employed. The data indicated an increased awareness of pronunciation phenomena and the challenges in their improvement. It also helped participants realize the complexities of accent imitation, raising doubts about its necessity in some while motivating others to continue imitating. While cognitive strategies were the most commonly used, participants employed diverse techniques to overcome their difficulties.

5.2 Limitations of the study

Exploring beliefs and attitudes is inherently challenging. No single data-collection tool can precisely capture what teachers believe or think. In addition, each tool has limitations, and questionnaires, especially open-ended questions, can be discouraging for some individuals. Despite this, questionnaires were essential to gain a detailed elaboration of participants' thoughts, which provided more insight into the nuances of their beliefs and attitudes. Although not everyone provided detailed answers to the open-ended questions, most participants did. However, follow-up interviews with participants could have offered even more profound insights into ambiguous answers and more information in cases where the answers were brief.

One of the main limitations of using diaries is the commitment they require. Students must dedicate a significant amount of time and effort to keeping their diaries up-to-date, which can burden those with busy schedules or competing priorities. However, the deadline set for the

shadowing task, and the COVID-19 lockdown situation, when most students were at home, may have facilitated regular entries. Another limitation of using diaries is that they focus on events and experiences that have already taken place. If students did not take the time to reflect on their daily practice and record it in their diary immediately, important information may have been lost or forgotten over time. Furthermore, when used as an in-class assignment, there is a risk that students will be tempted to include information intended to impress their instructor. It can be difficult to verify whether the shadowing activity was completed as required and with what regularity, which can undermine the effectiveness of this data-collection tool. However, in the case of learning strategies, and more specifically, in connection with the shadowing task, in-class solutions were not feasible. Only by providing participants with the opportunity to work alone on shadowing was it possible to gather data on their individual solutions to the challenges posed by shadowing (unaffected by the teachers' input).

The final limitation is generalizability. The participants were only second-year teacher trainees at the University of Szeged; thus, the findings may not be generalizable to other EFL contexts or other Hungarian universities. Furthermore, the study reflects teacher trainees' beliefs and attitudes at this stage of their studies before they have had the opportunity to gain teaching experience and specialized knowledge of matters of accent and pronunciation. As such, the findings are of primary relevance for pronunciation teaching and teacher education, and these limitations should be considered when comparing the results of this study to other contexts.

5.3 Implications for teacher education

The findings have important implications for teacher education. Although achieving a native-like accent is generally neither necessary nor feasible, participants expressed a strong preference for it. Although university courses can change this viewpoint, the literature suggests that this potential is uncertain (Weinstein, 1990; McDiarmid, 1990). More importantly, the data show that most teacher trainees have clear preferences and specific beliefs regarding accents and pronunciation at this stage of their studies, with reasons for their choice. The fact that some students do not have views on these issues is also noteworthy, indicating a potential lack of awareness of questions on accent and pronunciation, a lack of willingness to reflect on these issues, or a lack of motivation or interest in pronunciation improvement. It is crucial to consider these beliefs when developing curricula, uncover their underlying reasons, and discuss the

potential impact of these preferences on their future teaching, the consequences of teachers imposing their preferences on their students, or the reasons for a lack of interest and views on these matters. Only after students fully comprehend the complex factors that influence accent, accent choices, and pronunciation (linguistically, psychologically, and sociologically) can they be expected to make informed decisions about the chosen language input and pronunciation teaching techniques implemented in the classroom, while also considering their students' preferences regarding accents. Furthermore, teachers must understand the impact of their pronunciation-related feedback on students, as pronunciation is a sensitive issue (Guiora et al., 1972). Teacher education should provide students with information that helps them deliver nuanced, accurate, and personalized feedback that considers individual students' abilities and goals.

The remaining findings are particularly valuable to teacher trainers. Although participants demonstrated awareness of the areas in which their pronunciation could be improved, they still relied mainly on passive strategies (e.g., listening) to do so. Therefore, it is essential for teacher education programs to prioritize pronunciation teaching, similar to other skills such as grammar, reading, listening, and speaking. Although pronunciation improvement requires active involvement, it is often treated as an individual responsibility. This is reflected in participants' firm belief that studying abroad, exposure to native speakers, personal motivation, and English language media would impact their pronunciation the most. In contrast, targeted interventions, for example, in the classroom, were less emphasized, despite evidence that pronunciation can be improved by instruction (Saito & Plonsky, 2019), by non-native speaker teachers as well (Levis et al., 2016). Teachers must understand their role in pronunciation improvement if they are to be effective in helping students. Although the participants demonstrated an awareness of the difficulty of teaching intonation and stress before formally learning about them, they may have underestimated the difficulty of vowels. Teacher education can provide valuable support by helping teachers identify and address these challenges. When teachers thoroughly understand the nuances and acquire the skills to tackle such issues, the perceived difficulty can be transformed into areas of improvement rather than be neglected due to a lack of knowledge and confidence regarding the solutions. Participants' recognition of the importance of pronunciation teaching in the classroom and their desire to improve their own pronunciation indicated their willingness to learn. They need guidance to effectively incorporate pronunciation teaching into classroom activities.

The primary focus of shadowing research, as discussed in Section 2.3.6.3, has been to determine whether and how shadowing can enhance listening, fluency, and pronunciation. To

this effect, quantitative methods that measure progress and skill development among students are prevalent. However, data collection for these purposes can be challenging, requiring lab equipment, storage, and speech analysis software for the analysis of audio files, as well as the inclusion of raters to determine the improvement of accentedness, comprehensibility, and, intelligibility. Fewer studies have investigated the subjective experiences of students who engage in shadowing, even though it requires resourcefulness as an individual task, offering insights into pronunciation learning strategies. Pawlak and Szyszka (2018) suggested that researchers explore PLS use in specific tasks to add variety to the existing findings. With the use of diaries written by students, the present dissertation focused on the strategies and tactics applied during completing a specific task, shadowing. However, the shadowing task has been found to have numerous further advantages for both teachers and students. It could provide valuable information to teachers about the areas of difficulty and challenges faced by students as well as their preferences regarding accents and preferred study methods. For students, shadowing was a novel and engaging exercise that elicited more complex information about their learning than simply asking students about it. This can help them become aware of the pronunciation phenomena they may struggle with, especially if they have to record themselves. It could also allow them to reassess their desire to imitate a specific accent. Additionally, it can activate a range of strategies, encourage self-reflection, raise awareness of pronunciation phenomena, and encourage the reconsideration of one’s language learning goals, especially if there is time to discuss shadowing experiences with students.

5.4 Suggestions for future research

The study revealed that most students did not remember receiving meaningful pronunciation training during their early years of education. To better understand this observation, further studies should investigate whether it is specific to this population or reflects a more general trend. Additionally, research could focus on exploring the pronunciation teaching habits of Hungarian teachers in elementary schools and their beliefs and experiences regarding pronunciation training. It could also be beneficial to further investigate aspects of participants' pronunciation learning experiences, the feedback they received, and their beliefs about pronunciation feedback. Pronunciation feedback is often overlooked but is a crucial aspect of learning.

To assess the effectiveness of specialized courses or teacher education on students' beliefs and attitudes toward pronunciation, these participants could be surveyed later to monitor any changes in their beliefs as a result of attending Phonetics and Phonology or Sociolinguistics classes. A further point of assessment could be the year they start their teaching practice and gain experience with learners. In contrast, conducting research with first-year university students could yield interesting data on early teacher beliefs about entering university, as their high school experiences are more recent at this stage.

Regarding the shadowing task, follow-up interviews could shed more light on whether students found shadowing helpful in improving their pronunciation and explore how it may have shaped their beliefs or provided them with strategies that they later relied on. Moreover, the study or its parts could be replicated in other EFL teacher education contexts, or in Hungary.

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Appendices

Appendix A: Questions used in the study during the three years of data collection

Question topic	Question Nr	Question	Number of participants who answered the question
Speaking/fluency	1	On a scale of 1-6, how fluent a speaker do you consider yourself to be?	128
	2	When you speak, what is the most challenging for you?	128
	3	What are the aspects of your speech that you think you should improve?	128
Accent and Pronunciation	4	Do you have a favorite accent to listen to? Why do you like it?	46
	5	Do you think it is important for a language learner to try to sound native-like? Why?	128
	6	Is it important for you to sound native-like? Why?	127
	7	Do you think a language learner can ever attain a native-like pronunciation?	82
	8	Do you think can control your accent?	78
	9	Is there an accent you consciously try to imitate?	128
	10	Would you say your English pronunciation is good?	82
	11	What do you consider to be the most challenging aspect of pronunciation?	65
	12	Have you done/do you do anything to improve your pronunciation consciously?	128
	13	Have you ever received a positive or negative comment on your pronunciation?	125
	14	Evaluate the role of the following factors in the improvement of pronunciation.	81
	15	What do you think contributed to your pronunciation up to now?	127
Pronunciation teaching	16	If your teachers have dedicated time to pronunciation in English, please explain how.	44
	17	Do you think it is important to teach pronunciation in school?	127
	18	Teaching a group four times a week, how much time should be allotted to teaching pronunciation from a 45-minute class, and how often?	121

Appendix B: Questions as categorized and discussed in the present dissertation

Question number	Summary of the data (studies and associated questions)	Number of participants who answered the question
Study 1 Attitudes to and beliefs about English accents and pronunciation		
Part A: Attitudes to English accents		
1	Do you have a favorite accent to listen to? Why do you like it?	46
2	Is there an accent you consciously try to imitate?	128
Part B: Beliefs regarding the necessity and the attainability of a native-like accent and the controllability of an accent		
1	Is it important for you to sound native-like?	127
2	Do you think it is important for a language learner to try to sound native-like?	128
3	Do you think a language learner can ever attain a native-like pronunciation?	82
4	Do you think you have control over your accent?	78
Study 2 Beliefs about pronunciation		
1	Would you say your English pronunciation is good?	82
2	What do you consider to be the most challenging aspect of pronunciation?	65
3	Evaluate the role of the following factors in the improvement of pronunciation.	81
4	Do you think it is important to teach pronunciation in school?	127
5	Teaching a group four times a week, how much time should be allotted to teaching pronunciation from a 45-minute class, and how often?	121
Study 3 Past experiences with pronunciation learning and accent change		
1	Have you ever received a positive or negative comment on your pronunciation?	125
2	What do you think contributed to your pronunciation up to now?	127
3	If your teachers have dedicated time to pronunciation in English, please explain how.	44
Study 4 Reported and observed pronunciation learning strategies		
1	Have you done/do you do anything to consciously improve your pronunciation?	128
2	What did you do to overcome your shadowing-related problems?	107

Appendix C: Questionnaire distributed to students (2022)

Questionnaire

This questionnaire aims at finding out more about your linguistic background and how you perceive yourself as a language user.

By filling in this questionnaire, you accept that you are contributing to research that your instructor might do in the future.

The questionnaire is anonymous, and when working with these data, I am going to make sure that nothing can be traced back to you in any way.

This is a long-time project, it might take years before it is complete, but I am happy to update you about any results if you are interested, just let me know after handing it in (or by email any time).

Thank you for your participation and help!

1. **How often do you use English in your everyday life outside the English classes? (note: use means actively use, not listen to or read)**

a) Every day.
b) Almost every day.
c) Once or twice a week.
d) Less than once a week

2. **In what way do you use English outside university? You may choose more than one option.**

a) I speak to native speakers (in person/on the phone/Skype etc.).
b) I speak to other non-native speakers (in person/on the phone/Skype etc.).
c) I exchange written messages with native speakers.
d) I exchange written messages with non-native speakers.
e) I practice speaking on my own.
f) I practice English on my own (How?): ______________________________
g) I write for non-university related purposes (specify: ______________________).
h) other:

3. **On a scale of 1-6, how fluent a speaker do you consider yourself to be now? (1=hesitant, making a lot of pauses, struggling; 2 not really fluent; 3 relatively fluent; 4 pretty fluent; 5 =very fluent; 6= nativelike fluency).**

Please give reasons for your choice (why do you think you are (not) fluent, what kind of problems (if any) you encounter when you speak.

4. **When you speak, what is the most challenging for you? You may choose more than one option.**

a) Speaking without pausing often.
b) Finding the appropriate words.
c) Paying attention to my grammar and my vocabulary at the same time.
d) Paying attention to my grammar while speaking.
e) Paying attention to my vocabulary while speaking.
f) Thinking in the target language.
g) Stress (understood as 'hangsúly')
h) Intonation
i) other:

5. **What are the aspects of your speech that you think you should improve? You may choose more than one option.**

   a) I would like to speak faster.
   b) I would like to know more words.
   c) I would like to actively use more words.
   d) I would like to know grammar better.
   e) I would like to actively use my grammar.
   f) I would like to have better pronunciation.
   g) I would like to have better intonation.
   h) I would like to be able to think in the target language.
   i) I would like to be able to speak automatically without thinking about language forms.

6. **Do you think it is important <u>for a language learner</u> to try to sound native-like? Why?**

7. **Is it important <u>for you</u> to sound native-like? Why?**

8. Do you think it is possible for a language learner to ever attain native-like pronunciation (if they learn English as a foreign language)?

9. Do you think you can control your accent at all? If yes, what do you do to control it?

10. **Is there an accent you consciously try to imitate?**

11. Have you noticed a change in your own accent over the years?

12. Would you say your English pronunciation is good? If yes, why do you think so? If not, why? What would you like to improve?

13. What do you consider to be the most challenging aspect of pronunciation? Evaluate each area (1 = very easy, 5= very difficult).

a) Vowels
b) Consonants
c) Stress
d) Intonation

14. Have you done/do you do anything to consciously improve your pronunciation (in school or on your own)? If yes, what?

15. Have you ever received a positive or negative comment on your pronunciation? If yes, what was it?

16. Evaluate the role of the following factors in the improvement of pronunciation (1= not influential, 10= very influential).

a) ability to mimic
b) musical ear
c) proficiency in English
d) knowledge of other languages
e) individual motivation
f) living in an English speaking country
g) speaking to native speakers
h) watching TV (films, shows, videos)
i) specific training in pronunciation through phonetics
j) written transcriptions (listening to something and transcribing it word for word)
k) phonetic theory (how sounds are formed, articulation etc.)
l) ear training

17. What do you think contributed to your pronunciation up to now? You may choose more than one option.

a) my teacher in elementary school
b) my teacher in high school
c) a class/classes I took at university (which class:__________________________)
d) specific TV shows I watched (e.g._ ________________________)
e) films I watched
f) music I listened to
g) other (e.g., friends, family members, study abroad, etc.): ____________________

18. If your teachers (elementary, high school or university) have dedicated time to pronunciation in English class, please explain how here.

19. **Do you think it is important to teach pronunciation in school?**

a) Very important, right from the start.
b) Important, but it can wait until other skills have started developing.
c) Important, but only if there is time for it, other skills take priority.
d) Not very important, pronunciation can only partly be improved in the classroom.
e) Not important at all, pronunciation is improved outside the classroom.

20. Imagine you teach a group four times a week. How much time should be allotted to teaching pronunciation from a 45-minute class, and how often (e.g. once a week, twice a week, every second week etc.)

a) A whole class, but only from time to time (specify, how often: ________)
b) A whole class on a regular basis (specify how often: ______)
c) Half of the class on a regular basis (specify how often: ______)
d) 5-10 minutes on a regular basis (specify how often: ___________)
e) less than 5 minutes, but every class
f) less than 5 minutes a week
g) There is no need to work on pronunciation on a regular basis in class
h) other:

This is the end of the questionnaire. Thank you for your time! ☺

Appendix D: Shadowing diary template

Impressions of first attempt (fill in after first attempt only)	Date of practice	How many times I practiced today	Biggest difficulty today (What was it? Which part?)	Today's success/how I overcame the problem	When it's finished (you have recorded your best attempt: overall impression