

EFFECTS OF ENGLISH MEDIUM INSTRUCTION (EMI) ON STUDENTS' ACADEMIC AND SPEAKING PERFORMANCE: COMPARISON BETWEEN ENGLISH MAJOR AND NON-ENGLISH DEPARTMENTS

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Abstract

The purpose of this paper is to study the effects of the EMI policy on academic improvement and speaking proficiency among the students of private universities in Bangladesh. In addition to the academic implications of EMI, it investigates its impact on English-speaking performance among other related disciplines. A quantitative research methodology was used, with data collected from 120 participants in both English and non-English departments. A survey questionnaire consisting of 45 items was used to collect data on the participants' perceptions of the effects of EMI on academic and English-speaking performance. Factor analysis and t-test results reveal the pressing nature of the problem given that while students in English departments score high on the impacts EMI has had on undermining academic improvement and language proficiency, those in non-English departments consider EMI facilitative. Overall, the findings presented above might guide further discussions on the EMI policy and give recommendations to both individuals and institutions. As a result, this is a relevant contribution to the language instruction policy in higher

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education that is mainly concerned with better academic performance and speaking skills acquired by university students in Bangladesh and beyond.

Keywords: English medium instruction (EMI); higher education; perceptions; academic achievement; speaking proficiency; Bangladesh.

1. Introduction

English Medium Instruction (EMI) has played a significant role in Bangladeshi education history. Many private schools and colleges adopted English as the medium of instruction. Furthermore, all private universities adopted English as the medium of instruction. English is a compulsory subject in Bangladeshi public schools and colleges. Educational institutions in Bangladesh have been teaching and learning English, integrating it with the 'communicative approach' since the 1970s. The goal of the approach is to make the students more competent in communicating through the English language. Communication in English means continuing a discussion that demonstrates mastery of basic English language skills. But, after four decades of adopting the communicative approach, pedagogists, teachers, students, and educational researchers are facing difficulties, getting confused, and wondering about the actual results of the method, especially in acquiring speaking skills. Moreover, most of the students consider English a "subject" to pass; rather, it is the spoken language that is an obvious reason behind its inefficiency. Some of the remedies prescribed by Islam and Stapa (2021) that might help minimize the problem include using task-based and cooperative learning; improving family support; integrating instruction to speaking and listening; integrating Information and Communication Technology (ICT) applications; promoting Self-regulated Learning (SRL); and strengthening teacher education. If these are done, the students might heal from their ailment and start speaking English fluently.

Furthermore, Hasan and Ibrahim (2017) and Chowdhury (2016) found that if most of the private universities adapted some fundamental English courses for the freshmen's and offered them, they could be proficient in different skills of the English language. Moreover, Akter and Mitul (2020) recommended that if the teacher used mixed language (both Bangla and English), it would make the lecture easy to understand. Akter and Mitul (2020) also said that the university should offer a general remedial course for the students to overcome their weaknesses in English. The name of the suggested course is Computer-mediated Language (CML), which provides necessary teaching support. These specialized courses can help with the proper implementation of EMI. Thus, the students are being admitted to the English department without the necessary skills in English, and teachers are teaching in their profession without proper training. Furthermore, Amin (2019) investigated the fact that a successful teacher needs to be aware of some additional requirements besides preparation and research. It will quench their thirst for knowledge and make them want to read more and more. Along with that, a successful teacher has to become the students' friend and share thoughts and ideas so that the learning process will be developed in a decent and unforgettable way. Thus, more interventions concerning EMI should be done properly by the institutions, and most importantly powerful monitoring measures should be undertaken.

As a crucial issue in Bangladesh and around the globe, providing higher education through English Medium Instruction (EMI) is both important and demanding. The latest trends in higher education offer compelling reasons for the increasing use of English as the medium of instruction (Akteruzzaman & Sattar 2020). Efforts such as remedial courses and access academy programs have not been able to help the students, and their English proficiency continues to obstruct their academic results (Rahman et al., 2020). The problem extends further. Teachers are not proficient in English and cannot provide an effective language learning environment (Hasan et al., 2020; Chowdhury, 2016). As a result of this, academic performance drops sharply, and students have only a limited vocabulary (Aktar et al., 2022). Therefore, students struggle to understand the contents of the courses and have difficulty listening, speaking, or writing in English (Hossain and Al Younus, 2024; Akteruzzaman & Sattar, 2020). Therefore, a comprehensive assessment of how effective EMI is at the tertiary level in teaching English language and literature is imperative. This study will clarify what broader effects EMI has on undergraduates and educators, with implications that can benefit English language education throughout the world.

This paper extends the previous research about English Medium Instruction (EMI) in universities, especially in Bangladesh. However, whereas earlier research by Akteruzzaman and Sattar (2020), Hasan et al. (2018) and Aktar et al. (2022) identified challenges faced by EMI, this study goes deeper into such implications. In order to suggest fresh perspectives and innovations, the paper aims to investigate the effects of EMI on undergraduates and teachers. Vygotsky's (1978) sociocultural theory is the theoretical underpinning of this research, which examines not only academic performance but also English-speaking ability and students' perceptions. This can help us understand some of the social-cultural dynamics at work in tertiary education. The theory suggests that the sociocultural environment may influence students' experiences with EMI (Vygotsky, 1978). Within a sociocultural context, there has been relatively little research into the intersection between EMI practice and overall experience or language development.

Non-native English-speaking countries, such as Bangladesh, are embracing English Medium Instruction (EMI) in growing numbers. As globalization continues to develop and integrate the world economy, jobseekers are expected, at a minimum, to have the capability to read and write fluent English (Rahman et al., 2020). But some experts have pointed out that EMI not only improves students' understanding of course material but also aids their English-speaking ability (Yildiz et al., 2017).

Some argue that EMI courses should focus on increasing students' vocabulary and practical language skills so that they are ready to compete globally (Hasan et al., 2018). Meanwhile, others feel that, in order to deepen students' understanding of what is taught, teachers should use simple language terms, give adequate explanations, and create an engaging learning atmosphere (Islam, Hasan, & Mahmud, 2024; Khan, Hasan, Islam, & Uddin, 2024; Rahman,

Abidin, & Hasan, 2018; Uddin, Islam, Nirjon, Hilaly, Mazed, & Hasan, 2024; Mridha & Muniruzzaman, 2020; Huang, 2015). While the government believes EMI programs enhance the employability of students and improve their fluency in English, we are still waiting for research that looks at how students perceive the effects of an EMI-learning environment on course outcomes and their own speaking proficiency (Chowdhury, 2016; Murtaza, 2016). Therefore, this research was conducted with the intent of investigating how students view EMI in terms of its impact on their academic performance and spoken English abilities, in order to provide guidance for those engaged in EMI practice and oversight.

2. Literature review

In educational settings throughout the world, including Bangladesh, certain literature on English Medium Instruction (EMI) underscores its growing importance. The EMI entails instructing academic subjects in English. Cosgun and Hasirci's (2017) research on this topic, along with Shahzad et al.'s (2013) findings, suggest that EMI has the potential to significantly contribute to college students' positive attitude towards learning English and their perception that this language holds personal significance. However, despite these opportunities, EMI still faces significant challenges: Dearden (2014) points out that despite the concerns about diluting national identity amongst people today who choose EMI as a theoretical carrier, in Bangladesh, EMI is growing in popularity.

However, the implementation of EMI in Bangladesh is problematic for a number of reasons. As Huey (2021) and Chowdhury (2016) note, one of these challenges is that students often find it difficult to understand using English as the medium of instruction and quickly adapt to an entirely new environment of radical immersion in languages unknown to them. Students experience resulting tensions and social cleavages, leading to low academic achievement (Huey, 2021; Chowdhury, 2016). Aizawa et al. (2020) propose enhancing motivation and effort in English learning to address these issues, while Chowdhury (2016) argues for the provision of fundamental English courses to enhance students' language skills.

In addition, questions under EMI about students' spoken English proficiency are also matters of great concern, both for Islam and Stapa (2021) and Suchona and Shorna (2019). Anxiety, lack of confidence, and large class sizes demoralize many students by making it difficult for them to speak fluent English (Islam & Stapa, 2021; Suchona & Shorna, 2019). Moreover, Hasan et al. (2018), as well as Akteruzzaman and Sattar (2020), can also refer to specific policies and practices currently used in relation to language and instruction to provide examples of inefficient realization of the student language requirements. This approach would make these challenges persist, adding to the difficulty of EMI implementation. In general, the analysis of the articles suggests that administering EMI in higher education is a complex process, and it is possible to address its pros and cons by discussing students' language skills and academic achievement.

2.1 Students' Perception of the Effects of EMI on Academic Performance

Students' positive attitudes and perceptions indicate the need to offer EMI courses for language learning and skill improvement. Curricula should adapt to enhance students' international posture by increasing their self-confidence and awareness of international communities and cultures. According to Chowdhury (2016), the majority of students are facing problems upgrading their academic results due to the use of the EMI policy in the classroom as well as in the examination. In this regard, Huey (2021) revealed that though there is a problem with EMI, the students agree and support the use of EMI as they recognize the importance of English. They also believe that learning through EMI has many benefits, the biggest of which is improving their English language skills. Morais et al. (2023) and Aktar et al. (2022) stated that anxiety, nervousness, shyness, fear of losing face, making mistakes, and a less communicative environment are working behind the student's inability to speak English. Moreover, Köksal and Tercan (2019) discovered that the majority of participants acknowledged their English proficiency as either fair or poor; they unanimously supported the EMI language policy, suggesting that it could enhance their English language skills or provide them with increased opportunities to utilize English in natural settings. To achieve this, EMI teachers should reduce students' anxiety levels by using effective strategies to facilitate their understanding and motivate them. In addition, Mridha and Muniruzzaman (2020) found that teachers should take on the role of facilitators of language learning classes. They should make everything amusing, exciting, and enjoyable, and they should make their students practice orally without the support of a written script. In the classroom, the teacher must be friendly, and recognize the students' personalities as well as their potential.

2.2 Students' Perception of the Effects of EMI in Developing Speaking

Alongside the efforts to improve the overall quality of its education system through tertiary institutions, the international issue that arises is whether English medium instruction is a serious form of getting through college work in modern times on an equal basis as Mandarin and Spanish do. Because additionally, the English Medium Instruction (EMI) programs at the universities aim to enhance students' language proficiency and elevate the caliber of their academic work. Soe et al. (2020) and Cosgun and Hasirci's (2017) paper provides evidence that studying in an English medium environment significantly enhances students' overall English proficiency. This emphasizes the beneficial effects of meaningful language exposure on language skills development, as argued in Krashen's input hypothesis (1985). Moreover, Shahzad et al. (2013) note that English is the key to the most up-to-date advancements in fields of knowledge and that it will determine students' future achievements domestically and internationally. In the face of daunting challenges, students not only see the potential benefits of learning

English but also see a future career or further study as unattainable until they can master the language. Shahzad et al. (2013) and Inayah and Lisdawati (2017) stress the importance of fluency and accuracy in spoken English for communicative language learning, reflecting students' positive attitudes toward gaining fluency as a critical academic skill.

However, the effect that the implementation of EMI has had so far in Bangladesh is also problematic, with a variety of problems preventing students from gaining an understanding of both the lectures they listen to and how they can express themselves like this (Huey, 2021; Chowdhury, 2016). These are challenges that underline the necessity for institutions to tailor their teaching methods and provide language support mechanisms appropriate to furthering students' language learning and academic success (Akteruzzaman & Sattar, 2020). By doing this, universities will better prepare their students with the language skills needed for top-notch academic performance and professional development in the context of an increasingly globalized world.

3. Research method

The research was done on a private university of Bangladesh, located in Dhaka city. This study employed a quantitative method. It contained a survey questionnaire with 45 closed-ended questions divided into three segments for the students.

3.1 Sampling Technique

A private university in Bangladesh provides the sample for this study. 200 participants constructed the sampling frame based on specific criteria, which included students studying Bachelor and Masters Level in both English and non-English departments, students from Bangla medium backgrounds, and students aged between 18 and 25 years. The reason for choosing university students is due to their regular use of the English language in their classroom and also outside of the classroom. These students get their classroom instructions in English. Undergraduate and Graduate students from the English and Humanities department and other departments comprise the sample. Therefore, we can collect the necessary data from these sources. The online sample size calculator "Survey System" selected 120 respondents from the 175 participants, accounting for a 5% error. We collected the required number of data points using the simple random sampling (SRS) technique.

3.2 Survey Questionnaire

Quantitative research uses a survey research design to collect data. This study adapted the items for the questionnaire from earlier studies by Chowdhury (2016), Murtaza (2016), Huey (2021), Zumor and Qasem (2019), and Sultana (2014).

There was a total of 45 items in the questionnaire. We divided the questionnaire development process into two specific steps. The researcher divided the first part into two sections, which included 30 items about participants' perceptions of EMI on their academic performance: academic performance inside the classroom, with 15 items, and academic performance outside the classroom, with 15 items. The second part includes 15 items about participants' perceptions of EMI and their speaking proficiency. The researcher uses a "5-point scale" to provide the respondents with multiple choices and a more appropriate measure of liberal feedback. In addition, the researcher had the opportunity to view the collected data from different perspectives. The survey questionnaire provided the respondents with five options, ranging from 1 (strongly disagree) to 5 (strongly agree). The researcher specifically chose the 5-point "likert scale" to collect specific and accurate responses. The researcher sent the questionnaire to the 120 participants, asking them to complete it.

3.3 Data Collection Procedure

To collect the data, the researcher distributed the questionnaire as a Google Form to 200 students at a private university in Bangladesh. The response rate was 60%. A total of 120 students responded to the survey voluntarily. The university is located in Dhaka, the capital city of Bangladesh. The data collection process maintained all the ethical issues including participant consent and removal of any type of research bias.

3.4 Data Analysis

The data was analysed using STATA. The test types are mentioned here.

3.4.1 Factor Analysis

A Scree Plot of eigenvalues, Cronbach's alpha, and a t-test were used to look at the statistical data. These tests determined how the three groups perceived or judged the four factors and how they related to each other. This section of the study tested the reliability and validity of the questionnaire. The study used Cronbach's alpha reliability analyses to describe the scale's reliability levels and sub-dimensions. In this study, Cronbach's alpha is adopted by the researcher. The alpha is calculated by dividing the sum of the variances of the questions on a scale by the total variances. Alpha Coefficient checks that there is homogeneity structure of all the questions in some groups. It can assume the values between 0 and 1. When it becomes negative, it means that the reliability is too weak. For example, according to Özdamar (2016), the reliable alpha value is not less than 0.50.

Scree plot factor analysis wants to find out which variables in a single data set create consistent subsets that are largely independent of one another. Factors are variables that exhibit interrelationships yet maintain a significant degree of

independence from other variable groups. Therefore, Tabachnick and Fidell (2013) assumed that factors reflect basic processes that create interrelationships between variables. The researcher should examine the Kaiser Meyer-Olkin before conducting the Scree factor analysis. The Kaiser Meyer Olkin (KMO) sample adequacy value expresses the current sample's adequacy; the current sample has K items in measuring the phenomenon as opposed to its counterparts. It should be more than 0.5. Özdamar (2016) further said that if the KMO sample adequacy is close to 1, it indicates that the current scale is a high scale of adequacy in measuring the phenomenon.

3.4.2 Descriptive Statistical Analysis

Descriptive analysis is used to analyze the quantitative data. The data collected through the survey is transformed, reconstructed and modified to achieve the objectives of the study. According to Cresswell (2012), descriptive statistics summarize the overall trends in the data, giving an understanding of the variation in scores as well as an insight into the scores that seem to be the highest. Firstly, the questionnaire is prepared by the researcher. Secondly, the questionnaire is given to the participants. Thirdly, feedback is collected. Then, the results of the reactions are calculated. The data are prepared by using STATA (Statistical Software) Version 14. Through STATA, feedback of the survey questionnaire is presented in the form of table. According to Uddin et al. (2020) and Kolenikov (2001), STATA is a widely used computer program designed to help the statistical analysis of data. Through STATA, the feedback of the survey questionnaire is presented in the form of table.

3.4.3 Inferential Statistical Analysis: Two Sample t-Test

In the current study two sample t-test is performed to show the difference between the mean scores of perceptions of respondents between two groups (e.g. Students from English department and students from non-english departments). The formula of two sample t-test is specified as follows:

$$t = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

4. Findings

The collected data has been analysed statistically and interpreted in connection of the past literature in this part of the study. Figures and tables are used to present the quantitative data.

4.1 Perception of the EMI Factors on Academic-Inside Classroom

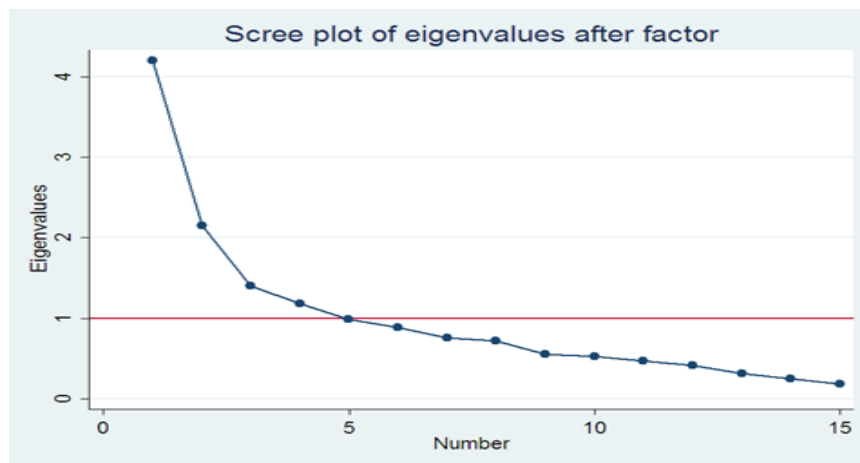


Figure 1. Scree Plot Graph 1(Inside Classroom)

In this Scree Plot, 15 components were used to factor analysis. When the graph is tested, it can be said that the ideal factor number for the scale is 1 - 4. It showed that up to the 3rd component the difference is showing that the line is gradually getting flat.

Table 1. The reliability estimates (Cronbach's coefficient alpha) (Academic-Inside Classroom)

Factors	Number of Items	Item Number	Reliability
F1-EMIIUC	6	4,3,1,15,13,7	0.84
F2-TPEMI	3	8,6,2	0.66
F3-SPEMI	2	10,14	0.38
F4-IESMIC	3	11,9,12	0.59

For table 1, Chi-Square test = 461.89, DF (degrees of freedom) = 105, P-value = 0.000, KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) = 0.712. The tested factors included class activities in EMI as F1-EMIIUC: EMI impedes understanding in the classroom, F2-TPEMI: Teachers' Preference for EMI, F3-SPEMI: Students' Preference for EMI, and F4-IESMIC: Improving English skills through EMI in the Classroom. The reliability estimates for the factors were calculated as shown in 1. For F1-EMIIUC, Cronbach's coefficient alpha values ranged were 0.84, for F2-TPEMI 0.66, for F3-SPEMI 0.38, and for F4-IESMIC 0.59. All the item numbers of factors are included from the questionnaire (Appendix) for factor analysis. Although the reliability estimates for F3 were lower than the others, about 0.39, it was taken as acceptable for the further examination of the data.

The reliability score of F1 and F2 showed the high score means it is a scale of high adequacy. It indicates that students found Learning through EMI is really difficult. F3 showed that only few students want to learn through both Bangla and English Language. Finally, F4 showed that though the students found learning through English is difficult but it is very important for them to learn in English. So, from the result of the validity and reliability analysis, it can be said that EMI in the Classroom is found structurally valid and reliable tool.

4.2 Perception of the EMI Factors on Academic-Outside Classroom

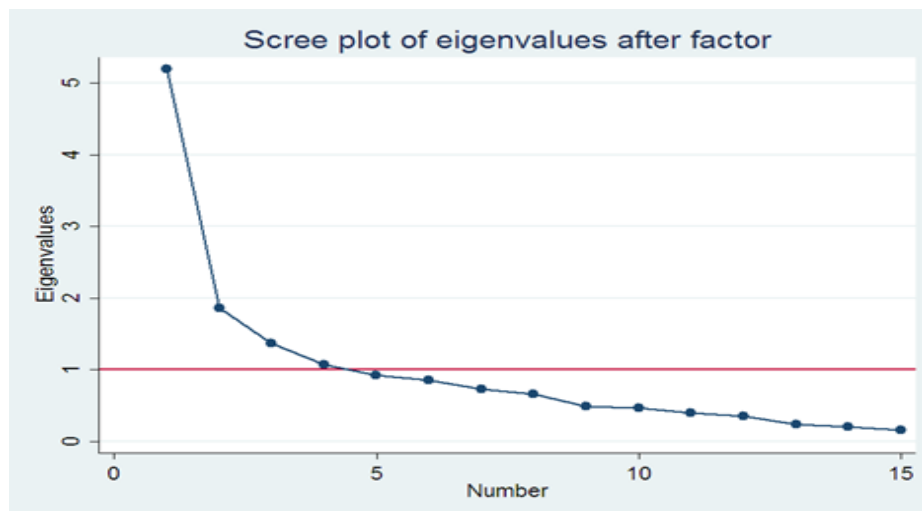


Figure 2. Scree Plot Graph 2 (Outside Classroom)

In this Scree Plot 15 components were used to factor analysis. When the graph is tested, it can be said that the ideal factor number for the scale is 1-4. It showed that up to the 3rd component the difference is showing that the line is gradually getting flat.

Table 2. The reliability estimates (Cronbach's coefficient alpha) (Academic-Outside Classroom)

Factors	Number of Items	Item Number	Reliability
Fact1-PEEMIP	5	2,1,15,9,7	0.82
Fact2-NIEMIL	4	4,5,6,3	0.86
Fact3-ILE	4	10,11,14,8	0.45
Fact4-NLE	2	12,13	0.41

For table 2, the Chi-Square test is 591.28, DF (degrees of freedom) is 105, the P-value is 0.000, and the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) is 0.812. The tested factors included class activities in EMI as F1-PEEMIP: problems encountered in EMI and personal, F2-NIEMIL: negative

influence of EMI on L1, F3-ILE: importance of learning English, and F4-NLE: necessity of learning English. The reliability estimates for the factors were calculated as shown in Table 2. Cronbach's coefficient alpha values ranged for F1-PEEMIP 0.82, F2-NIEMIL 0.86, F3-ILE 0.45, and F4-NLE 0.41. All the item numbers of factors are included in the questionnaire (Appendix) for factor analysis. Although the reliability estimates for F3 and F4 were lower than the others, about 0.4, they were taken as acceptable for further examination of the data.

The reliability scores of F1 and F2 showed a scale of high adequacy. It indicates that students are not only facing problems inside the classroom; they are also facing problems outside of the classroom because of the EMI policy. F3 and F4 showed the same thing here, like Table 1. The students are continuously facing trouble where they need to use the English language, but at the same time, they can also realize the importance of the English language. So, from the result of the validity and reliability analysis, it can be said that EMI outside of the classroom is a structurally valid and reliable tool.

4.3 Perception of the EMI Factors on Speaking Proficiency

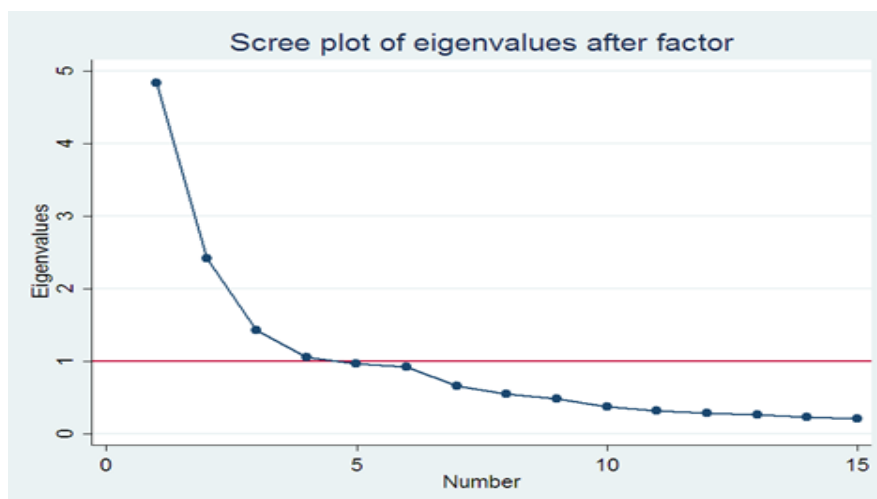


Figure 3. Scree Plot Graph 3: Speaking Proficiency

In this Scree Plot, 15 components were used to analyze the factor. When the graph is tested, it can be said that the ideal factor number for the scale is 1-4. It showed that up to the 3rd component the difference is showing that the line is gradually getting flat.

Table 3. The reliability estimates (Cronbach's coefficient alpha) (Speaking Proficiency)

Factors	Number of Items	Item number	Reliability
Fact1-NREMI	6	1,3,15,2,14,4	0.86
Fact2-SCBLEMI	5	10,13,7,8,9	0.60

Fact3-BSTPDEMI	2	5,12	0.42
Fact4-PISEC	2	11,6	0.41

For table 3, the Chi-Square test is 607.99, DF (degrees of freedom) is 105, the P-value is 0.000, and the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) is 0.786. The tested factors included class activities in EMI as F1-NREMI: negative reviews of EMI; F2-SCBLEMI: social and cultural benefits of learning through an EMI program; F3-BSTPDEMI: both students and teachers perceived difficulties in EMI; and F4-PISEC: positive impact of students' English competency. The reliability estimates for the factors were calculated as shown in Table 3. For F1-NREMI, Cronbach's coefficient alpha values ranged from 0.86 for F2-SCBLEMI to 0.60 for F3-BSTPDEMI to 0.42 and for F4-PISEC to 0.41. All the item numbers of factors are included in the questionnaire (Appendix) for factor analysis. Although the reliability estimates for F3 and F4 were lower than the others, about 0.4, they were taken as acceptable for further examination of the data.

The reliability scores of F1 and F2 showed a scale of high adequacy. It indicates that students are facing a lot of problems when they are speaking in English. F3 indicates that some teachers are also finding it difficult to teach. F4 indicates that the students are also realizing the importance of EMI in speaking. The analysis given to the scale showed that all of the items were distributed across the relevant factors. While the scale KMO value showed high sampling adequacy ($KMO > 0.7$), p value = 0.000 (low proficiency in the English language), $DF = 105$ (maximum students faced the same problem regarding EMI), and Cronbach's alpha reliability coefficients identified for the factors and the Scree plot of eigenvalues indicate that all factors and the scale are at a high level of reliability.

4.4 Comparison Between English and Non-English Departments Regarding Academic-Inside Classroom, Academic-Outside Classroom and Speaking Performance through EMI

Table 4. t test aic, aoc, and sp score, by department

Variables	Combined Mean Score	Mean Score (English)	Mean Score(Non-English)	Mean Difference
Academic-Inside Classroom (aic)	49.61	48.62	52.15	-3.52 Sig-0.02
Academic-Outside Classroom (aoc)	50.85	49.92	53.25	-3.33 Sig-0.09
Speaking Proficiency (sp)	54.43	54.11	55.25	-1.14 Sig-0.52

All the variables aic, aoc, and sp are included in the questionnaire (Appendix) for the t-test. According to the results of the t-test, the mean score of the students in the English department was 48.62, the non-English department was 52.15, the combined mean score was 49.61, the mean difference was -3.52, and the significant difference was 0.02 regarding academic achievement (Inside Classroom). On the other hand, the mean score of the students' English department was 49.92, the non-English department was 53.25, the combined mean score was 50.85, the mean difference was -3.33, and the significant difference was 0.09 regarding academic achievement (Outside Classroom). The mean score showed that English department students are inferior to non-English department students. This means that the students in the English department had low proficiency in the language. So, the result showed that English department students felt learning through EMI was a barrier for them. On the other hand, the combined mean score of the non-English department showed that the students felt it was much easier to learn through EMI than the English department students. The combined mean score was 49.61. It showed that, as students of Bangla Medium Instruction, sometimes they were having problems learning through EMI because they did not have sufficient English language skills. The third variable, speaking proficiency, showed that the mean score of the students in the English department was 54.11, the non-English department was 55.25, the combined mean score was 54.43, the mean difference was -1.14, and the significant difference was 0.52. The mean scores, differences, and significant differences showed that both the English and non-English departments had a little bit of good knowledge in speaking skills rather than writing skills. But overall, non-English department students felt comfortable learning through EMI.

5. Discussion

5.1 Students' Perception Regarding Academic Achievement

Tables 1, 2, and 4 represent the findings regarding academic performance. The findings showed that the majority of students found EMI difficult to learn. The success of the educational process essentially depends on successful communication, interaction, and discussion. Most of the students came from Bangla medium instruction. Therefore, when they attended classes in an entirely English-speaking environment, they struggled to comprehend everything clearly. Even many of the words used in class, whether by the teacher or in their books, were difficult for them to understand. They were dealing with these issues both inside and outside of the classroom. Sometimes in the examination hall, they could not understand the whole question. They found some words that were unknown to them. They needed to focus on grammatical errors, spelling, appropriate vocabulary, and the subject matter whenever they wrote something. As the students of Bangla medium, it was really difficult to deal with another language. As a result, they felt inferior everywhere. As a result, they got a poor

academic grade. It means the interaction and discussion did not happen properly. Moreover, Chowdhury (2016) and Sultana (2014) found the same thing: the students who came from a Bangla medium background faced troubles at the university as the university places importance on the English language. It also showed that the EMI can be responsible for marginalizing students who do not have sufficient proficiency in the English language. The most significant finding in this study is that the students in the non-English department found learning through EMI easier than the English department students. They did not place more focus on language skills. They just needed to explain different terms, theories, statistics, etc. They obtained better marks than English department students through their basic English language skills. They wanted to continue their learning through the English language despite facing problems. Almost all the students in the non-English department realized that learning English is a good opportunity for them, which will make them successful in the future. This finding did not match others. We also noticed another finding: the majority of them agreed that EMI was causing tension and social divisions. Sultana (2014) also found that English severely hampered their possibilities of learning and the development of identity.

5.2 Students' Perception Regarding Speaking Proficiency

The findings from tables 3 and 4 represented the findings regarding speaking proficiency and indicated that most of the students were facing problems when they talked in English. They could not ask the teacher any questions that they could not understand. They could not express their ideas. Rather, they felt bored in the classroom. Sometimes students were facing problems, like when the teacher just focused on the student who knew English better than the others. Therefore, students who lacked proficiency in English were experiencing feelings of inferiority. So, the learning was not happening; rather, the students were increasing their fear of EMI. Akhtar (2021), and Hasan and Labonya (2016) also revealed problems of ineffective performance in the EMI classrooms, lack of coherence in writing in answer to questions, problems in grammar, lexis, and incomplete comprehension because most of the undergraduates had non-EMI backgrounds.

The findings of Table 4 showed that there was no significant difference in their English-speaking proficiency between the English department and the non-English department. Students from non-English departments felt very comfortable speaking in English. Students from non-English departments did not need to focus on their language skills. They just needed to clarify their subject matter, such as theories, statistics, or any other terms. That is why they were able to grasp the material more easily and found speaking English to be easier than for students in the English department. Conversely, the results indicated that students in the English department found it difficult to communicate in English. Being the students of Bangla medium background, the English department

students suddenly met the English environment, and they became confused. When they talked in English, they needed to clarify their subject matter and put more focus on grammatical mistakes, pronunciation, accent, and vocabulary. The strict EMI policy in the class increased their emotional intelligence. They seemed shy and started thinking that they were smaller to share, whereas whatever the native persons would sound better in English and regularly share any discussion before the audience. Moreover, Akhtar (2021) and Murtaza (2021) found the same factor; the majority of the students stated that they are shy to ask a question in English since caught by native words.

According to Krashen (1982), people can acquire a second language if only they can accept comprehensible input sufficiently and if their affective filter permits them to arrive at information. The affective filter hypothesis of Krashen involves not only motivation, attitude, anxiety, and self-confidence but also encouraged students to speak a second language. Whereas Suchona and Shorna (2019), and Hasan and Labonya (2016) found the same results of the factor, desired students get nervous while talking in English (Morais et al., 2023) gone for the anxiety, lousy English background, lack of self-confidence, and absence of desire to use English. The same finding we got regarding this section was that sometimes teachers gave more focus to the students who were more proficient in English. So, most of the students felt substandard in comparison to them. It indicated that there was not enough communication, interaction, and discussion. Sultana (2014) also found the same thing: the weaker students do not get a chance to participate in class discussions. Students from the non-English department, on the other hand, did not find many problems that the English department students experienced. The students in the non-English department did not need to give more focus to the language. They needed to clarify their subject matter using their basic English knowledge. Therefore, they found learning through EMI easier than the English department students.

Finally, based on the composite results, it is achievable to claim that the EMI indicators among students are positive. Many students understand the advantages of EMI to higher education and believe that EMI is good for them because they develop cognitively, are successful in their education, and are able to obtain a better job in the future.

5.3 Implications, Novelty, Limitations and Recommendations

The essence of Vygotsky's social constructivism theory is that learning is both social and collaborative. People develop their understandings based on shared experiences and interactions with others. The English Medium Instruction environment corresponds to the above theory in the following ways: The results obtained during the survey show that students from non-English departments considered their learning through EMI more positive compared to those from English departments. This observation points to the fact that there are structural

influences, such as students' previous linguistic experience and adaptation to a new language environment.

The outcomes correspond to Vygotsky's (1978) acclamation of the importance of social and cultural settings in the learning process. The obtained results' theoretical implications suggest that we should organize EMI around the variables of students' linguistic background and natural progression. Furthermore, English lecturers would need additional courses and training on working with EMI directly, considering that it directly affects students' specifics in terms of language development and confidence-building. An interactive approach to EMI successfully aligns with Vygotsky's main principle of a collaborative learning atmosphere.

However, this study's limitations stem from its reliance on social media communication for data collection, raising questions about the depth of interaction. Moreover, the sample size does not reflect the whole picture, and the results may be biased towards the students that practice EMI on a regular basis. Alternative explanations for the findings also might originate from other variations in language exposure outside the classroom or individual differences in language learning procedures, which were not incorporated in the analyses. Further research can remedy these problems by adding more structured data and conducting surveys and interviews with more students.

Future recommendations include conducting extensive longitudinal studies to ascertain the long-term impact of EMI on grades and English, both professional and informal. Instead of conducting additional studies, it would be beneficial to compare at least two universities, as the research material could be valuable for developing EMI and determining content aggregation cycles. Investigation also needs to be conducted to see whether the elimination EMI affects students' English-speaking performance. Ultimately, we should conduct research that diversifies based on the type of EMI or identifies a new type, bilingual EMI.

6. Conclusion

In conclusion, the present study provides essential findings regarding the diverse student perceptions of EMI in terms of academic performance, in-and-out of the classroom, and speaking proficiency. Moreover, through t-tests of English and non-English departments' perspectives, it is also evident that different student populations have distinct perceptions associated with EMI, especially the latter group, which is favorable to the new language medium. This information suggests that we should consider individual student language background knowledge and past experience when developing efficient EMI training programs. The problem identified in this study can be solved by incorporating the noted interventions in a student-specific way to improve students' English skills while learning the assigned discipline.

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The authors declare that there is no conflict of interest in this work.

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Appendix

Survey Questionnaire

Demographic Profile of the Respondents:

Gender:

Male

Female

Level of Study:

BA

MA

Department:

English

Non-English

School & College Type:

Bangla Medium

Please choose suitable option.

Items (Under Each variable)		SD	D	N	A	SA
Students' Perception of the Effects of EMI on Academic Performance (inside classroom(aic))						
1	I think, 'English as a medium of instruction' is creating a barrier in my learning.					
2	I have experienced a class/ in my school/ college where only English was used as a medium of instruction.					
3	I face problem in understanding class lectures given in English.					
4	Using only English as a medium of instruction in the classroom leads me to have poor grade in classroom participation.					
5	I feel like using a dictionary always in the classroom to understand the course materials better.					
6	I think some teachers are inclined towards students who are very fluent in speaking English than the students who cannot speak well in English.					
7	I think that I will understand the class lectures better if Bangla is used as well with English in class lectures.					
8	I think some teachers are concerned only with the students who can write well in English rather than the students who cannot shape their thoughts properly in the exam scripts due to their lacking in English.					
9	I find no problem when my teacher explains everything in simple English.					
10	EMI can be maintained if students want their teachers to give lectures in English.					
11	If teachers have strong competence in English, students' learning of English will be facilitated.					
12	English as a medium of instruction (EMI) improves the English language competence of learners as they learn to use the language.					
13	EMI makes learning contents complicated.					
14	Teachers using both Bangla and English in the class make the lectures easier.					
15	I only prefer Bangla instructions in the class.					
Students' Perception of the Effects of EMI on Academic Performance (outside classroom(aoc))						
1	I find it difficult to participate in class discussion in English.					

2	I find it difficult to participate in any debate in English.					
3	I struggle when I require to interact with English-speaking students.					
4	I feel embarrassed when I make grammatical mistake in front of English-speaking students.					
5	Students weak in English do not respond to class discussion.					
6	A better command of English will help me to get more attention from my teacher and friends.					
7	A better command of English will help me to be more sophisticated.					
8	Students weak in English usually avoid chances of socialism.					
9	Speaking skills in the class help me to communicate with teachers in the classroom.					
10	Speaking skills in the class help me to communicate with friends in the classrooms.					
11	Most teachers use both Bangla and English while giving lectures.					
12	Some teachers are not good at English communication.					
13	I feel comfortable when I am asked to express (both speaking and writing) my ideas only in English.					
14	I feel shy while asking questions in English.					
15	My weakness in English is the main reason for not asking questions for clarification during the lecture.					
Students' Perception of the Effects of EMI on Speaking Proficiency (sp)						
1	I find it difficult to participate in class discussion in English.					
2	I find it difficult to participate in any debate in English.					
3	I struggle when I require to interact with English-speaking students.					
4	I feel embarrassed when I make grammatical mistake in front of English-speaking students.					
5	Students weak in English do not respond to class discussion.					
6	A better command of English will help me to get more attention from my teacher and friends.					
7	A better command of English will help me to be more sophisticated.					
8	Students weak in English usually avoid chances of socialism.					
9	Speaking skills in the class help me to communicate with teachers in the classroom.					
10	Speaking skills in the class help me to communicate with friends in the classrooms.					
11	Most teachers use both Bangla and English while giving lectures.					
12	Some teachers are not good at English communication.					
13	I feel comfortable when I am asked to express (both speaking and writing) my ideas only in English.					
14	I feel shy while asking questions in English.					
15	My weakness in English is the main reason for not asking questions for clarification during the lecture.					