Arzu Ekoç Özçelik
Yildiz Technical University, Türkiye
Suzan Kavanoz
Yildiz Technical University, Türkiye
Selahattin Yılmaz
Yildiz Technical University, Türkiye

EMI DYNAMICS: AN EMPIRICAL STUDY ON STUDENTS' PERSPECTIVES AT TERTIARY LEVEL IN TÜRKİYE

Abstract. The unprecedented adoption of English-Medium Instruction (EMI) in higher education on a global scale has brought about challenges as well as opportunities for students, which necessitates a careful consideration of factors impacting their perceptions and experiences. Recognizing this critical need, our study attaches significant importance to delve into the attitudes of tertiary-level students towards EMI and aims to evaluate the attitudes and language-related challenges encountered by students in full EMI undergraduate programs. Data were collected from 278 undergraduate students in various full EMI programs at a Turkish public university. Utilizing the culturally and linguistically adapted form of Yeh's (2014) EMI questionnaire, the study focused on students' backgrounds, motivations, and attitudes towards EMI courses, challenges, learning strategies, and beliefs about EMI policies. The findings indicate generally positive attitudes towards EMI. Students perceive EMI as beneficial to their academic and professional development, viewing it as an opportunity to enhance their English proficiency. Nevertheless, challenges arise from coping with specialized terms, heavy learning load, and lecturers' accents. These results offer valuable insights into the experiences of undergraduate students in full EMI programs at a state university, highlighting both the positive facets and challenges they encounter in settings where English is used as a vehicle for academic growth.

Keywords: attitudes towards EMI; educational language policy; English as a medium of instruction (EMI); higher education; internationalization.

Introduction

In today's globalized world, English is becoming more prevalent for international communication especially in fields like science, education, and business. This phenomenon is unprecedented on a worldwide scale (Crystal, 1997). English-Medium Instruction (EMI) at universities around the world has emerged and developed quickly as a result of widespread use of English in a number of educational environments. Higher education institutions (HEIs)

worldwide have actively pursued strategies concurrently to enhance their international competitiveness and prepare graduates for the global workforce.

In some countries, EMI has been viewed as a way to improve the English proficiency of local students and internationalize education (McKinley & Rose, 2022). The evident relationship between internationalization and EMI programs particularly at the tertiary level (Özer & Bayram, 2019) has led to a significant upswing in the adoption of EMI academic programs, particularly in non-Anglophone nations, as observed by Bradford (2018). However, this widespread adoption of EMI has introduced a unique set of challenges, affecting both students and educators alike (Evans & Morrison, 2011; Pun & Jin, 2021). Lei and Hu (2022) note a variety of EMI difficulties such as language barrier, workload, the need for additional time to prepare and study for EMI courses. In the reviewed literature, the difficulties faced by EMI students are frequently considered as the result of their insufficient academic English skills, as demonstrated by their inability to write essays in a formal academic style (Evans & Morrison, 2011), listen to lectures and understand instructors' accents (Hellekjaer, 2010), give oral presentations or participate in seminar discussions (Kırkgöz, 2005), and read textbooks with a large number of unfamiliar words (Andrade, 2006).

Despite these challenges, a growing number of educational institutions have embraced EMI, sparking debates over its adoption. Located at the crossroads of Europe and Asia, Türkiye serves as a prominent example of this phenomenon, as the prominence of English-Medium programs has been on the rise in an era dominated by internationalization (Yuksel et al., 2022). This phenomenon mirrors trends observed in numerous non-Anglophone countries (Doğançay-Aktuna & Kızıltepe, 2005; Kırkgöz, 2009). Much like their global counterparts, Turkish universities are gradually transitioning from students' first language (L1) to EMI (İnal et al., 2021). The critics of EMI have voiced concerns about its potential negative impact on students and the Turkish language (Sinanoğlu, 2000). On the other hand, proponents have emphasized the benefits, such as effective English language instruction, the internationalization of Turkish higher education and the standardization of university degrees by allowing staff and student mobility (Kirkpatrick, 2014). Studying through EMI has been seen as a way to gain access to better

education and a career with more respect and favourable advantages (Huang & Curle, 2021; Kırkgöz, 2005). Despite the ongoing discourse among politicians, educators, and intellectuals regarding EMI within the Turkish educational system, a critical void persists: the need for more studies on stakeholders' perceptions of EMI at the tertiary level.

Given the myriad challenges associated with EMI (Dearden & Macaro, 2016), its continued prevalence suggests a compelling need for research aimed at understanding the perceptions and challenges of students as one of the stakeholders, when navigating EMI courses. Recognizing this critical gap, our study assumes significant importance as it endeavours to delve into the attitudes of tertiary-level students towards EMI. In this regard, our research serves a multifaceted purpose. Firstly, it establishes a foundational reference point for researchers interested in exploring the perspectives of university-level students regarding EMI in Türkiye. Secondly, it provides invaluable insights that can inform decision makers and educational administrators when contemplating actions related to the implementation of EMI. Furthermore, it is worth noting that not all conclusions drawn from prior studies are universally applicable, especially considering the unique context of Turkish universities. Ultimately, our study contributes to a more comprehensive understanding of how the choice of English as an instructional language at the tertiary level shapes students' viewpoints. Such investigations hold the potential to benefit various stakeholders. For instance, faculty members may uncover potential issues in delivering EMI courses through the perspectives of their students. By hearing the voices and opinions of students, faculty can critically assess the effectiveness of their EMI courses in terms of content delivery and language acquisition.

Taking the aforementioned reasons into consideration, the primary objective of our research is to examine the opinions and language-related challenges faced by students enrolled in programs where instruction is conducted fully in English. To achieve this goal, our study is structured around addressing two fundamental research questions:

1. What are the attitudes of undergraduate students towards the use of English as the medium of instruction?

2. What language-related problems do undergraduate students encounter in EMI courses?

Previous Research in International Context

EMI has garnered significant attention in the academic landscape, especially in nations where the predominant mother tongue is not English (Dearden, 2014). This contentious issue has fuelled ongoing debates spanning historical epochs up to the present day across various nations and contexts employing EMI. A deeper examination reveals a multitude of contextual, geographical, historical, and political factors that intricately shape each country's embrace of EMI. While superficially similar, the motivations behind the adoption of EMI may vary significantly (Dearden, 2014).

The literature reflects an increasing number of studies investigating the opinions and challenges faced by university students concerning EMI across countries in Europe, East Asia, as well as Türkiye. For instance, Cho (2012) conducted research at a South Korean university, seeking the perspectives of both lecturers and students. His findings revealed that courses taught in English were perceived as less effective than those delivered in Korean, primarily due to students' limited proficiency in the foreign language. Thus, language proficiency of both students and instructors, along with the challenge of comprehending lessons in a foreign language, emerged as salient issues impacting effectiveness. Similarly, Yeh (2014) explored the attitudes and experiences of Taiwanese university students via a survey, which we replicated in our study. His research indicated that a majority of participants exhibited positive attitudes toward EMI, believing it contributed to their learning and English language proficiency. Additionally, Yeh (2014) noted that some participants, who grappled with limited English language skills, resorted to notetaking as a strategy to compensate for comprehension difficulties in EMI courses.

In the research conducted by Pun and Jin (2021), the researchers investigated 73 students enrolled at EMI universities in Hong Kong. The study explored a range of factors, including gender, EMI experience, and prior English exposure, revealing that the participants viewed themselves as having low

levels of language and learning challenges. Al-Shboul's (2022) research delves into students' perceptions regarding the choice between English and their native language (Arabic) as a medium of instruction in pre-intermediate level English learning centres. The survey results indicate that although participants hold positive attitudes toward their native Arabic language, they tend to prefer English over Arabic as the medium of instruction in English learning centres. Similarly, in the study by Ndizeye and Tabaro (2023), mixed perceptions were observed regarding EMI in engineering courses in Rwanda. While both students and lecturers viewed EMI as beneficial for their career prospects, they also expressed concerns about the use of English, as limited English proficiency posed difficulties in completing academic tasks for both groups. In their study, Zhang and Pladevall-Ballester (2022) also examined students' perspectives on various EMI courses in International Trade, Film Production, and Project Management. The findings from pre-post semester student questionnaires indicate that while students initially had positive attitudes toward EMI courses, their perceptions became less favourable by the end of the semester. Furthermore, Moncada-Comas' (2022) qualitative analysis of students' reflections on EMI revealed several key insights such as the way disciplinary knowledge is conveyed, the use of multilingual dynamics, and translanguaging practices by both lecturers and students. While students generally held positive views of EMI, they also expressed concerns about its implementation, ultimately contributing to a more comprehensive understanding of EMI in the specific context examined.

EMI in Turkish Higher Education

In Türkiye, English enjoys extensive use, permeating both educational settings and various sectors (Arik, 2020). The utilization of EMI, particularly in higher education institutions, is on the rise and is often considered a prestigious distinction among universities. Differing perspectives emerge regarding the role of English in HEIs where it serves as the language of instruction. Many students favour undergraduate EMI programs due to instrumental motivations, such as the prospect of better job opportunities and higher salaries (Atlı & Özal, 2017). On the other hand, according to some students, the fact that their

academic subject is not taught in Turkish causes them to acquire academic content inefficiently and spend excessive amount of time on their courses. There is also a perception among some students that the medium of instruction can, to some extent, have a negative impact on their exam results (Ozer & Bayram, 2019).

Studies are conducted in Türkiye to better understand EMI at universities. There are a number of studies that focus on students' perspectives. For example, Kırkgöz's (2014) study compared the perceptions of two groups of final-year engineering students in a Turkish institution: one group studied in Turkish Medium of Instruction (TMI), and the other in EMI. The findings revealed that despite some shared perceptions between the groups, acquiring detailed disciplinary knowledge proved more challenging for EMI students when compared to their TMI counterparts, who were largely successful. Turhan and Kırkgöz (2018) evaluated the attitudes of Turkish students enrolled in engineering programs, as well as the perceptions of instructors. The study reported no discernible difference between the motivation levels of the students in each class, and both students and instructors were found to be more externally motivated to use English as the language of instruction due to its perceived linguistic and academic advantages. The occurrence of limited interaction in EMI courses was attributed to the lecturers' dominating class discussions by the students, and the students' insufficient linguistic ability by the lecturers. In their study, Yıldız et al. (2017) explored the challenges faced by 83 EMI students from different departments and academic levels across one private and two state universities in Türkiye and examined their perceived needs. The students' responses were centred around various challenges, including difficulties with technical vocabulary, inadequate use of English by lecturers, code-switching, issues with the English preparatory-year curriculum, language skills, and the lack of language support in EMI programs. In his study, Karakas (2017b) examined satisfaction with EMI in higher education among Turkish students at a private university in Ankara, focusing on universities promoting EMI as international brands. The findings revealed overall satisfaction with EMI, but notably lower satisfaction with language policies and practices. Ozer and Bayram (2019) aimed to assess the perceived effectiveness of EMI programs among senior

undergraduate students at a state university. The findings suggest that while EMI programs significantly contributed to students' subject-specific English skills and motivation, many participants noted that their English proficiency did not consistently improve throughout their education. Likewise, exploring students' perceptions of EMI courses at a technical university in Türkiye, Ekoç (2020) found that EMI offers advantages like preparation for a global work environment and access to the English resources for students while challenges include students' language backgrounds, lecturers' language proficiency and course effectiveness. In a similar vein, Kamaşak and Sahan (2023) investigated factors impacting Turkish students' success in EMI courses. They reported that students' perceptions of their language proficiency and challenges significantly influenced their academic success, while the amount of English used in classes did not. The study emphasizes the importance of language support in EMI programs and suggests that multilingual teaching approaches may be beneficial. A recent study by Curle et al. (2024) reports the impact of general motivation (Instrumental and Integrative), gender, and English language ability on academic achievement in EMI in Turkey. They found that instrumental and integrative motivation were both significant predictors of EMI accomplishment, while gender had no statistically significant predictive power of EMI achievement. Being proficient in the English language accounted for 90% of the success variance, making it the strongest predictor.

Methodology

Setting and Participants

In the context of our study, a public university in a major city in western Türkiye, students enrolled in full EMI undergraduate programs are required to have preparatory language education if they do not achieve a score of at least 60 out of 100 points in the English Proficiency Exam administered at the beginning of the academic year, or fail to attain the required score in equivalent internationally and nationally recognized foreign language exams. It is aimed that students start their undergraduate programs by demonstrating proficiency at an advanced level in speaking, listening, reading, and writing.

Notwithstanding the aforementioned requirement, students encounter some problems and have certain needs in EMI courses.

In order to reveal a clear depiction of the situation, the data for this study were collected from undergraduate students studying in different full EMI programs at a technical university in the 2022–2023 fall semester. We employed a purposive sampling technique to select participants who could offer valuable insights into the phenomenon, given their exposure to EMI (Creswell & Plano Clark, 2011). The necessary ethical approval was obtained from the institutional ethnical board. Students enrolled in 14 full EMI programs were contacted through their lecturers and they were requested to fill in the questionnaire via Google Forms. A total of 278 students completed the questionnaire.

Table 1

Key Demographic Characteristics of the Participants

Attribute	Number	Percentage (%)
Gender		
Male	155	55.8
Female	123	44.2
Distribution of participants across academic years		
First year	36	12.9
Second Year	113	40.6
Third Year	42	15.1
Fourth Year	87	31.3
Number of English courses taken by the participants		
One course	2	0.7
Two courses	3	1.1
Three courses	1	0.4
Four courses	0	0
Five courses	7	2.5
More than five courses	265	95.3
Total	278	100

As shown in Table 1, more than half of the respondents were male students (55.8%). Sophomore students made up the majority with 40.6% of the total participants. In terms of prior EMI experience, the vast majority of students (95.3%) had taken more than five English-Medium courses before, with only a small percentage taking fewer courses.

Data Collection and Procedure

Yeh's (2014) 5-point Likert-type EMI questionnaire was adapted for the current study. The questionnaire consists of six parts, including students' background information, reasons why they were enrolled in EMI programs, their attitudes towards and the effects of EMI courses, reasons for the difficulties they experience in EMI programs, learning strategies they use in EMI courses, and their beliefs about EMI policies and emotional reactions to EMI.

For the Turkish version of Yeh's (2014) scale, he was contacted via e-mail and a necessary permission was obtained for the scale to be used in the research. We then undertook a cultural and linguistic adaptation of the scale into Turkish in order to minimize cultural and linguistic barriers for the participants and allow them to express themselves effectively (Mackey & Gass, 2021). In light of this, the originally English scale was translated into Turkish by three experts in the field of English Language Education. The scales translated into Turkish were merged into a single form by the researchers by checking their linguistic and cultural equivalence. This version of the form was translated back into English by three different instructors who are experts in the field of English Language Education, and the compatibility of each Turkish item with the English scale was examined.

In order to test the linguistic and cultural equivalence, the scale forms in the original language and Turkish were applied to the pre-service English teachers who are at B2 level according to the criteria of the Common European Framework of Reference for Languages and registered in the English Language Teaching Program. A total of 44 students completed the Turkish scale and 39 students completed the English scale. Due to the small number of participants who answered the Turkish ($n = 44$) and English scales ($n = 39$),

the Mann-Whitney U-test analysis was performed from non-parametric statistical calculations. The results of the Mann-Whitney U-test, which was performed depending on the number of groups answering the Turkish and English scales, showed that there was no statistically significant difference between the groups (U = 746.5, p = .309). Through the translation and cross-cultural adaptation of the scale, we finalized the Turkish version that preserves the conceptual and linguistic accuracy of the original questionnaire. This process enabled us to ensure that the scale is understandable and relevant to participants in Turkish context.

Findings and Discussion

For the presentation of findings, the sequence of research questions is followed to offer a systematic exploration. Our initial query focused on the attitudes of students in full EMI undergraduate programs towards the use of English as the language of instruction. As a first step, the rate of Turkish usage by instructors during lessons taught in English was sought. It is seen that 72.3 percent of the participants (n = 201) stated that their EMI instructors made use of Turkish up to 25 percent of the class time (see Table 2). Relevant to the current discussions on the role of L1, this result shows that the English-Language delivery is prevalent despite the presence of L1 usage to a certain extent. However, the use of Turkish in EMI courses is in line with arguments in the literature advocating for EMI to encompass both lecturers' and students' diverse multilingual repertoires alongside English, thus better catering to the needs of students (Kamaşak & Sahan, 2023; Sahan & Rose, 2021).

Table 2

Rate of Turkish Usage in English Lessons

Rate of instructors' Turkish usage in English lessons	Frequency	Percentage (%)
5% of the time	97	34.9
6% to 25% of the time	104	37.4
26% to 50% of the time	44	15.8
More than 50% of the time	33	11.9
Total	278	100

Students were asked to state their reasons for taking EMI courses. They were informed that they could choose multiple reasons. The answers led to a total of 441 reasons for taking EMI courses (Table 3). Students ($n = 211$) stated that they mainly took EMI courses because they were compulsory. The following two popular reasons were related to the English language. Eighty-nine students viewed EMI courses as a means to improve their English or they chose EMI course because they liked the English language ($n = 56$).

Table 3

Students' Reasons for Taking English-Medium Courses

Reasons why students enrol in EMI courses	Frequency	Percentage (%)
1) EMI courses are compulsory	211	47.8
2) I want to improve my English	89	20.0
3) I like English	56	12.7
4) There were no or very few other course options	35	7.9
5) The instructor of the course is an expert in his field	34	7.7
6) I like the teaching methods or teaching style the instructor uses	16	3.6
Total	441	100

The students were also given the option to write their personal reasons in the same question. Most of these personal reasons are related to professional or academic opportunities. The students believed EMI could offer them better job prospects and easy access to information in their field, which also resonated with previous research findings (Ekoç 2020; Huang & Curle, 2021; Kırkgöz, 2005). Some excerpts representing this point of view are as follows:

"I thought it would be more suitable for [studying/living] abroad. But I don't understand English, it's not enough." (P56)

"Because [EMI] will appear on the diploma when I graduate, and I think it can help me in my search for foreign sources in my field." (P124)

"Since I am studying science, I think learning the terms in English will make it easier for me to master the [disciplinary] literature in my future life." (P96)

When inquired about their opinions on EMI (see Table 4), students were found to feel moderately positive about how well they understood the course content (M = 3.65), as well as how knowledgeable their lecturers were in terms of linguistic proficiency (M = 3.41) and pedagogical resources (M = 3.41, SD = 1.08). However, there was also consensus slightly above the mean among the students that EMI courses adversely affected their willingness to participate in their lessons (M = 2.92, SD = 1.45). These results corroborate Yeh's (2014) finding that despite general contentment with EMI, students have hesitations in participation due to this policy. The EMI courses were found moderately satisfactory by the students in our study, which aligns with Le and Nguyen's (2023) finding. In their study, they also reported that Vietnamese undergraduate students expressed the greatest level of satisfaction with the teaching quality of lecturers in EMI contexts. Similar to their suggestions, this study underscores the importance of motivating students. To ensure successful learning outcomes, educators and educational institutions in non-English speaking nations should focus on motivational aspects.

Table 4

Opinions about English as the Language of Instruction

	N	Minimum	Maximum	Mean	SD
I can understand the content in EMI courses.	278	1.00	5.00	3.65	1.12
I am satisfied with the English proficiency of the instructors in EMI courses.	278	1.00	5.00	3.04	1.15
In EMI courses, instructors use sufficient teaching tools that support course content.	278	1.00	5.00	3.41	1.08
The fact that the language of instruction is English reduces my desire to share my ideas in the classroom.	278	1.00	5.00	2.92	1.45

As is seen in Table 5, the participants reported that EMI helped them improve their English reading skills (M = 3.89, SD = 1.15), listening skills (M = 3.84, SD = 1.14) and writing skills (M = 3.49, SD = 1.27). Yet, the results revealed that this improvement is not reflected that much in their speaking skills (M = 2.77, SD = 1.27). These results differ from those in Yeh's study (2014) where writing skills had the lowest mean score. However, it is possible

to suggest that this finding aligns with Kırkgöz's research (2005) in which the participants reported challenges in terms of their English-speaking skills, especially when interacting with their lecturers and classmates orally. In addition, this finding could be linked to the participants' reduced desire to express opinions in class. The same tendency is observed in Mai's recent study (2023), which revealed that EMI students with low levels of perceived language competence tend to be less willing to participate in class discussions.

Table 5

Effects of English as the Language of Instruction

	N	Minimum	Maximum	Mean	SD
The language of instruction was English, which helped me improve my English listening skills.	278	1.00	5.00	3.84	1.14
Having English as the language of instruction helped me improve my English writing skills.	278	1.00	5.00	3.49	1.27
Having English as the language of instruction helped me improve my English reading ability.	278	1.00	5.00	3.89	1.15
Having English as the language of education helped me improve my English-speaking ability.	278	1.00	5.00	2.77	1.27

In terms of learning strategies used in EMI courses, it was observed that most participants frequently took notes during classes (M = 3.61, SD = 1.25) and spent additional time reviewing the course materials (M = 3.42, SD = 1.40) as common strategies. However, seeking help from classmates (M = 2.68, SD = 1.32) and instructors (M = 2.33, SD = 1.16) received lower mean scores, indicating these strategies were less frequently used. Forming study groups (M = 2.40, SD = 1.27), asking questions (M = 2.59, SD = 1.24), and reviewing materials in advance (M = 2.78, SD = 1.37) were also expressed with moderate frequencies. One of the drawbacks is that students' performance in EMI courses might suffer when compared to those taught in their native language (L1) (Fernández-Sanjurjo et al., 2019). As teacher talk dominates interactions in EMI classrooms (An et al., 2021; Turhan & Kırkgöz, 2018), it is seen that in order to avoid the negative

influence of EMI and understand both the teacher's input and lesson content, students resort to utilizing several strategies such as taking notes and spending time for revising the materials (see Table 6).

Table 6

Learning Strategies Used in English-Medium Courses

	N	Minimum	Maximum	Mean	SD
I take notes in EMI courses.	278	1.00	5.00	3.61	1.25
I request help from my classmates in EMI courses.	278	1.00	5.00	2.68	1.32
I spend more time reviewing the materials of EMI courses.	278	1.00	5.00	3.42	1.40
I spend more time reviewing additional course materials for EMI courses.	278	1.00	5.00	3.40	1.38
I request the help of the instructors for EMI courses.	278	1.00	5.00	2.33	1.16
I form study groups with my classmates for EMI courses.	278	1.00	5.00	2.40	1.27
I ask questions in EMI courses.	278	1.00	5.00	2.59	1.24
I spend more time reviewing the materials of EMI courses in advance.	278	1.00	5.00	2.78	1.37

As shown in Table 7, EMI is perceived positively in several aspects. Participants are of the opinion that it can enhance their English language skills (M = 3.85, SD = 1.18). Additionally, they feel that it broadens their horizons (M = 3.60, SD = 1.30) and enhances competitiveness (M = 3.47, SD = 1.36). Moreover, some participants consider EMI beneficial for future academic pursuits or business endeavours, indicating a relatively high score (M = 4.27, SD = 1.01). However, there are concerns as well. The survey highlights that EMI might negatively affect the learning of professional knowledge (M = 3.50, SD = 1.35). Furthermore, they perceive challenges in communication between instructors and students in EMI courses (M = 2.96, SD = 1.31). In this sense, our students' situation is comparable to that of students described by Kyeyune (2003) who encounter challenges in exchanging ideas during the lessons in which the EMI policy is implemented.

Table 7

Opinions on the Policy of English as the Language of Instruction

	N	Minimum	Maximum	Mean	SD
Having English as the language of instruction can improve my English skills.	278	1.00	5.00	3.85	1.18
Having English as the language of education can broaden my horizons.	278	1.00	5.00	3.60	1.30
Having English as the language of education can increase Türkiye's competitiveness.	278	1.00	5.00	3.47	1.36
English as the language of education negatively affects the learning of professional knowledge.	278	1.00	5.00	3.50	1.35
English as the language of instruction interrupts the communication between instructors and students.	278	1.00	5.00	2.96	1.31
Having English as the language of instruction can be useful in future academic studies or in business.	278	1.00	5.00	4.27	1.01

Although students state that they feel stressed in EMI courses, it is observed that they generally give positive affective reactions to EMI (see Table 8). Zhang and Ma (2023) also observed that students in their study held high opinions of EMI courses, considering them crucial in the modern world, despite acknowledging the pressure they bring. In a similar vein, Guo et al. (2022) underline that students who are motivated by their interests in EMI put more effort into their studies and get better grades as a result. Curle et al. (2024) also found that Turkish undergraduate students' level of motivation significantly impacts their academic success in EMI courses.

Table 8

Affective Reactions to English as the Language of Instruction

	N	Minimum	Maximum	Mean	SD
I would like my department to open more EMI courses.	278	1.00	5.00	3.69	1.43
I would like to take more EMI courses.	278	1.00	5.00	3.36	1.47

	N	Minimum	Maximum	Mean	SD
I get stressed when I take EMI courses.	278	1.00	5.00	3.47	1.49
I feel that I am successful in EMI courses.	278	1.00	5.00	3.29	1.20

It was observed that the students do not want to have EMI courses only in the upper classes of undergraduate education and at the graduate level (M = 2.36, SD = 1.48). Similarly, they do not prefer them to be offered only as elective courses. Yet, they expressed a positive opinion about EMI courses being taught by foreign instructors (M = 3.42, SD = 1.40). Consistent with this finding, according to Karakas (2017a), more students were discovered to be orientated toward having native teachers (NESTs) teach them content courses. He reported that NESTs were considered more suitable for teaching students with high English-Language proficiency, whereas nonnative teachers (NNESTs) were preferred for students with beginning- or lower-level proficiency. Students who choose NEST EMI lecturers are considerate of the lecturer's background and do so because they believe that a native speaker's command of the language of instruction equates to a more effective teacher, as opposed to students who prefer non-native speakers.

Table 9

Attitudes Towards English as the Language of Instruction

	N	Minimum	Maximum	Mean	SD
EMI courses should only be given at the upper undergraduate and graduate level.	278	1.00	5.00	2.36	1.48
EMI courses should only be offered as elective courses.	278	1.00	5.00	2.11	1.41
I would like instructors to use Turkish more in EMI courses.	278	1.00	5.00	2.69	1.45
I would like EMI courses to be taught by foreign instructors.	278	1.00	5.00	3.42	1.40

Our second aim in this study was to investigate language-related problems students encounter in full EMI undergraduate programs. When

students were asked about the sources of their difficulties in EMI courses, most students stated that there was a high number of specialized terms in course materials (M = 3.29, SD = 1.22). Similarly, they stated that the learning load of EMI courses is generally heavy (M = 3.06, SD = 1.31). While the students did not consider the speaking rate of the instructors to be a major issue (M = 2.08, SD = 1.07), the instructors' accents were found to have a relatively important effect on students' comprehension of EMI courses (M = 2.86, SD = 1.27). Considering the fact most of the instructors are non-native speakers of English, this finding aligns with Hendriks et al. (2018) in that non-native accents impact students' attitudes towards EMI courses adversely. In terms of reading comprehension, studies have shown that many EMI students struggle to understand textbooks, mostly because they include so many unfamiliar words and specialized technical jargon (Andrade, 2006; Kırkgöz, 2005). According to Aizawa et al. (2023), EMI learners need to be proficient in both general English and discipline-specific English, including the usage of English for academic purposes (EAP) and English for specific purposes (ESP). Similarly, in Yıldız et al.'s (2017) study, the lack of the requisite technical terminology or academic vocabulary made it difficult for the students to understand the content of the EMI course.

In addition to the terminology, students found the learning load in EMI courses very heavy. As Siegel (2022) explained, EMI courses may pose challenges for students who need to simultaneously read the PowerPoint slides and listen, especially when encountering technical English terms that they do not comprehend, further adding to the cognitive load in EMI (see Table 10).

Table 10

Sources of Difficulties in English-Medium Courses

	N	Minimum	Maximum	Mean	SD
The content of EMI courses is very difficult	278	1.00	5.00	2.76	1.28
There are many specialized terms in EMI course materials.	278	1.00	5.00	3.29	1.22
The learning load of EMI courses is very heavy.	278	1.00	5.00	3.06	1.31
I cannot focus on classes where the medium of instruction is English.	278	1.00	5.00	2.58	1.34

	N	Minimum	Maximum	Mean	SD
I cannot understand the accent of the instructors in EMI courses.	278	1.00	5.00	2.86	1.27
In EMI courses, instructors speak English very quickly.	278	1.00	5.00	2.08	1.07
My English proficiency is not at the appropriate level for EMI courses.	278	1.00	5.00	2.19	1.25

Students with higher English language proficiency tend to have more positive attitudes and perceive EMI as beneficial for their language development. While language anxiety is common among students in EMI contexts (Chou, 2018), it was seen in this study that students do not seem to feel anxious. Thus, it was concluded that the pressure to understand and express the content of the subject area in a language that is not their mother tongue did not cause serious problems for students. This supports the finding in previous studies that challenges students face tend to decrease as they get used to EMI and gain confidence in their language skills. Supporting previous studies (Pennington & Yue, 1994; Wu, 2006), the participants in this study also stated that they preferred their programs because the medium of instruction is English. As Wei et al. (2017) noted, students tend to be more willing to participate in EMI programs at reputable institutions.

Conclusion and Suggestions for Further Research

The current study sought to investigate the attitudes and understand the language-related needs and challenges of undergraduate students enrolled in full EMI programs at a state university in Türkiye via an online questionnaire. It was found that the attitudes of the students towards EMI are generally positive as they consider it beneficial for their academic and professional development, which were also reported in Kırkgöz (2005), Ekoç (2020), and Huang and Curle (2021). The students also see EMI as an opportunity to improve their English proficiency. This aligns with previous research by Zhang and Ma (2023) and Guo et al. (2022), highlighting students' motivation and enthusiasm for EMI.

However, the students in the current study were also found to face certain challenges when coping with the frequent use of specialized terms in course materials, the heavy learning load, and the instructors' accents. As previous research shows, these challenges pose difficulties especially for lower-proficiency students who, if not offered discipline-specific language support, might continue to benefit from EMI courses considerably less than their peers with higher English language proficiency (Aizawa, et al., 2023; Siegel, 2022). Finally, one of the most key factors affecting students' attitudes towards EMI is the pedagogical approach used by instructors. Effective teaching practices such as clarity of explanations, provision of necessary support, and interactive teaching methods can positively affect students' perceptions and increase the quality of EMI education. Such practices can be introduced to EMI lecturers via training programs tailored to their linguistic and pedagogic needs as well as contextual dynamics (Deroey, 2023).

While the current study shed light on the perspectives of EMI students from diverse academic programs, it is not without limitations. The results of this research should be interpreted cautiously due to the study sample consisting only of students from one higher education institution in Türkiye. In order to enhance the generalizability of the study, the sample can be diversified by incorporating students from different universities. In addition, future studies could complement survey data by interviewing select participants so as to gain deeper insights into their EMI experiences. In addition, further investigation can focus on exploring the effects of challenges such as specialized terminology and learning load on students' cognitive processes and learning outcomes in EMI courses. Research could also examine effective pedagogical strategies to mitigate these challenges, such as offering courses that address the students' discipline-specific language needs. Moreover, the students' preference for EMI courses taught by foreign lecturers, who are ideally native speakers of English, deserves additional exploration as this might negatively impact their perception of the instructional effectiveness of Turkish lecturers. As Karakaş (2017a) suggests, encouraging students to understand that nativeness does not necessarily ensure successful communication in English could lead to more positive perceptions of their Turkish lecturers' L2 English usage.

Disclosure Statement

The authors report there are no competing interests to declare.

Acknowledgements

References

Aizawa, I, Rose, H., Thompson, G., & Curle, S. (2023). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research, 27*(4) 837–861. https://doi.org/10.1177/1362168820965510

Al-Shboul, O. K. (2022). The students' perceptions of Arabic and English as a medium of instruction in Jordan. *Theory and Practice in Language Studies, 12*(7), 1441–1446. https://doi.org/10.17507/tpls.1207.26

An, J., Macaro, E., & Childs, A. (2021). Classroom interaction in EMI high schools: Do teachers who are native speakers of English make a difference? *System*, 98, 102482. https://doi.org/10.1016/j.system.2021.102482

Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education, 5*(2), 131–154. https://doi.org/10.1177/1475240906065589

Arik, B. T. (2020). English in Turkey. *World Englishes, 39*(3), 514–527.

Atlı, İ., & Özal, D. (2017). Does English Medium Instruction (EMI) make a difference on student motivation? *Journal of Language Research, 1*(1), 25–36.

Bradford, A. (2018). It's not all about English! The problem of language

foregrounding in English-medium programmes in Japan. *Journal of Multilingual and Multicultural Development, 40*(8), 707–720. https://doi.org/10.1080/01434632.2018.1551402

Cho, D. W. (2012). English-medium instruction in the university context of Korea: Tradeoff between teaching outcomes and media-initiated university ranking. *Journal of Asia TEFL, 9*(4), 135–163.

Chou, M. H. (2018). Speaking anxiety and strategy use for learning English as a foreign language in full and partial English-medium instruction contexts. *TESOL Quarterly, 52*(3), 611–633.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Sage Publications.

Crystal, D. (1997). *English as a global language*. Cambridge University Press.

Curle, S., Yuksel, D., Aizawa, I., Thompson, G., & Rakhshandehroo, M. (2024). Academic success in English medium instruction programmes in Turkey: Exploring the effect of gender, motivation, and English language proficiency. *International Journal of Educational Research, 123,* 102288.

Dearden, J. (2014). *English as a medium of instruction: A growing global phenomenon*. British Council. https://www.britishcouncil.org/sites/default/files/e484_emi_cover_option_3_final_web.pdf

Dearden, J., & Macaro, E. (2016). Higher education teachers' attitudes toward English medium instruction: A three-country comparison. *Studies in Second Language Learning and Teaching, 6*(3), 455-486.

Deroey, K. L. (2023). English medium instruction lecturer training programmes: Content, delivery, ways forward. *Journal of English for Academic Purposes*, 101223.

Doğançay-Aktuna, S., & Kiziltepe, Z. (2005). English in Turkey. *World Englishes, 24*(2), 253–265. https://doi.org/10.1111/j.1467-971X.2005.00408.x

Ekoç, A. (2020). English Medium Instruction (EMI) from the perspectives of students at a technical university in Turkey. *Journal of Further and Higher Education, 44*(2), 231–243. https://doi.org/10.1080/0309877x.2018.1527025

Evans, S., & Morrison, B. (2011). Meeting the challenges of English-medium higher education: The first-year experience in Hong Kong. *English for Specific Purposes, 30*(3),198–208.

Fernández-Sanjurjo, J., Fernández-Costales, A., & Arias Blanco, J. M. (2019). Analysing students' content-learning in science in CLIL vs. non-CLIL programmes: Empirical evidence from Spain. *International Journal of Bilingual Education and Bilingualism, 22*(6), 661–674.

Guo, L., He, Y., & Wang, S. (2022). An evaluation of English-medium instruction in higher education: influencing factors and effects. *Journal of Multilingual and Multicultural Development*. https://doi.org/10.1080/01434632.2022.2107654

Hellekjær, G. O. (2010). Lecture comprehension in English-medium higher education. *Hermes: Journal of Language and Communication Studies, 45*, 11–34.

Hendriks, B., van Meurs, F., & Reimer, A. K. (2018). The evaluation of lecturers' nonnative-accented English: Dutch and German students' evaluations of different degrees of Dutch-accented and German-accented English of lecturers in higher education. *Journal of English for Academic Purposes*, *34*, 28–45.

Huang, H., & Curle, S. (2021). Higher education medium of instruction and career prospects: An exploration of current and graduated Chinese students' perceptions. *Journal of Education and Work*. https://doi.org/10.1080/13639080.2021.1922617

İnal, D., Bayyurt, Y., & Kerestecioğlu, F. (2021). Problematizing EMI programs in Turkish higher education: Voices from stakeholders. In Y. Bayyurt (Ed.) *Bloomsbury World Englishes Volume III: Pedagogy* (pp. 192–207). Bloomsbury.

Kamaşak, R., & Sahan, K. (2023). Academic success in English medium courses: Exploring student challenges, opinions, language proficiency and L2 use. *RELC Journal*, 00336882231167611.

Karakaş, A. (2017a). Teacher preferences in content and language-focused courses in higher education: The case of Turkish EMI students. *The Journal of Language Teaching and Learning, 7* (2), 127–145.

Karakas, A. (2017b). The forgotten voices in higher education: Students'

satisfaction with English-medium instruction. *Journal of English as an International Language, 12* (1), 1–14.

Kırkgöz, Y. (2005). Motivation and student perception of studying in an English-medium university. *Journal of Language and Linguistic Studies, 1*(1), 101–123.

Kırkgöz, Y. (2009). Globalization and English language policy in Turkey. *Educational Policy, 23*(5), 663–684. https://doi.org/10.1177/0895904808316319

Kırkgöz, Y. (2014). Students' perceptions of English language versus Turkish language used as the medium of instruction in higher education in Turkey. *Turkish Studies – International Periodical for the Languages, Literature and History of Turkish or Turkic, 9*(12), 443–459.

Kirkpatrick, A. (2014). The Language(s) of HE: EMI and/or ELF and/or multilingualism?. *The Asian Journal of Applied Linguistics, 1*(1), 4–15.

Kyeyune, R. (2003). Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms. *Language, Culture and Curriculum, 16*(2), 173–184. https://doi.org/10.1080/07908310308666666

Lei, J., & Hu, G. (2022). Research on English-medium instruction in the Asia Pacific: Trends, foci, challenges, and strategies. In W. O. Lee, P. Brown, A. L. Goodwin, & A. Green (Eds.), *International handbook on education development in Asia-Pacific*. Springer.

Le, N. T., & Nguyen, D. T. (2023), Student satisfaction with EMI courses: The role of motivation and engagement. *Journal of Applied Research in Higher Education, 15*(3), 762–775. https://doi.org/10.1108/JARHE-02-2022-0050

Mackey, A., & Gass, S. M. (2021). *Second language research: Methodology and design* (3rd ed). Routledge.

McKinley, J., & Rose, H. (2022). English language teaching and English-medium instruction: Putting research into practice. *Journal of English-Medium Instruction, 1*(1), 85–104.

Mai, J. (2023). Effects of English-Medium instruction on students' willingness to communicate in L2 in EMI universities. *SN Computer Science*, *4*(4), 325.

Moncada-Comas, B. (2022). What students have to say about EMI: Exploring university students' perspectives on changing the learning/teaching language to English. *ESP Today, 10*(2), 263–285. https://doi.org/10.18485/esptoday.2022.10.2.4

Ndizeye, A., & Tabaro, C. (2023). Attitudes towards English medium of instruction in engineering courses in Rwanda Polytechnic. *Journal of Research in Higher Education, 7*(1), 40–70. http://dx.doi.org/10.24193/JRHE.2023.1.3

Ozer, O., & Bayram, N. (2019). Students' experiences of English-Medium courses at tertiary level: A case in Turkey, *International Online Journal of Educational Sciences, 11*(1), 61–70. https://doi.org/10.15345/iojes.2019.01.005

Pennington, M. C., & Yue, F. (1994). English and Chinese in Hong Kong: Pre-1997 language attitudes. *World Englishes, 13*(1), 1–20.

Pun, J., & Jin, X. (2021). Student challenges and learning strategies at Hong Kong EMI universities. *PLoS ONE, 16*(5), e0251564. https://doi.org/10.1371/journal.pone.0251564

Sahan, K., & Rose, H. (2021). Problematising the E in EMI: Translanguaging as a pedagogic alternative to English-only hegemony in university contexts. In B. Paulsrud, Z. Tian, & J. Toth (Eds.), *English-Medium instruction and translanguaging* (pp. 1–14). Multilingual Matters.

Siegel, A. (2022). Study abroad in Sweden: Japanese exchange students' perspectives of language use in university EMI courses. *Languages 7*(3). https://doi.org/10.3390/languages7010003

Sinanoglu, O. (2000). *Bye bye Türkçe* [Bye bye Turkish]. Otopsi Yayınevi.

Turhan, B., & Kırkgöz, Y. (2018). Motivation of engineering students and lecturers toward English medium instruction in Turkey. *Journal of Language and Linguistic Studies, 14*(1), 261–277.

Wei R., Feng J., & Ma Q. (2017). College students' perspectives on English-medium instruction and their English learning motivational intensity. In J. Zhao & J. Q. Dixon (Eds.), *English-Medium instruction in Chinese universities: Perspective, discourse and evaluation* (pp. 45–58). Routledge.

Wu, W. S. (2006). Students' attitudes toward EMI: Using Chung Hua University

as an example. *Journal of Education and Foreign Language and Literature, 4*, 67–84.

Yeh, C. (2014). Taiwanese students' experiences and attitudes towards English-medium courses in tertiary education. *RELC Journal, 45*(3) 305–319. https://doi.org/10.1177/0033688214555358

Yıldız, M., Soruç, A., & Griffiths, C. (2017). Challenges and needs of students in the EMI (English as a medium of instruction) classroom. *Konin Language Studies, 5*(4), 387–402. https://doi.org/10.30438/ksj.2017.5.4.1

Yuksel, D., Altay, M., & Curle, S. (2022). English medium instruction programs in Turkey: Evidence of exponential growth. In S. Curle, H. Ali, A. Alhassan, & S. S. Scatolini (Eds.), *English-medium instruction in higher education in the Middle East and North Africa: Policy, research and pedagogy* (pp. 109–128). Bloomsbury

Zhang, M., & Pladevall-Ballester, E. (2022). Students' attitudes and perceptions towards three EMI courses in mainland China. *Language. Culture and Curriculum, 35*(2), 200–216. https://doi.org/10.1080/07908318.2021.1979576

Zhang, J., & Ma, W. (2023) Application of EMI in international business law course in EFL setting. *Creative Education, 14*, 677–688. https://doi.org/10.4236/ce.2023.144044

Arzu Ekoç Özçelik
Jildizo technikos universitetas, Turkija
arzuekoc@yildiz.edu.tr
Suzan Kavanoz
Jildizo technikos universitetas, Turkija
skavanoz@yildiz.edu.tr
Selahattin Yılmaz
Jildizo technikos universitetas, Turkija
yilmazs@yildiz.edu.tr

EMI DINAMIKA: STUDENTŲ, STUDIJUOJANČIŲ TURKIJOS AUKŠTOJOJE MOKYKLOJE, POŽIŪRIO EMPIRINIS TYRIMAS

Anotacija. Beprecedentis dėstymo anglų kalba (angl. *English-medium Instruction*, EMI) diegimas aukštosiose mokyklose pasauliniu mastu studentams sukėlė iššūkių, bet ir atvėrė naujų galimybių, todėl būtina atidžiai išnagrinėti veiksnius, darančius įtaką jų suvokimui ir patirčiai. Pripažindami šį svarbų poreikį, atidžiai tyrinėjome aukštųjų mokyklų studentų požiūrį į EMI, kad įvertintume su kalba susijusius sunkumus, kylančius mokantis anglų kalba dėstomose bakalauro studijų programose. Buvo apklausti 278 bakalauro studijų studentai, studijuojantys įvairiose EMI programose Turkijos valstybiniame universitete. Taikant kultūriškai ir lingvistiškai adaptuotą Yeh (2014) EMI klausimyno formą, tyrime daugiausia dėmesio skirta studentų demografinėms charakteristikoms, motyvacijai ir požiūriui į EMI dėstomus dalykus, iššūkiams, mokymosi strategijoms ir įsitikinimams apie EMI politiką. Gauti rezultatai rodo iš esmės teigiamą požiūrį į EMI. Studentai mano, kad dalykų dėstymas anglų kalba yra naudingas jų akademiniam ir profesiniam tobulėjimui, ir vertina tai kaip galimybę pagerinti savo anglų kalbos kompetencijas. Vis dėlto kyla sunkumų dėl specializuotų terminų, didelio mokymosi krūvio ir dėstytojų akcento. Šie rezultatai suteikia vertingų įžvalgų apie valstybinio universiteto bakalauro studijų studentų, studijuojančių tik anglų kalba dėstomose programose, patirtis; išryškėja ir teigiami aspektai, ir iššūkiai, kylantys aplinkoje, kurioje anglų kalba vartojama kaip akademinio tobulėjimo priemonė.

Pagrindinės sąvokos: dalykų dėstymas per anglų kalbą (angl. EMI); aukštasis mokslas; tarptautiškumas; kalbų politika švietime; požiūris į EMI.