EMI Academics' Cognitions and Actual Practices of Correct Pronunciation

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Abstract

The purpose of this study is to investigate EMI academics' cognitions and practices regarding pronunciation of English as a foreign language in EMI classrooms. The study was conducted using a qualitative research design and a semi-structured interview format. The participants of the study were university instructors, associate professors, and professors from different departments including Faculties of Medicine and Nursing, Departments of English Language Teaching, English Language and Literature, and Translation and Interpreting Studies. The qualitative data were collected through interviewing the participants. The results revealed that EMI academics generally had positive attitudes toward correct pronunciation in EMI classrooms. They reported that proper pronunciation could lead to a better understanding of content and improvement in general language skills, particularly pronunciation proficiency. Based on the findings of this study, it can be concluded that EMI can be considered an efficient means of improving students' English pronunciation and content learning since teaching content through English provides the students with more exposure to the language and more opportunity to practice English pronunciation.
Keywords: English Medium Instruction, English Pronunciation, EMI Academics, Cognitions, Practices.

Introduction

Over the past few decades, there has been a dramatic shift towards the use of English as a medium of instruction (EMI) in higher education and as a distinct advantage for both disciplinary learning and English proficiency, and thereby, EMI has been the subject of considerable research. (Belhiah & Elhami, 2015; Cañado, 2020; Dearden & Macaro, 2016; Hu & Lei, 2014; Joe & Lee, 2013). English Medium Instruction is defined as "the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions where the first language of the majority of the population is not English" (Macaro et al., 2018, p. 37). Institutions do not promote EMI to teach English but to teach non-language courses through English. Concomitantly, students' language development is not the leading intended outcome in EMI contexts. (Pecorari & Malmström, 2018).

With the advent of teaching in English as a curricular approach, the need for an international medium of communication has been fulfilled, but also as the cutting-edge language, its global influence and dominance have expanded (Byun et al., 2011). There are a variety of driving forces behind the adoption of EMI in universities around the world. The globalization and internationalization of the educational system in higher education is one of the main reasons for the implementation of English-medium instruction (Richter, 2019; Tsou & Kao, 2017). Within the scope of internalization of higher education, according to Knight (2003), educational services including teaching, learning, and research are provided in an international perspective enabling students to improve their international understanding and intercultural skills within the borders of campus. This is why, in the applied context of global universities, English, as

a medium of instruction, is becoming an integral part of teaching programs. Also, the increased use of EMI is the result of English's dominance as a lingua franca in different contexts. This instructional approach has also added the benefit of increasing the language skills and confidence of higher education instructors and enables students to have a higher level of internationally-oriented skills. (Byun et al., 2011).

In European and Asian countries, EMI is not a new trend and thereby has been widely adapted in different educational contexts (Chapple, 2015). The use of English to teach academic disciplines has attracted international students, helped domestic students for the global labor market and enabled the institutions to gain prestige (Doiz et al., 2011). Tsou and Kao (2017, p.5) describe EMI as a "win-win case" facilitating content knowledge development and improving English proficiency. However, EMI still has some disputable, social and educational issues such as the impacts of implementation on students' development, instructors' language competence to teach students with different English proficiency levels, their skills to use appropriate teaching techniques and effective assessment strategies. Students' language deficiency may pose a problem for the process to go smoothly (Jiang et al., 2019). From a social perspective, Dearden and Macaro (2016) state that students from lower socio-economic groups may not have the opportunity to learn academic subjects through English and emphasize the fear of losing identity and first language. Nonetheless, there is a consensus among EMI researchers mentioned above that the educational emphases, purposes, resources, and contexts are different in each country adopting EMI. Therefore, it is challenging to seek common solutions to EMI practitioners' challenges.

Another crucial issue concerns EMI instructors' skills to convey their intended messages efficiently. Based on the notion that students need to use English as the medium of instruction to interact with teachers and other students in EMI contexts (Belhiah & Elhami, 2015), mutual intelligibility and effective communication can be significant considerations in English-taught courses. From this perspective, instructors in EMI as the stakeholders of this process tend to provide an intelligible interaction to increase

the effectiveness of EMI programs. In an era when intelligibility is regarded as a crucial aspect of efficient communication (Munro, 2008; Munro & Derwing (2011), pronunciation is the most important factor both for the success of English language speakers' interactions and for intelligibility (Levis, 2018). In this respect, pronunciation in the EMI context is worth mentioning since the interaction between instructors and students may be hampered due to pronunciation mistakes of instructors. Although many instructors assume that they are good at communicating, they still feel insecure about their pronunciation. Notwithstanding various potential advantages of pronunciation in efficient communication, instructors' practices regarding pronunciation are very limited.

The implementation of English-medium instruction (EMI) has emerged as a substantial development in Turkish higher education as well as in many countries around the world. Many universities, either state or private, such as The Middle East Technical University, Boğaziçi University and Bilkent University, offer English-taught courses in all degrees. In contrast, the other institutions which do not adopt English as their official academic language provide EMI only in certain programs (Duran & Sert, 2019). The increasing use of English in higher education has been the subject of considerable research in Turkey from different perspectives (Başıbek et al., 2014; Duran & Sert, 2019; Kilickaya, 2006; Kirkgöz, 2014; Macaro & Akincioglu, 2018; Taquini et al., 2017). However, academicians' cognition and actual practices of correct pronunciation in EMI classrooms in Turkey have remained under-researched. Therefore, the present study aims to shed light on the understanding of actual practices of accurate pronunciation of academicians who are taking part in English-medium instruction.

Literature Review

The increasing mobility in higher education led to the growing use of English as a medium of instruction in Europe (Erling & Hilgendorf, 2006) and throughout the world (Kim et al., 2009), and thereby several universities are trying to increase the number of EMI lectures (Coleman, 2006; Graddol,

2006). However, relevant research begs the question of whether current EMI lectures are effective in terms of allowing students to gain specialized knowledge and advanced English skills (Banks, 2018; Belhial & Elhami, 2015; Doiz et al., 2011). To keep up with this trend, many studies were conducted to understand the effectiveness of EMI lectures and the influential factors in this process. For an acceptable and successful implementation of English-medium instruction, among the factors influencing the effectiveness of EMI classes are a perceived need for English in EMI lectures, appropriate teaching materials and environment (Kim et al.,2009), the levels of learner proficiency in the medium language (Doiz et al., 2013) EMI instructors' attitudes toward EMI (Dearden & Macaro, 2016), their proficiency in English (Lam & Maiworm, 2014), cognitions and practices in EMI classes (Soren, 2013; Chen et al., 2020) which is the focus of this study.

Teacher cognition envelops a wide range of concepts, counting teachers' knowledge, beliefs and thoughts in connection with their actual teaching practices in educational settings. Borg (2006, p. 35) defines foreign language teacher cognition as "an often tacit, personally-held practical system of mental constructs held by teachers and which are dynamic—i.e., defined and refined on the basis of educational and professional experiences throughout teachers' lives". The literature based on the EMI in higher education is replete with studies of EMI academics' cognition and practices concerning their use of English, especially academic vocabulary and grammar (Astiani & Widagsa, 2021; Volchenkova & Ph, 2019; Wanphet and Tantawy, 2018). In comparison, pronunciation issues in EMI have mainly been underrepresented in relevant literature, with some exceptions, the work of Kling (2015), who reported the reflections of 10 Danish lecturers about their perceptions of the impacts of teaching in EMI setting and emphasized the participants' pronunciation weaknesses and their adverse effects on their oral production. Bienzobas et al.'s study (2019) yields a similar finding regarding the lecturers' thoughts about pronunciation in EMI teaching. The results revealed that pronunciation is regarded as the most problematic aspect of the English language and lecturers perceive poor pronunciation as an obstacle

in EMI courses. They believe that intelligible pronunciation should be achieved to deliver the content rather than native-like accuracy. On the contrary, Chen et al. (2020), conducting a case study to explore EMI lecturers' linguistic and pedagogical characteristics, observed that EMI instructors applied their first language in the use of medium language at all levels from pronunciation to syntax. However, the researchers state that poor pronunciation may not have negative impacts on students' understanding as long as instructors deliver the content effectively.

Examining the instructors' thoughts about the issue of adopting EMI policy at the tertiary level, Wanphet and Tantawy (2018) concluded that while some of the interviewed instructors support the belief that using EMI may facilitate students' language development and hence their future academic goals, others advocate bilingual teaching to enable students to acquire content knowledge. The study conducted by Bienzobas et al. (2019) on lecturers' beliefs and practices in EMI, the participants see themselves as incompetent in language skills and thereby find teaching in EMI challenging. This situation reinforces the finding of Tsui (2018) that the competency in English might lead the lecturers to favor EMI.

Unlike the above-mentioned studies' conclusions, Lam and Maiworm's (2014) study indicates that English proficiency ratings obtained from Program Directors were predominantly positive. These ratings imply that the English proficiency of academic staff in English-taught programs (ETP) is good or very good. However, the researchers find these ratings unrealistic compared to ETP students and critics' negative remarks about the level of instructors' proficiency in the medium language, as also revealed in Wanphet and Tantawy's (2018) study. However, this is not to say that instructors with high levels of English proficiency can manage the control of academic and cultural differences of the heterogeneous students in the classroom well. This points to the need for more teacher training programs to overcome academic and cultural differences-related problems (Lam & Maiworm, 2014). Dafouz's (2021) study reports a corresponding finding suggesting that EMI teacher professional development programs can be helpful for lecturers

to develop their skills and competencies to teach in internationalized classrooms involving students with different linguistic and cultural backgrounds (Dafouz, 2021). Training courses focusing mainly on speaking and pronunciation skills were the most preferred ones with a rate of 28.4 percent of all participants in the Turkish EMI context (Özer, 2020). Given that EMI participants need to have the essential skills for effective engagement in various academic activities (Pecorari & Malmström, 2018), training courses are deemed valuable and necessary.

Research Questions
1. What are the views of EMI academics about correct and appropriate English pronunciation?
2. What are the needs and expectations of the EMI academics about the English pronunciation?
3. What are the strengths and weaknesses of the EMI academics regarding English pronunciation in their classrooms?

Method
Participants
Purposive sampling was employed in selecting participants for the study. Purposive sampling enables researchers to recruit participants who have been experiencing or 'had [already] experienced the central phenomenon' in a given context (Creswell, 2009, p. 217).

The participants of the study were university instructors, associate professors, and professors from different departments: Faculties of Medicine and Nursing, Departments of English Language Teaching, English Language and Literature, and Translation and Interpreting. All of them were Turkish and held their doctorate degrees in different subjects. Drawing on interview data with them, the study explored their experiences in the EMI program and their perceived pronunciation-related challenges and needs in EMI teaching.

Instrument
Semi-structured interviews were used as data collection tools to investigate EMI instructors' cognitions and their practices. Semi-structured interviews provided rigorous and comprehensive data about the research topic. To make sure if the interview questions adapted was appropriate in the study or not, an interview assessment tool was developed. The tool was sent to 4 academicians in Language Teaching Department who were experts in their field and they were asked to complete the tool. According to the feedback given by academicians, the interview questions were appropriate to be used in the study.

Instructors were interviewed at their offices between May and June of 2021. Each around one hour, the interviews were conducted in Turkish and audio-recorded. The duration of the interviews was between 1 and 2 h. The questions for the EMI teachers are included in Appendix A. The interview data were then transcribed and translated into English and analyzed through the researcher's qualitative, inductive approach.

Data Analysis Procedure
The qualitative data were analysed using content analysis. First, the researcher got familiar with the data by transcribing the recorded interviews verbatim. The transcripts were read several times carefully to grasp a sense of the whole. In line with the steps of content analysis offered by Creswell (2005), the codes in the data were identified. Based on the codes identified, the categories were determined under four themes. The themes were presented in a narrative passage with quotations from the transcripts such that the issues could be described and discussed.

Results
For a general understanding of cognitions and practices of participants on pronunciation, semi-structured interviews were conducted with participants. Therefore, the data obtained from the interviews provided a general framework on how participants deal with English pronunciation in the EMI context. The data collected from participants were classified under two main themes.

The content analysis of the interviews with EMI academics revealed two main themes, and each theme contains its categories and codes. The themes were defined as "*Perceptions of EMI Academics of English toward English Pronunciation*." and "*EMI Academics' Needs and Expectations about English Pronunciation*". Figure 1 shows the themes identified through content analysis.
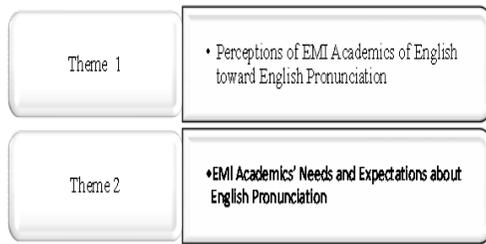
Figure 1 Themes for Interviews

The first theme consists of EMI academics' perceptions toward the significance of English pronunciation and its place in EMI classrooms. Two categories are included in this theme which are defined as "the value of pronunciation in EMI implementation" and "students' profiles".

Theme 1 Perceptions of EMI Academics of English toward English Pronunciation
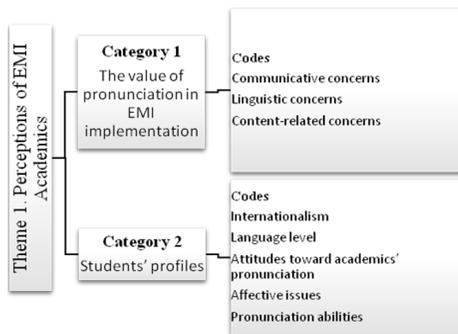
The first category of the first theme addresses how the participants perceive pronunciation in EMI classrooms. Through the data analysis, three overarching codes were established with respect to participants' perceptions of pronunciation skills and their opinions about pronunciation. Based on the data obtained from the participants, there appeared many concerns regarding the value of pronunciation in teaching an EMI course. One of them is communicative concern that all of the participants dealt with. Many participants considered pronunciation to be more critical for effective communication than some other L2 skills such as grammar or vocabulary. Emphasizing this issue, I-1 pointed to the impacts of pronunciation on communicative skills. In his own words:

For mutual intelligibility, correct pronunciation is essential both for academics and students. We have to repeat everything to be understandable. Otherwise, we cannot communicate effectively, and now we provide online training. When a student turns on his microphone and asks a question, I want him to repeat what he has said because his pronunciation is bad and I cannot be sure if he said what I understood or if he tried to say something else. If he had used the correct pronunciation, there would not have been such a problem. That is why pronunciation certainly increases intelligibility in communication.

The data obtained from I-2 showed parallelism with the participant's perceptions mentioned above about EMI academics' and students' being more intelligible in the English language to receive and convey the messages between the speakers and the listeners. She asserted that correct pronunciation is needed for EMI stakeholders not only as a speaker but also as a listener for the reason that they both should be able to understand what the speaker says and should be intelligible when conveying the message to another listener.

Pronunciation is crucial for both listeners and speakers since they should understand each other correctly when they speak. Because poor pronunciation causes misunderstanding and we don't even understand each other at all. For example, when speaking to native speakers, an incorrectly pronounced word may confuse and irritate them. This interrupts communication. That is why good pronunciation is absolutely important. Through the end of the lesson, we move on to the question-answer part and pronunciation gains more importance when we engage in social communication.

Only one participant out of eight claimed that pronunciation is not requisite for communicative concerns. The existence of different accents of the English language worldwide leads up to consider that there is not only one accurate and applicable way to use English. Therefore, she claimed it would be pointless to impose only certain patterns of English pronunciation since millions of people use different dialects of English as a second language. Even if people do not have enough pronunciation knowledge, they can communicate intelligibly. According to her, the language presented in EMI classrooms must be

as authentic as possible. I-3 presented her ideas as follows:

I think it is more important to use the language effectively in EMI courses rather than good pronunciation because if we can speak fluently in any accent without the need to speak with a native-like accent, we can convey the message appropriately to the interlocuters, so there is no harm in conveying our message with a foreign accent.

The data revealed that there could be a positive change in students' pronunciation abilities when they are exposed to correct pronunciation in a meaningful way. Pertaining to students' pronunciation abilities, almost all the participants believed the beneficial effect of good phonological skills of academics on the students' language development. As an example, I-8 noted as the following:

I believe that correct pronunciation contributes to learners' language development. For example, even I can improve myself when I listen to the news in English from time to time and I realize that I do not know correct pronunciation of some words. Therefore, it can be beneficial for students' language development if the instructor becomes a role model with the correct pronunciation. This leads students to learn the correct pronunciation of the words related to their discipline.

Similarly, the relationship between pronunciation and content learning was emphasized by some participants. I-7 pointed out that good pronunciation has positive impacts on acquiring subject knowledge and competencies as well as language skills. In this sense, I-5 argued that:

Different accents or mispronunciations of some words may discourage students. However, when instructors have good pronunciation, students could be better motivated to their lessons; they can listen to lectures from other sources, so they can reinforce the content.

The second category of the first theme explores the sociolinguistic profile and linguistic diversity of local and international students attending English-Medium Instruction (EMI) courses. The participants regarded learner characteristics as major, if not the primary, factors determining success in EMI implementation. Their language level, nationality, and pronunciation skills were some of them mentioned

by the participants. In the EMI context, national and international students are united. In this sense, the participants agreed that students of diverse linguistic and cultural backgrounds might have challenges in understanding instructors with a nonnative accent, while it might be easier to follow a lecture given by instructors with good pronunciation. Concerning the students' attitudes toward academics' pronunciation in the EMI context, the participants uttered a similar comment related to the importance of correct pronunciation. In this sense, I-8 emphasized the relationship between students' language levels and their attitudes with pronunciation as follows:

The important thing is that if the target students are expected to teach English in the future, that is, if they will use English as a profession, good pronunciation is important. For example, when we meet new people, a good introduction will capture our attention and the first parameter will be their pronunciation, so pronunciation may increase students' self-confidence. Also, our new students are interested in technology. They are constantly learning new words on the computer and in computer games; they are exposed to English more than we were, which increases their language proficiency. These students can realize our phonological mistakes easily. That is why, an EMI instructor should be competent in pronunciation.

The participants believe that credibility somewhat depends on their pronunciation skills and they can establish more credibility as EMI instructors by improving their pronunciation skills; thereby, they can abstain from being evaluated negatively by their students. In this sense, I-8 continued expressing his thoughts as:

Especially if you are teaching in English departments, your pronunciation should be native-like. If not, the students may lose trust in your academic knowledge. When I took lessons in Germany, an instructor spoke in English with a German accent, which caused a loss of respect and trust, but later on, when I saw five books written by the same instructor in the library, I noticed that he was actually very knowledgeable.

The second theme presented in the table below with its categories and codes consists of EMI academics' perceptions of their own pronunciation

of English and pronunciation training of English language that is considered influential in their pronunciation improvement.

Theme 2 EMI Academics' Needs and Expectations about English Pronunciation
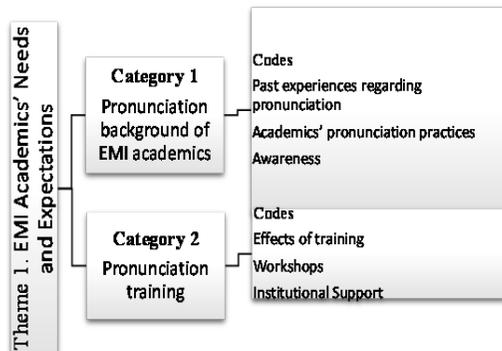
The first category is connected to participants' educational background regarding L2 pronunciation and their views about their own pronunciation skills. The data on EMI academics' language background highlight the need for a strong focus on pronunciation training in order for EMI instructors to be able to interact in content-based situations and fulfilling basic communicative functions in the classroom. Based on the data obtained in this study, two participants seem to be only discipline-area specialists and they are not proficient in English language pronunciation. However, the other participants are competent in both content knowledge and English language in general and their pronunciation in particular. However, only three lecturers received explicit pronunciation training during their university years and they believe they have sufficient knowledge of segmental and suprasegmental aspects of English pronunciation. Those teaching in the field of medicine stated they never received explicit pronunciation training and their educational background generally neglected pronunciation in language teaching. Pertaining to their pronunciation skills, I-2 expressed her thoughts with the following statements:

I have only received a short-term pronunciation training course given by an academician at the university. I realized that I was really bad at English pronunciation during this period. I cannot say I learned everything because I need more training programs and practice. However, I became aware of the importance of pronunciation more than before.

Many participants referred that they seem to be aware of the importance of correct pronunciation and they always try to improve their pronunciation skills. In this sense, I-8 reported that he has accurate and acceptable pronunciation as well as being proficient in both segmentals and suprasegmentals referring that:

When I watch a movie or listen to an English song, I focus on the pronunciation of words and pay attention to how they pronounce the words. I know phonological rules, but I always pay attention to how they are used in practice. There are also training programs on pronunciation I want to attend. For example, now a university in America has a pronunciation training program and I applied for that course. If I am accepted, I will receive a two-month pronunciation training.''

The majority of the participants pointed out that although they follow lectures in international conferences, practice English pronunciation using dictionaries or listen to native speakers, providing pronunciation training to EMI instructors can significantly improve their pronunciation skills. Also, the data revealed a lack of importance given by higher education system and EMI curriculum. Therefore, they emphasized the importance of reconsidered language policies including pronunciation training for quality assurance in the EMI context.

Discussion

In much of the literature related to the internalization of higher education (Earls, 2016; Gu & Lee, 2019; Chen & Kraklow, 2015; Corrales et al., 2016), a noticeable trend is the dominance of English-medium instruction (Smit & Dafouz, 2012). In all higher education learning systems that include an additional language medium, English is a prevailing partner (Phillipson, 2015). This study attempted to investigate English Medium Instruction academics' cognitions and practices regarding pronunciation of English as a foreign language. The overview of the results in this study showed that EMI academics perceived the EMI classes in a positive light, considering them to be efficient to improve students' pronunciation skills. While some academics stated that they provided extensive

comprehensible input of English pronunciation to students. Therefore, students had opportunities to acquire new phonological patterns since they focused on both content knowledge and language. In a similar way, Lightbown (2014) suggests this way emphasizing integration of content and language prevents students from missing opportunities to pay attention to certain aspects of language just when they fully focus on learning them. This notion led to the necessity for integrating language and content teaching in order to help students improve their pronunciation of English.

In this study, most participants reported having received little or no instruction in English pronunciation, although some had received some instruction in English phonetics and phonology. However, in all cases, the participants felt the need to know more about English pronunciation so that they could provide more efficient EMI courses to students from various L1 backgrounds. On the other hand, they referred to the lack of institutional support for more teacher training. Valcke and Wilkinson (2017) have brought a focus to the inconsistency between higher education institutions' desires for internalization and practices for improving the quality of EMI and stated that teacher support programs are not fully incorporated into professional development programs which may threaten internalization. This is in line with the views expressed by Briggs et al. (2018) who conducted a study comparing teacher beliefs in secondary and tertiary education. They concluded that teachers need more support to have an adequate level of English proficiency in the EMI context. The question is to what extent do institutions bear in mind EMI academics' needs and expectations in terms of their professional development regarding the English language in all aspects. Such gaps in this issue have been notified from a variety of different contexts (Airey, 2012; Alhassan, 2021; Ball & Lindsay, 2013; Caruana & Ploner, 2010; Fink, 2013; Karakas, 2016; Kim & Tatar, 2017; Lauridsen & Lillemose, 2012; Mouhanna, 2016; Ploettner, 2019; Vu & Burns, 2014). For instance, on the one hand, Airey (2012) addresses teachers' deficiencies - or lack thereof – in language issues preventing them from teaching effectively in internationalized classrooms, Lauridsen (2017) on the other hand,

discussing the gap between lecturers' needs, refers to the disparity between the institutional policies and realities in the classrooms as in Valcke and Wilkinson (2017) mentioned above. This implies that there is little evidence of sufficient support for academicians to attain desired levels of English proficiency. Ball and Lindsay (2013) emphasize the importance of pronunciation in EMI classrooms and report pronunciation as an EMI concern.

Since the amount of research into EMI academics' cognition of pronunciation is inadequate, it makes sense to draw upon the academicians' needs and expectations regarding English pronunciation in EMI context for further insight into what might be expected in tertiary education, especially when considering that EMI teaching predominantly aims to improve students' communication skills, and thereof, pronunciation plays a significant part in communicative competence (Richter, 2017). Such findings lend support to the findings reported in the literature suggesting more research into the issue of pronunciation in the EMI context. (Ball & Lindsay, 2013; Gómez-Lacabex & Gallardo-del-Puerto, 2021).

In this study, most of the participants reported that they feel insecure about their own pronunciation, which leads to a need for more pronunciation training to build and maintain confidence and a positive attitude of students toward their teachers' academic and language knowledge. Another striking finding is that a large majority of EMI academicians believe that their English pronunciation proficiency influences the management and delivery of the course contents. The findings correspondingly indicate that EMI academicians feel improper pronunciation may render the content unattainable to students. In other words, academicians' unintelligibility in the EMI context may lead to the concerns regarding content learning. Less important to a small number of the participants in this study were aims to deliver content with a native-like accent or improving students' pronunciation competence or linguistic skills. When they perceive students understand them during content delivery, different accents and pronunciation errors are considered as less problematic. This suggests that speech which is judged by listeners as heavily accented and with pronunciation errors can be

intelligible for the same listeners, which does not lead to problems in communication and content learning. This finding goes in line with the study's findings conducted by Jiang et al. (2019). They investigated the practices and perceptions of teachers, and student ESP learning motivation and needs in a university EMI programme in mainland China and concluded that pronunciation errors did not negatively influence communication in EMI classrooms. However, the other participants' focus appears to be very much on the benefits of good pronunciation to the students' increasing confidence and pronunciation proficiency since their perceptions imply that their pronunciation abilities could negatively influence students' pronunciation and confidence. This finding agreed with those in the study conducted by Santos et al. (2018) who suggest that lower levels of pronunciation proficiency increase anxiety, thereby decreasing confidence in EMI classrooms. Similarly, approaching the issue from the perspective of the effects of EMI on students' pronunciation skills, Richter (2016) concluded that students included in EMI process improved their pronunciation skills.

Despite its contributions to understanding the importance of correct pronunciation in EMI implementation in higher education, the study has somelimitations. First, this is a qualitative study based on semi-structured interviews. By virtue of its purely qualitative nature, the results cannot be generalized in other research contexts directly. The study also lacks information on the role of the students' cognitions about the place of pronunciation in their learning. Research on their perceptions about the impacts of pronunciation on their content learning and language proficiency can help EMI academics and policymakers address needs and requirements in EMI classrooms. Within the scope of the study and compatible with the nature of qualitative research, the study could have been supplemented with classroom observations. Given these limitations, it is clear that further research is needed to particularly examine EMI academics' pronunciation cognitions and practices in EMI classrooms through classroom observations and with the participation of students to provide data about their perceptions of their teachers' pronunciation skills and practices.

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Conclusion

The general overview of the findings of this study indicates that EMI can be a better means of improving students' English pronunciation because it provides them with more exposure to the language and more opportunities to practice English pronunciation. On the other hand, the relevant literature suggests that pronunciation is still a marginalized topic in the EMI context. The authorities' lack of attention to this issue may result in limited knowledge about the importance of appropriate pronunciation in EMI classrooms, in turn, academics' lack of knowledge of English pronunciation. Therefore, the authorized institutions should take into account the relevant research findings on academics' pronunciation practices and knowledge to provide the essential professional development and teacher training programs that will lead to the development of academics' pronunciation proficiency, and thereby encourage them to procure the quality of their teaching and their students' learning in terms of content and language competency.

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Appendix A. EMI (English Medium Instruction) Academics' Interview Questions

1. What are your views regarding the role of English pronunciation in EMI classrooms?
2. Do you think good pronunciation is a crucial part of successful EMI implementation?
3. How do you think pronunciation influence the communication among EMI students and lecturers?
4. Do you think correct pronunciation contributes to students' language development?
5. To what extent does good pronunciation contribute to students' content learning?
6. Are you satisfied with your own English pronunciation?
7. Do you believe that you have enough background knowledge in English pronunciation? (What are your views about your background knowledge in English pronunciation?)
8. Are you good at producing English speech sounds, and practicing English intonation, stress and rhythm?
9. What are your students' attitudes toward your pronunciation? (Do they pay attention to your pronunciation in EMI lectures? Do they criticize? etc.
10. In what aspects of English do you think EMI instructors improve themselves? (grammar, vocabulary, pronunciation)
11. Do you think you need to improve your pronunciation for better EMI implementation?
12. Do you ever devote time to correct your pronunciation? If so, what do you do to improve your pronunciation?
13. Does EMI curriculum encourage you to practice English pronunciation?
14. Do you think it is essential to provide EMI instructors with pronunciation training?

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