

STUDENTS' STRUGGLES WITH EMI IN KAZAKHSTANI UNIVERSITIES

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Abstract. *Introduction.* Fascination with English medium instruction (EMI) is fast growing in higher education institutions in non-native English-speaking countries, including Kazakhstan. The Kazakhstani government adopted a trilingual education policy in 2007 and the Bologna Process in 2010. Both these initiatives motivated universities to offer academic programmes in the English language. As a result, EMI programmes are offered in over 70 higher education institutions across Kazakhstan. In addition, there are four major Kazakhstani universities which offer academic programmes in English only. Despite the increase in the number of EMI programmes, there is a lack of empirical evidence about the difficulties and challenges faced by students in the EMI programmes.

Aim. The present study aimed to investigate the nature, forms, and levels of challenges graduate students face in academic reading and writing in English and the way they cope with these challenges. The study was conducted with graduate students and faculty in 10 selected Kazakhstani universities, which offer academic programmes in EMI.

Research methodology and methods. The study is based on a mixed-method design, involving an online survey and semi-structured interviews. The closed-ended questions have been analysed using SPSS software (Statistical Package for the Social Sciences). The grounded theory analysis was utilised to scrutinise open-ended questions and interview transcripts.

Results and scientific novelty. The study's results indicated two major challenges faced by graduate students in academic reading and writing: the personal-psychological challenge and sociological challenge. The first challenge includes students' previous academic backgrounds, exposure, and learning experiences. The second challenge is related to English academic culture and students' worldviews, concepts, and values about English as a language and medium of instruction. As a result, graduate students experienced a lack of vocabulary, inadequate academic literacy skills, unfamiliarity with academic writing styles in English, and lack of skills to synthesise reading materials.

Practical significance. Hence, this study recommends systematising English language programmes across secondary and higher education institutions to help students acquire advanced English language proficiency. Also, the study results suggest that local faculty members should be trained according to international standards in terms of their English language skills and innovative teaching methods.

Keywords: challenges, graduate students, academic reading, academic writing, EMI, Kazakhstan.

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ПРОБЛЕМЫ ОБУЧЕНИЯ СТУДЕНТОВ НА АНГЛИЙСКОМ ЯЗЫКЕ (EMI) В УНИВЕРСИТЕТАХ КАЗАХСТАНА

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Аннотация. Введение. Интерес к обучению на английском языке (English Medium Instruction – EMI) быстро растет в высших учебных заведениях стран, для которых английский язык не является родным, включая Казахстан. Правительство страны приняло политику трехязычного образования в 2007 году и Болонский процесс в 2010 году. Обе эти инициативы побудили университеты предлагать академические программы на английском языке. В результате они появились в 70 вузах Казахстана. Более того, на данный момент есть четыре крупных университета с академическими программами исключительно на английском языке. Несмотря на увеличение количества программ EMI, отсутствуют эмпирические данные о трудностях и проблемах, с которыми в них сталкиваются студенты.

Цель. Данное исследование изучает природу, формы и уровни проблем, с которыми сталкиваются магистранты и докторанты при академическом чтении и письме на английском языке, а также то, как они справляются с этими проблемами. Исследование проводилось среди студентов магистратуры и докторантуры, а также преподавателей из 10 выбранных казахстанских вузов, предлагающих академические программы с EMI.

Методология и методы исследования. Исследование использует дизайн комбинированных методов, включающий онлайн-опрос и полуструктурированные интервью. Закрытые вопросы были проанализированы с помощью статистического пакета (SPSS). Метод обоснованной теории был использован для подробного анализа открытых вопросов и транскриптов интервью.

Результаты и научная новизна. Результаты исследования выявили две основные проблемы, с которыми сталкиваются студенты при академическом чтении и письме: личностно-психологическая и социологическая. Первая проблема включает в себя предыду-

ций академический опыт студентов, а также опыт обучения. Вторая проблема связана с английской академической культурой и мировоззрением, концепциями и ценностями студентов в отношении английского языка как языка и средства обучения. В результате студенты столкнулись со следующими трудностями: нехватка словарного запаса, недостаточные навыки академической грамотности, незнание стилей академического письма на английском языке и отсутствие навыков синтеза прочитанного.

Практическая значимость. Таким образом, данное исследование рекомендует систематизировать программы изучения английского языка в средних и высших учебных заведениях, чтобы помочь учащимся овладеть английским языком на продвинутом уровне. Кроме того, результаты исследования показывают, что местные преподаватели должны быть обучены в соответствии с международными стандартами, включая навыки английского языка и инновационные методы обучения.

Ключевые слова: трудности, студенты магистратуры и докторантуры, академическое чтение, академическое письмо, EMI, Казахстан.

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Introduction

The discourse of an English Medium Instruction (EMI) in Kazakhstan has two connotations. Firstly, there is a delivery of academic programmes in English only. For this purpose, the Kazakhstani government took the initiative between 1992 and 2010 to establish four major international standard universities. Each university was expected to train qualified specialists competitive in both local and international contexts. Three out of the four universities are situated in Almaty city, which is the financial and cultural capital of Kazakhstan. Secondly, as these three universities were insufficient to cater to the increasing number of students who want to study in EMI programmes, the government adopted a trilingual education policy in 2007. This policy was situated within the major strategic initiative of “New Kazakhstan in the New World”, with the aim that Kazakhstan must integrate, interact and connect with the world community. Therefore, government and policymakers highlighted the significance of three languages for Kazakhstani people: Kazakh as the state language, Russian as the regional language of post-Soviet countries, and English as the language of advancement and technology as well as a medium to interact and integrate with the rest of the world [1]. Since then, the trilingual education policy has been implemented both in secondary schools and higher education institutions.

To further strengthen the quality of higher education programmes in EMI, the Kazakhstani government established a world-class English medium university – the Nazarbayev University – in its capital city Nur-Sultan in 2010. This university offers 22 undergraduates, 30 master and 16 PhD programmes in EMI taught by a strong pool of faculty from over 62 countries.

Kazakhstani higher education institutions have been delivering academic programmes in three languages to support government policy. For institutions, other than those which offer 100% EMI programmes, the proportion of languages should be in the following pattern: 50% of courses – in native language, this is either Kazakh or Russian; 20% of courses – in the second language, either Kazakh or Russian; 30% of courses – in English [2]. Moreover, the role of the English language in Kazakhstan's education system has further augmented as the country joined the European Higher Education Area and signed the Bologna Process declaration in 2010. One of the Bologna process parameters is internationalisation, which impacts trilingual education policy development as it supports the academic mobility of students. It is stated that 62% of students use English within their mobility programme [2].

There are several compelling reasons for the growing number of English medium universities, schools, and academic programmes in the country. Those include, but are not limited to, the following:

- Kazakhstan aims to join the top 30 most developed countries of the world by 2050, and therefore there are fundamental reforms taking place in all sectors, particularly in higher education which has remained uncompetitive as compared to the higher education in Russia, China, Japan, and other non-native English-speaking countries in Asia [3];
- Implementation of English medium programmes will “speed up the process of internationalisation of Kazakhstan's higher education, and surely improve the academic mobility under the Bologna process” [4];
- English medium programmes will help to attract international students and increase international collaboration and partnerships by breaking language barriers;
- Proficiency in the English language will help students, faculty, and others access academic literature and modern technologies.

Meanwhile, the number of universities undertaking to teach some courses in English has increased from 42 in 2015 to 57 in 2019, and to 70 respectively in 2020 [2, 5, 6]. In the 2019–2020 academic year, the number of courses led in three languages in 57 higher education institutions reached 25 549 [2]. In bachelor programmes – 21 651 (9533 in Kazakh; 6072 in Russian, 6046 in English), in Masters' programmes – 3 349 (1088 in Kazakh; 1330 in Russian, 931 in English), and PhD programmes – 549 (193 in Kazakh; 204 in Russian, 152 in English) courses. In total, 7129 courses were delivered in English medium.

Moreover, 20 553 students (Bachelor, Master, PhD) and 4062 faculty members possess CERF (OEK) certificates; 951 students (Bachelor, Master, PhD) and 742 faculty members possess IELTS, TOEFL certificates.

Since the early establishment of English-medium instructions universities, only a few studies have partially investigated local Kazakhstani students' challenges in studying in EMI programmes. This study examined students' experiences from Master's and PhD programmes from three EMI universities and seven regional universities that practise English-medium instructions in a limited number of programmes.

Literature Review

This study aims to contribute to a global shaping view of EMI. The study refers to some of the findings indicated in the paper that will show EMI conceptualisation issues in Kazakhstan.

Conceptualisation of EMI in Kazakhstan

This study used the systematic review of EMI done by Macaro, Curle, Pun, An, and Dearden as a theoretical frame [7]. The findings presented by these authors guided our discussions on EMI issues in Kazakhstan. The first finding discussed by these authors refers to the diversity and lack of consensus in defining EMI per se [7]. The current study also found that there is no unique or single definition of EMI in Kazakhstan. In fact, the term EMI is understood differently in different universities. For example, in their websites, the four EMI universities have defined EMI as: "Programmes are taught in English" (University 1), "English-taught degree programmes" (University 2), "A world-class English language university" (University 3), and "The language of instruction is English" (University 4).

The second finding refers to the rising number of EMI programmes across the globe [7]. As mentioned above, the number of EMI courses has also been increasing in Kazakhstan. Nevertheless, in contrast to global tendencies, Kazakhstan has shaped its own model of EMI practices. While there are 129 higher education institutions in Kazakhstan, only four universities deliver their programmes exclusively in English. The rest use Kazakh, Russian and English languages simultaneously [1]. Different universities have undertaken the early implementation of the trilingual education policy based on their resources and staff capacities. An experience of one university shows that they themselves identified certain subjects to be delivered in Kazakh, Russian, and English [8].

According to Macaro and co-authors [7], the third finding refers to the top-down, bureaucratic facilitation of EMI in non-native English-speaking coun-

tries. This finding is in line with the way the trilingual education policy and EMI are implemented in Kazakhstan. The trilingual education policy and EMI universities were established by the decree of the first President, Nursultan Nazarbayev [1]. Since then, several other policy initiatives have been taken through a top-down and centralised approach, as reflected in the State Programme on Education Development [9].

The fourth finding presented by Macaro and co-authors [7] refers to the widening of research on EMI in the world. Unfortunately, this is not the case in Kazakhstan, where despite an increasing number of EMI programmes, there is a lack of systematic investigation of EMI practices in Kazakhstani universities. Although official reports by the Ministry of Education and Science (MOES) provide necessary information on the increasing numbers of EMI courses and universities [2, 5], there is very little empirical evidence on the effectiveness, quality, and practices of EMI. Therefore, this current study was designed to explore graduate students' experiences of studying in EMI universities.

The fact that graduate students struggle in their academic reading and writing in English is not unique to Kazakhstan. Research conducted elsewhere has found that international students for whom English is a second or third language often face difficulties expressing their ideas in a clear and coherent manner, paraphrasing sentences, and utilising computer translator programs to convert their text into English [10–12]. Studies often report students' issues related to understanding rules for building sentences, structure, and grammatical rules [13]. However, grammatical and structural knowledge of a foreign language was insufficient to grasp new concepts, discourses, and values discussed in the international arena, requiring a critical approach in reading and interpreting them [14, 15]. Furthermore, lack of praxis in receiving constructive feedback to their written work discouraged students and caused anxiety [16, 17]. In addition, students' struggles differ from the chosen field, as it was found that social science students are keener to improve their academic writing compared to their peers from STEM fields [18].

The previous studies conducted around EMI have also revealed that undergraduate and graduate students found many positive moments from learning in the EMI context. Some students of EMI in Kazakhstan underlined the career opportunities and well-paid jobs as crucial advantages of completing their majors in the English language [19, 18, 16, 20]. It has been identified that STEM and social sciences students and faculty members believed in international career opportunities and aptitude to gain further education abroad after graduation from the EMI universities [18]. The earlier studies on STEM and finance identified that EMI graduates might be employed in prestigious job positions in big Kazakhstani cities as well as in foreign countries [19]. A recent study in Ka-

zakhstan reported that most students mentioned a higher salary for specialists with a sufficient level of English language and an increase of competitiveness of such candidates in the labour market [16].

To sum up, by analysing graduate students' responses, this study explains how EMI is conceptualised and implemented in Kazakhstani universities; the nature, forms, and levels of challenges graduate students face; and the strategies these students use to cope with the challenges of academic reading and writing in the English language.

Methodology

Keeping in view the purpose of the study, we employed sequential mixed methods research, having both quantitative and qualitative methods. A quantitative survey was used to obtain data from a large number of graduate students, and qualitative interviews were used to obtain rich descriptive data from 10 English medium universities located in different cities in Kazakhstan [21–23]. These universities offer a variety of graduate programmes in English and represent both the public and private education sectors in Kazakhstan. Participation in this study was voluntary and informed (detailed information about the study, its purpose, ethical considerations, and expected results were shared with the universities and participants beforehand). The study was approved by the Nazarbayev University Institutional Research Ethics Committee.

Participants

The online survey and interviews participants were Master and PhD students in EMI programmes at the selected universities. As many as 320 students responded to the survey, representing different disciplines, degree programmes, age groups, regions, and linguistic backgrounds (see Table 1).

Table 1

Frequencies and percentage of participants

Gender	Number	Percentage	Degree programme	Number	Percentage
Male	61	19.1%	Master	211	65.9%
Female	203	63.4%	PhD	43	13.4%
Missing	56	17.5%	Any other	8	2.5%
Age	Number	Percentage	Missing	58	18.1%
18–25	104	32.5%	Region	Number	Percentage
26–35	106	33.1%	Rural	47	14.7%
36–45	49	15.3%	Urban	191	59.7%
46–55	5	1.6%	Semi-rural	18	5.6%

Missing	56	17.5%	Semi-urban	8	2.5%
Years of study at current university	Number	Percentage	Missing	56	17.5%
0–2	173	54.1%	Country of undergraduate degree	Number	Percentage
2–5	49	15.3%	Kazakhstan	239	74.7%
5–7	28	8.8%	Russia	5	1.6%
7 and above	13	4.1%	Overseas	19	5.9%
Missing	57	17.8%	Missing	57	17.8%
Subjects/ Disciplines	Number	Percentage	How many languages do you speak fluently?	Number	Percentage
Education	122	38.1%	1	6	1.9%
Medical sciences	13	4.1%	2	73	22.8%
Engineering	16	5%	3	140	43.8%
Natural sciences	3	0.9%	4	41	12.8%
Social sciences and humanities	81	25.3%	Missing	60	18.8%
Other	28	8.8%			
Missing	57	17.8%			

Research Tool (s), Validity/Reliability Checks

The quantitative data was collected with the help of Qualtrics software. Generally, the survey embodies open-ended and closed-ended questions to capture the full range of participants' perceptions in terms of their academic English language challenges and the support provided by EMI universities. The closed-ended questions have been analysed via SPSS (Statistical Package for the Social Sciences). In general, the following quantitative analyses have been employed: descriptive statistics, inferential and correlational analyses. Descriptive analysis was used to identify the distribution of participants across groups and distribution of percentages. The bivariate statistical analysis: independent sample T-test has been conducted to compare the participants of two groups (across gender). Multivariate One-Way ANOVA analysis was used to show the relationship between different groups, such as age, geographical area, degree of the respondents. The Pearson Product-moment correlation indicated the relationship between the age factor and participants' academic challenges and support provided by university services.

Open-ended questions and interview transcripts were analysed through grounded theory analysis [24]. There were three approaches employed: open, axial, and selective coding. First, through open-coding, main categories were identified. This stage was followed by axial coding to examine the alignment between emerged categories. It further divided categories into subcategories to describe its content [25]. Finally, selective coding combined all categories to describe students' academic reading and writing challenges. Three members of the research team analysed open-ended questions to ensure the trustworthiness of the categories. One person analysed the data and built categories and subcategories. The remaining two members double-checked categories and subcategories to the relevance of the given title and content. The consistency of categories among members was 98% and 99%, respectively.

Results

The survey questions consisted of several close-ended and five open-ended questions. Each open-ended question was subdivided into three sub-questions. Responses to these questions were analysed through the grounded theory approach. In this section, we analysed two open-ended questions on students' challenges in academic reading and writing in English. These responses were grouped under two main themes of personal-psychological and sociological challenges.

Personal-Psychological Challenges

The first question was developed to identify challenges that students have faced while taking courses in English. Due to voluntary participation in the study, the participants had the liberty to respond or not to respond to a question; only 149 (50,4%) out of 296 participants answered the questions related to their personal-psychological challenges. Based on an analysis of the students' responses, five major categories emerged that are presented in Table 2 below.

Table 2

Key categories

#	Categories	Frequency
1	Understanding content: Language issues	65 (44%)
2	Academic reading challenges	33 (22%)
3	Absence of challenges	27 (18%)
4	Technical issues	18 (12%)
5	Phonetic issues	4 (3%)
	Irrelevant responses	2 (1%)
	Total	149

The first category was based on the following keywords: “lack of vocabulary, writing style complexity, understanding specific terms, and unknown words”. The keywords mentioned above were repeated 65 times and covered 44% of all responses. It implies that poor English language skills impeded students’ understanding of the course materials. The students found a lot of jargon words, terminologies, words, and concepts in English unfamiliar to them. They believed that due to insufficient English proficiency, they struggled in grasping the course contents.

Consequently, these issues were grouped under one category entitled “Understanding content: Language issues”. Surprisingly, the responses extracted from closed-ended questions related to the International English Language Test Scores (IELTS) indicated that 36.9% (118) of all participants passed the IELTS test. In comparison, 37.2% (119) of them stated that they also passed another language exam such as Duolingo, entrance language exams, or other tests provided by universities.

Moreover, only 5.3% of the participants obtained the highest score between 8 to 8.5 points in the IELTS, 18.1% (58) scored between 7 to 7.5, 13.4% (43) scored 6 to 6.5, and 5.9% (19) participants scored between 5 to 5.5. Hence, this analysis shows that a great number of graduate students were admitted based on their sufficient English language skills that they demonstrated through various tests. However, the language test scores cannot measure students’ preparedness for undertaking advanced level studies. Therefore, graduate students, despite having obtained high scores in IELTS, struggle with academic reading and writing due to a lack of academic literacy skills.

Next, an in-depth examination of the first category has revealed three subcategories presented below in Table 2.1:

Table 2.1

Subcategories of the category “Understanding content: Language issues”

#	Subcategories	Frequency
1	Poor/Insufficient vocabulary (terms, technical words, vocabulary, unfamiliar words)	56 (86%)
2	Grammatical points	3 (5%)
3	Complex style of academic texts	6 (9%)
	Total	65

As it can be seen from the above table, a significant portion of responses – 86% (56) indicated a lack of vocabulary as the biggest challenge faced by the students. It is worth mentioning that the students admitted to facing numerous challenges in their academic reading and writing mainly because of insufficient vocabulary and unfamiliarity with the terms and concepts related to their field. For example, *lack of specific vocabulary and unfamiliarity with jargon words and*

concepts result in difficulty understanding literature available in English (Student 121_Survey). In contrast, closed-ended questions results indicated that only 36% of respondents confirmed their challenges in articulating concepts in English. Nevertheless, most participants (92%) agreed that academic reading and writing are different from general reading and writing and thus challenging. The participants also mentioned that academic writing in English is different and more challenging than in Kazakh or Russian languages. However, the analysis of a closed-ended question, *"Difficulty of academic reading and writing in English from those in Kazakh and Russian"*, showed contradicting results. It found that 38% of respondents considered academic reading and writing in English more difficult than in Kazakh or Russian, whereas 45% of the respondents reported that academic reading and writing in English was not tricky compared to Kazakh and Russian ones.

Compared to the previous first category, where language issues dominated, the second category emerged around reading academic texts per se. Students referred to challenges in conceiving content of texts, then analysis and summary of them. The frequency of responses was equal to 33 (22%). This category was entitled "Academic reading challenges". The subcategory "Complex style of academic texts" might overlap this category. However, they were differentiated by language. In the "Understanding content: Language issues", students referred to a lack of understanding of the content due to poor vocabulary, whereas students in this category avoided it. The following two subcategories clearly described first, 22 (66%) students "fear" to misinterpret ideas and conceive them incorrectly (Table 2.2). The abovementioned facts signal about their language sufficiency to understand terms and concepts.

Table 2.2

Subcategories of the category "Academic reading challenges"

#	Subcategories of the category "Academic reading challenges"	Frequency
1	To identify the main idea	22 (66%)
2	Structural dimension	11 (34%)
	Total	33

The next theme was the easiest as students stated, "no problems", and it appeared 26 times. Hence, the category entitled "Absence of challenges". Although this category did not require deep analysis, it might propose two options: either students neglected this question, or they indeed have not faced any challenge. However, some students explained the absence of a challenge by indicating their foreign background, previous learning experience in EMI university, and work experience in this field. Hence, this emanates out from some reasons behind the lack of challenges. Otherwise, students would raise their issues as it stems from the following category "Technical issues". This category contains few frequencies;

nevertheless, these are obstacles that students referred to. For example, 33% of the respondents pointed out length of an article, small letters that are difficult to read and perceive. Also, the columns that some journals use caused discomfort within the reading. Another 17% of the respondents stated that they need time because they (17%) read very slowly. As a result, they need practice (11%) to improve those skills. In addition, local students from regional universities probably indicate obstacles to accessing credible resources. Even though most local Kazakhstani universities provided access to credible databases, they were limited. Moreover, students and faculty members, who lack experience in reading international literature, need time and energy to select suitable articles for their studies too. This fact also emerged as a technical issue within 11% of responses.

Table 2.3

Subcategories of the category “Technical issues”

#	Subcategories of the category “Technical issues”	Frequency
1	Need practice	2 (11%)
2	Need time	3 (17%)
3	Speed of reading low	3 (17%)
4	Text format (small letters, columns, lengthy text)	6 (33%)
5	Access issues	2 (11%)
6	Selection of articles, separation reading and writing	2 (11%)
	Total	18

Hence, students’ experiences showed two areas where reading challenges were identified. The first area was related to “language” per se as “unknown words” impeded a holistic understanding of concepts and ideas. The second area relates to “academic reading” since an in-depth analysis of the article requires students’ critical and analytical skills. The remaining students pointed to technical issues related to the need for time and practice to improve their reading speed and the need to access credible resources and skills to select relevant to their study.

Thus, in open-ended questions, students could explain and point out the details of challenges in reading. In contrast, participants confirmed academic reading difficulties in English in closed-ended questions.

Sociological Challenges

Graduate Students’ Challenges in Writing

The second question was related to the challenges of academic writing. Out of 296, 153 (52%) respondents skipped this question; in contrast 143 (48%) responded. Students’ responses to open-ended questions were categorised under seven themes (see Table 3). Students’ major obstacles in academic writing

included structure and consistency, building argumentative sentences, coherence between paragraphs, and clearly expressing ideas in English. For example, a student stated, *"I would love to learn to write more complex sentences, to learn to be more precise and coherent"* (Student_80_Survey). As elicited from 34 (24%) responses, it was aligned with insufficient vocabulary and synonyms that could diversify and enrich academic writing. For instance, the following phrase: *"Usage of appropriate words, translators not always helpful"* (Student_60_Survey) was mentioned. Students' previous writing experiences in Russian and Kazakh remain an impeding factor in their learning of APA style, punctuation, grammar, paraphrasing, and synthesising literature. For example, students had to unlearn their academic writing in Kazakh and Russian to learn and relearn academic writing in English. Surprisingly, 16% (23) of respondents stated that they did not face any challenge while producing writing works. 9% (13) of participants highlighted the necessity of practicing writing. One student noted a lack of expertise in faculty members, who teach academic literacy courses. Table 3 below presents the percentages of participants and the challenges they face in academic writing.

Table 3

Major categories of writing challenges

#	Categories	Frequency
1	Structure	42 (30%)
2	Vocabulary	35 (24%)
3	Style	24 (17%)
4	No problems	23 (16%)
5	Lack/absence of practice	13 (9%)
6	Produce a work	3 (2%)
7	Difficult to respond	3 (2%)
	Total	143

Moreover, writing academic articles in Scopus journals is one of the qualities of a competent teacher at universities. In local universities, faculty members can receive additional incentives for published works.

The closed-ended questions were analysed to examine students' attitudes towards the challenges in academic English, including reading, writing, communication with professors and peers, and involvement in class discussions. The quantitative inferential and correlational analyses such as independent sample t-test and one way ANOVA revealed general trends in academic English. The independent sample t-test indicated that gender does not impact the way participants perceive their academic language challenges. Similarly, one-way ANOVA analysis showed that the age factor does not influence participants' perceptions.

Some statistical analyses were employed to explore the influence of students' educational backgrounds on their English academic challenges. For instance, an independent-samples t-test which was conducted to compare the academic English challenges between PhD and Masters students, did not show any statistical significance – PhD ($M = 2.21$, $SD = 0.56$) and Masters' students ($M = 2.23$, $SD = 0.52$); $t(225) = -0.24$, $p = .081$). These results suggest that both PhD and Masters' students faced similar challenges in academic English. A one-way ANOVA analysis of variance was conducted to compare where the respondents obtained their undergraduate degrees. The result demonstrates no statistically significant difference between the three groups, $F(2, 230) = 1.04$, $p = 0.35$. This result means that the students who obtained their undergraduate degrees in Kazakhstan, Russia, and overseas universities faced similar, in most cases the same, challenges in academic English.

Overall, the above-mentioned quantitative analyses indicated that the participants experienced a similar set of challenges in academic English. Such factors as gender, age, and educational background did not substantially impact the nature, forms, and levels of challenges faced by these students. The students' major challenge was achieving the international standard of academic writing in English in terms of structure, coherence, clarity, argumentation, and consistency.

Discussion

The findings presented above have shown that graduate students in higher education institutions in Kazakhstan face several challenges in their academic reading and writing in English. Despite many significant steps the policy-makers and practitioners take towards EMI implementation, there seems to be a gap in the curriculum between schools and universities in how students are prepared for academic life, more specifically for academic reading and writing. The participants in this study revealed that throughout their school studies, they were not exposed to that type of academic writing style they have to do at the university currently.

Evidently, English medium universities are easily accessible for bachelor students with foreign language education backgrounds. Those who did not study in English medium schools can pay additional money to obtain IELTS and SAT tests to enter the university. Nevertheless, in this study, 44% of the participants (both Master and PhD students), who had obtained their degrees in English, reported that lack of vocabulary often impedes their understanding of the core content of the courses. These students believe that had they been taught academic reading and writing in elementary and secondary schools, they would

not be facing difficulties in their university studies. For instance, a comparative analysis of EMI experiences among local and international students in one of the universities in Singapore explored that the former had several challenges in all four levels of English skills [26]. Another study conducted at one of the Japanese universities revealed that university students were provided with an 18-month training in English prior to the commencement of the academic programmes they were enrolled in [27]. This intensive training in English was required to prepare the students and enhance their academic literacy skills. Although these students had the required IELTS scores, they still faced numerous challenges in academic reading and writing in English. These findings show that students' IELTS scores cannot be an indicator of excellent academic language skills [28]. The same is the case in Kazakhstan, where most students have the IELTS scores required for university admissions but they still struggle in academic reading and writing due to insufficient academic literacy skills. For instance, 22% of the participants asserted that reading in English style was quite tricky. These findings are aligned with the experiences of international students across the globe, highlighting the lack of skills in critical analysis [14, 15]. Thus, there is a genuine need to (i) provide students with a stronger foundation for academic literacy skills at the secondary schools, (ii) provide intensive academic literacy and foundation courses at the EMI universities, and (iii) revise the university admission requirements to assess not only the English language proficiency but also academic literacy skills of the prospective students.

Many post-colonial countries are struggling with balancing the use of the English language and their native languages in schools and universities [29]. Kazakhstan is not an exception. The participants in this study expressed their concerns that the increasing emphasis on English may undermine the national language – Kazakh – and Russian as the regional language. The participants suggested that while learning English is the need of the hour for Kazakhstan to integrate with the rest of the world, equal emphasis should be given to Kazakh and Russian languages in both school and higher education. According to the participants, a significant number of faculty at EMI universities lack language proficiency and pedagogical skills. They, therefore, need professional development that could equip them with innovative methods of teaching and advanced language and academic literacy skills.

Conclusion

To conclude, graduate students in EMI universities in Kazakhstan indicated two major challenges that they confront in their academic reading and writing in English. One is related to the personal-psychological challenge, which

includes students' previous academic backgrounds, exposure, and learning experiences. Since most graduate students had studied in Kazakh or Russian as the language of instruction in their previous academic programmes, they faced difficulties in understanding the concepts and content delivered in English. This fact shows that lack of exposure and systematic English learning experience in secondary schools and undergraduate studies hinders students' academic reading and writing skills in English in EMI universities. The second challenge faced by graduate students is related to English academic culture and students' worldviews, concepts, and values about English as a language and medium of instruction. The way students view the English language and its importance for their careers influences their approaches to learning and engaging with English. Thus, it is critically important for universities to provide students and faculty with an enabling, stimulating, and vibrant environment for learning and using the English language to address these two above-mentioned major challenges. Furthermore, ongoing professional development of faculty members in the English language, academic literacy, research, and innovative pedagogies may help the faculty facilitate students' learning in graduate programmes.

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