

**Understanding the Connection between Attention and Comprehension of Bangladeshi
Undergraduates: A Study of an EMI-based Foundation English Course**



Nada Tabassum

201013026

Department of English and Humanities

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Nada Tabassum
201013026
Thesis Supervisor: Sheikh Nahiyen

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CERTIFICATE OF APPROVAL

I hereby declare that this thesis is the student's own work and effort. All sources of information incorporated here have been duly acknowledged. This thesis has been submitted with my approval.



Sheikh Nahiyan

Lecturer

Department of English and Humanities

DECLARATION

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.



(Nada Tabassum)

201013026

Department of English and Humanities

Dedication (optional)

Acknowledgments

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Abstract

English is prominently used as a foreign language in Bangladesh. Despite introducing bilingual pedagogy as a successful teaching application, learning in EMI pedagogy is yet highly emphasized for authentic and holistic EL comprehension at the tertiary level. Researchers around Asia and Bangladesh reported valuable insights into designing effective EMI teaching practices to enhance the learners' cognition. This pilot study explored how attentiveness and relevance to prior learning influence EL comprehension and competence in EMI-based foundation English courses. Several existing literature points to the scope of learners' attention in developing EL cognition in EMI. Therefore, this study explored the interrelation of attentiveness and EL performance on the conceptual ground of Bernard Spolsky's General theory of second language learning (1989) and the Self-Determination Theory of Ryan and Deci (2000). This mixed-method explorative study collected data from 54 tertiary students from diverse backgrounds through surveys and interviewed nine students considering their academic context. Besides, three focused group discussions and three specialized instructors' perspectives from interviews added in-depth insights to the exploration. The overall findings unfold the factors responsible for influencing attention and self-efficacy of students, and the impact of attentiveness on the process of EL learning. The results reveal several psycho-cognitive cues to influence learners' attention and their impact on effective immersion in EMI learning. The study recommends that learners find effective ways to adapt to EMI settings and find the maximum extent of attention. It further presents scopes for the researchers and EMI policymakers to extend this research on a broader scale.

Chapter One

1. Introduction

Bangladesh, a country with diverse speech communities, has a majority of speakers whose first language is Bangla; however, communication in a second language, such as English, has gotten less attention at the tertiary level of education (Islam & Akteruzzaman, 2016). While English has been made mandatory in all tertiary institutions in Bangladesh (National Education Policy, 2010), learners are observed not to perceive its usefulness for learning purposes as their L2 but for its future contribution to the professional or service sectors. Therefore, when English is used as the only medium of teaching, there is a tendency to accept it only for professional purposes, making the L2 learning process biased (Sarker et al., 2021). However, concurrent with other countries and the use of English as a medium of instruction widely in the world (Dearden, 2015), the universities of Bangladesh are using EMI-based classroom learning in other disciplines of study as well (Hamid et al., 2013; Williams et al., 2024). The intention for extensive study in EMI is also because the learners are expected to internalize through globalization and accept English as a part of their academia, apart from intending to develop their professional skills (Rahman et al., 2021). As for this, practicing English at a level that shapes the learners' thoughts is important. To achieve this target outcome, making a critical decision requires English language competence and its involvement with the cognitive resources to shape the learners' thoughts (Goya, 2020). The following background information provides a further reference as to why and how the thought process or learners' psychology is relevant, important, and justifiable for an EMI-based pedagogy.

1.1 Background of the Study

In Bangladesh, with 98% of Bangla native speakers (Imam, 2005), the country's curriculum encountered the necessity of incorporating the use of English as a foreign language. In line with

this and globalization, English as the medium of instruction (EMI) has been particularly initiated at the tertiary level of education to avail the outcomes, preferably the convenience of accessing higher studies abroad, better job opportunities, and the expansion of international trade (Hamid et al., 2013). Considering the importance of English, the Bangladesh curriculum introduced English as Medium of Instruction (MoI) and mandated it to be used besides Bangla in the tertiary level (Chowdhury & Kabir, 2014). However, non-native English learners in Bangladesh are found to prefer translanguaging by incorporating a combination of their mother tongue and English to enhance their comprehension. Therefore, the application of EMI comes with challenges in understanding and interpreting the classroom contents. (Sultana & Fang, 2024). These learners' challenges predominantly consist of unbalanced English proficiency among them and their instructors. Consequently, having a different native language often adds to the difficulty of understanding classroom contents in EMI (Muttakin & Ida, 2015). Despite the perplexity of these students understanding the contents of EMI, they are surprisingly discovered to have a positive perspective towards its implementation (Murtaza, 2016). To address the learners' practical needs, different universities mandated the completion of foundation English courses for learners from multidisciplinary backgrounds and subjects. However, a study argues that these measures have failed to equip the students with holistic English proficiency due to their diverse backgrounds and levels of comprehension (Sarkar et al., 2021). So, implementing EMI in Bangladesh challenges the student's English language understanding since English has particularly an EFL context here.

Apart from the gap in language proficiency, learners' content comprehension relies on other multiple non-linguistic factors in an EMI-based classroom. Among them, their learning styles, cognitive abilities, background knowledge, and motivation to learn are noteworthy (Siegel, 2020). According to the BBC Bengali report (2015, as cited in Hasan, 2020), nearly 63% of students get

admitted to private universities, and Hasan (2020) stated that these students get more exposure to learning English; moreover, public university students also attend the EMI-based preparatory English courses. It further observed an existing relationship between the student population's background and their comprehension through EMI. Although the purpose of EMI is to allow the learners to get exposed to native English exercises (Chaudhury & Rafique, 2023), their language achievement in EMI preparatory year programs is not only dependent on classroom contents but also correlated with their emotional and psychological factors (Atlı & Özal, 2017). To exemplify, the student's motivation to internalize EMI fluctuates over time, often due to non-linguistic factors like the variation in the learning environment, educational background, and even their purpose of learning in EMI (Soruç et al., 2024).

The social context of the learners is identified as a crucial component in determining their psychological capability to cope in the EMI-based classes (Dincer et al., 2019). For instance, sociocultural factors, relevance to the EMI-learning content, and context-based materials highly influence students' psychological drive to adopt English proficiency (Li, 2023). Moreover, studying in EMI has a considerable positive impact on the L2 (second language) acquiring motivation. Determinants like grammatical inference, interpersonal attitude from a socio-psychological point of view, and immersion in the empirical use of English contribute to L2 comprehension (Sun et al., 2023). It is also important to contemplate that English-only settings require both learning and teaching strategies to have a more cognitive presence in the learning space (Dimova et al., 2024), and mindful learning is very effective in facilitating English language outcomes (Lin, 2020). Therefore, social, psychological, and intrapersonal aspects are significant for the processing of EMI-based learning.

Considering that SLA is significant to obtain effective outcomes in an EMI setting, besides socio-psychological factors, some other educational psychological facets are substantial as well. For instance, learners' mindfulness in the EMI setting creates a sense of cognitive presence in the setting. Consequently, they tend to build awareness and attention to details, for example in the language form, vocabulary, and any sort of linguistic limitation (Zeilhofer, 2023). Zeilhofer (2023) also indicated that the self-regulation or awareness of the learners increases with the increase of SL learning motivation. As a result, positive implication is detected in acquiring the target language competence. One such example is that learners' awareness of morphological forms and their attention to the use of a second language resulted in an effective writing capacity, while those who failed to practice awareness had relatively less writing productivity (Leow, 2005). Subsequently, awareness entails positive emotions strongly related to various cognitive dimensions and educational performance (Huang, 2022). Besides, cognitive presence and self-regulatory learning are generated depending on multiple individual differences of the learners. Dörnyei (2005), in his book, *The Psychology of Language Learner*, identified the close relationship between the willingness to communicate, motivation, and cognitive styles of individuals with their learning styles and self-regulatory approach to SLA. Thus, educational psychology and socio-cognition are the determining factors to investigate the SL outcomes in an EMI-based class.

As mentioned earlier, Bangladesh, being an EFL context, implemented preparatory year courses to meet certain demands of the students (Sarkar et al., 2021), and so the importance of their cognitive presence to develop English comprehension is undoubtedly a matter of concern, according to the prior discussion on the relevance of educational psychology with SLA (Dörnyei, 2005). EFC, or foundation English courses, bring students from multidisciplinary backgrounds

and diverse educational practices to equip them with basic English skills. Subsequently, EMI pedagogy encounters diverse learners' perceptions of SLA in such courses (Sarkar et al., 2021). Apart from Bangladesh, some other Asian countries, e.g., China (Wang & Zhang, 2023), Turkey (Kemaloğlu, 2023), and Saudi Arabia (Alasmari, 2023) incorporated EMI in the preparatory English programs to effectively activate the students' SLA to equip them further for their majors. The studies also identify the role of EFCs in allowing students to avail themselves of other academic and professional opportunities. However, Alasmari (2023) pointed out the lack of motivation and interest among students for the sudden implementation of full English in EFCs as one of the concerning barriers to generating SL comprehension. From the provided information, it appears that, although EFCs are intended to train tertiary students for academic success and professional prospects, non-linguistic features of individuals are one of the major facets to determine the effectiveness of these courses.

1.2 Problem Statement

The prime focus of this study is to understand the interrelationship between learners' attention or conscious presence and their EL learning momentum in EMI-based foundation English courses. In a country like Bangladesh, exposure to a full English pedagogical environment for a large number of learners coming from a Bangla-exposed higher secondary context made their learning difficult with many adaptive challenges. Several studies found systematic use of translanguaging and the implementation of bilingual pedagogy for successful EL learning (Khan & Sultana, 2020; Karim et al., 2021). Besides, it is found that learners' attribution beliefs and their expectancy value establish individual self-determination to have a socio-cognitive presence for effective comprehension. As a result, achievement motivation is derived (Shurovi et al., 2024). Motivation assists learners in willingly interacting and regulating their learning in English-exposed

classes (Alam et al., 2022). However, the learners' decision to immerse in the EMI class cannot be wholly controlled only by the “doing motivation” because the academic benefits of “being mode” in learning outweigh the “doing mode” of learning tendency (Kuroda et al., 2022). Therefore, although the aforementioned research identified solutions with approaches like translanguaging and bilingual practices, it is inevitable to understand learners' psychological impact in regulating EMI learning.

Considering the motivation for EL learning, Akteruzzaman et al., (2024) stated that external impact and previous EL classroom experiences are responsible for the learners' low level of learning determination. However, motivation to learn is not sufficient to explain the mechanism of cognitive learning. Gottlieb et al., (2016) argued that motivation is only a signal to change the mental state, but not the decision to initiate learning action. They point out the role of learners' attention or learning focus as the dominant factor involved in controlling learners' determination to seek information. Moreover, Hosan et al., (2022) revealed that in the EMI context, students suffer from a lack of diligence and low concentration. It leaves a scope for exploring the impact of learners' concentration on effective learning in EMI. Islam & Stapa (2021) argued that considering the students' psychological facets, the dissatisfactory performance in English speaking is largely controlled by the negative effects on learners' self-efficacy. They suggested executing further research to advance EMI practices that introduce a gap in understanding what other competencies may or may not be influenced by learners' mindful presence. Learners' attention as mentioned earlier, determines the process of information is seeking for cognitive development, therefore, it is significant to explore the factors that affect information assimilation through activities, contents, and lectures in EMI classrooms (Kamal et al., 2024). It is evident from these studies that no substantial research has been conducted to inspect individual learners' attentiveness and cognitive

attributes, their interconnection with EL comprehension in an EMI setting; and to what extent learner attention is influenced is yet underexplored in Bangladesh.

The gap in the instructional interpretation of learners' performance and students' perspectives regarding their compatibility with EMI pedagogy is identified as a crucial issue in the successful execution of EL learning practices (Sarker et al., 2021). Therefore, despite conducting many research studies, it is yet a struggle for both learners and teachers to effectively obtain the learning goals in EMI. To specify, learners' different first language inferences require extra effort to immerse themselves in the EMI pedagogy (Dimova et al., 2024), and their conscious presence in the classroom is a significant factor in analyzing their productive academic performance (Kuroda et al., 2022). Hence, exploring the relationship between learners' attention and EL cognition in EMI because learning performance increases with the increase of learners' external attention as well as internal stimulation (Wulf & Lewthwaite, 2016).

1.3 Research Aims and Objectives

The role of attentiveness and cognitive presence in measuring the effectiveness of content comprehension in EMI-based classes of Bangladeshi tertiary students has yet to be explored widely. This study aimed to understand and observe the impact of consciousness and cognitive presence of the students on their learning behavior inside the EMI classroom and their implication on the student's learning outcomes. The effect of a range of components on students' learning attitudes, interaction, comfort toward diverse content, and individual attributes was observed to verify to what extent they cognitively engage in the EMI classroom. The objectives of this study are:

1. To observe the connection between students' self-efficacy and their attention in EMI-based foundation English courses through empirical inquiries.

2. To identify the factors influencing the conscious presence of the students and their motivation to learn EMI contents through qualitative inquiries.
3. To understand the relation of intrapersonal and contextual factors on the learning attitude and competence of the students through in-depth group discussions.

1.4 Significance of the Study

The importance of this research stands in its observation of the cognitive and psychological factors influencing comprehension and their outcomes within the context of EMI in Bangladeshi tertiary EFCs, which often need to be more widely identified. While previous studies prioritized linguistic factors (Soruç et al., 2022), motivational factors (Chowdhury et al., 2021; Solhi, 2024), and technical pedagogical strategies (Hosan et al., 2022; Islam & Stapa, 2021; Sarker et al., 2021), for instance, translanguaging (Sultana & Fang, 2024) and bilingual (Thompson et al., 2019) pedagogy, there remains a critical scope of understanding regarding the role of students' cognitive presence and psychological attributes in identifying the success of EMI content learning. This study contributes to the educational gap in EMI, the educational psychology in ELT, and practical implications for EMI pedagogy.

Regarding the attempt to transition toward EMI in Bangladesh tertiary education, several existing studies have assessed the challenges that learners commonly experience in teaching and learning. These studies discussed the broader impacts of EMI policy and management strategies, on language outcomes (Sarker et al., 2021). However, very few studies analyzed the affective factors (Kojima & Yashima, 2017; Nguyen et al., 2023) and psychological dimensions (Sun et al., 2023) that evaluate the learners' abilities to navigate the EMI pedagogy. This study intended to address this gap by observing how factors, such as students' self-efficacy, attentiveness, and cognitive involvement, affect their learning attitude and lead to EL achievements.

This study also contributes to the learning psychology of ELT by concentrating on students' cognitive presence and consciousness within the EMI classroom. It points out the intricate connection between the students' mental attributes and their language outcomes. Understanding this connection, especially the impact of intrapersonal attributes and interactive factors on the student's learning behavior, assists ELT practitioners in modifying teaching strategies for better results. The significance lies in finding the justification that attention or conscientiousness is the precondition to the motivation (Raymond, 2009) to gain effective comprehension in EMI. Consequently, the insights from this study contribute to developing better pedagogical practices and policy-making in EMI that may enhance positive linguistic outcomes and cognitive development.

The findings of this research are expected to adopt functional policies to create revamped content for EMI learners. Some existing literature recommends delving into understanding individual learning attitudes during English comprehension (Hosan et al., 2022). These strategies may generate more effective learning procedures that inspire students' learning efficacy and ensure their metacognitive presence. To enhance the comprehension ability of subject contents in English, this research also assists in providing actionable suggestions for EMI pedagogy improvement by discovering the gaps in previous studies (Sarker et al., 2021).

Chapter Two

2. Literature Review

In Bangladesh, the education policy mandates the English language as a medium of instruction starting from the secondary-level education to the tertiary level of education (National Education Policy, 2010). Despite being widely used in Bangladeshi tertiary classrooms (Hamid, Jahan & Islam, 2013), incorporating the use of English in all four language teaching-learning processes has become a matter of concern for the instructors. Some of them claimed that teaching English using it as a medium of instruction is cognitively demanding as it requires more focus and more planning time for the lecture content preparation (Dimova et al., 2024). More effort in planning and preparing is inevitable as the undergraduate learners in English classrooms in Bangladesh come from different schooling contexts (e.g. BMI, EV, EMI), and the variation of the background makes it difficult for the instructors to develop a proper EMI-based curriculum (Sarker et al., 2021). A study in Japan found that receptive skills (i.e. reading and listening) and speaking proficiency in English are the primary requirements to attend EMI-based courses since the application of frequent English demands potential English skills and so the students find it difficult to participate in these courses (Brown et al., 2021). It is further understandable from a study on EFL students from the responses of their English instructors that they are reluctant to perform well because of their fear of English (Chowdhury et al., 2021). Besides, the motivational factors, for instance, self-efficacy (Thompson et al., 2019) and relatedness with the academic English course contents (i.e. social factors & previous knowledge) are vital in developing academic English language proficiency. In Bangladesh, undergraduate students from any discipline enroll in foundation English courses to adapt to the global context (Fatema Sultana et al., 2019) yet they lack interest in attending these lessons for insufficient motivation and lack of proper outcomes

from the contents taught (Riya & Kabir, 2019). Several studies have found various factors affecting the learner's performance in preparatory academic courses for socio-psychological impact on learner's motivation to engage in the classrooms (Atlı & Özal, 2017; Soruç et al., 2022).

2.1 EMI in the Bangladeshi Undergraduate Study

Learning in an English-only system is more cognitively demanding (Dimova et al., 2024) and needs more attention for the expected linguistic outcome. However, findings stated that students in Bangladesh sometimes get distracted and lose persistence to be cognitively involved with the learning process (Hosan et al., 2022). For instance, EMI-based writing courses require high proficiency in written English, nevertheless, students struggle with keeping up the pace (Rahman, 2023). Similarly, issues with native English epistemology in the English teaching contents often exclude Bangladeshi tertiary learners from developing expected linguistic outcomes. The inclusion of diverse cultural and local perspectives solves these issues (Dong & Han, 2023). Another study finds that students from different educational contexts in an EMI-based class have different attitudes while performing group activities. Native English-speaking students have more confidence than students from a Bangla medium background resulting in a lack of interest in speaking English and often found to remain silent (Sarker et al., 2021). Some of the reasons for their limitation in engaging and participating in the EMI classes are their psychological barriers. Although it is inevitable to have full interaction in English while doing EMI-based academic courses, regrettably, poor English fluency among these students is visible due to an unsupportive environment, less confidence, fear of losing face, and anxiety issues (Islam & Stapa, 2021). Struggles in English language learning, performance, and outcome are therefore notable in different spheres of Bangladeshi undergraduate learners leaving behind a scope to understand the ways of maintaining their cognitive presence in the learning process.

2.2 Learners' Context and EMI Learning

One of the major factors manipulating a learner's motivation in an EMI setting relates to the social or educational context. The learner's motivation in EL is connected to the cultural, ethnic, and social components along with their general interest to connect with the course contents (Dörnyei, 1994). Brown et al. (2021) suggested in a study on Japanese undergraduate students that EAP course content preparation must consider where learners have come from. To exemplify, making necessary adjustments to be relevant to the learner's context is inevitable. A study cites-

While developing a specific framework (bilingual education) in a language school, necessary interpretation, modification and contextualization is executed according to the local practices and realities (Baker & Wright, 2017, as cited in Graham et al., 2021).

The reason why such adjustments for relevance are made is to ease the comprehension of the learners (Norte & Morell, 2024). Moreover, in a non-native context if EMI pedagogy incorporates learner's social dimensions it bolsters their learning attitude causing linguistic, social, cultural, and cognitive development (KİMSESİZ, 2023). So, clarification of any content needs better cognitive and socio-affective strategies for better comprehension in the EMI classroom (Norte & Morell, 2024). Consequently, learners are motivated to practice self-regulated learning. This connection between their social and educational context and their level of cognitive understanding is justified by the investigation of Luan et al. (2020, as cited in Huo, 2022). They uncovered that EL learners' social engagement or context is one of the factors influencing their psychological or cognitive learning involvement. These studies infer a scope of examining the intricate role of learning attitude and the learners' context to assess the impact of relevance on their learning outcomes.

2.3 Psychological and Motivational Impact

Apart from the contextual aspects, researchers stated that learners' psychological factors, for instance, self-motivation and willingness to engage are key aspects to consider in their performance in an EMI classroom. According to Thompson et al. (2019), besides previous knowledge of English, learners' self-motivation, self-efficacy, and integration with course content help in performance development in EMI-based classes. A study in Turkey found the integrative motivation of undergraduates is a key predictor of academic success in EMI (Curle et al., 2024). In the Bangladeshi context, learners' motivation to connect for English learning is found to be regulated and resisted by external behavioral factors (Akteruzzaman et al., 2024). Here, the learners' autonomous involvement in the classroom is highly dependent on the environment of the class, the level of in-depth pragmatic conversation, and their level of dependence on the instructor. As a consequence, they find it arduous to learn if any of the aforementioned factors experience an issue (Alam et al., 2022). It implies that in Bangladesh or any other state, due to a dedicated contextual conversation between the learners and the instructor with liberty, effective English teaching-learning happens. Eventually, the efficacy of having liberty results in proper classroom learning interaction (Nguyen and Phu, 2020). Although Akteruzzaman et al. (2024) predominantly centralized the findings on extrinsic factors influencing the students' self-determination, there remains scope for evaluating the intrinsic motivational factors.

Besides the extrinsic psychological aspects influencing the learning outcome and motivation, learners in an EMI class may also be influenced by their attributes. Findings suggest that individual learners' diverse personality traits significantly affect their English speaking, listening, reading, and writing skills (Zulkifli & Basikin, 2024). Referring back to the previous studies it is evident that self-motivation and learners' personality significantly measure their

English learning outcomes. Additionally, interaction and willingness to communicate allow them to develop their L2 comprehension further. Yet, they are visibly found to be reluctant to participate in online and offline English learning because of individual anxiety and boredom (Solhi, 2024). Since EMI requires more cognitive involvement as stated earlier (Dimova et al., 2024), negative impacts like boredom, demotivation, and anxiety (Solhi, 2024) may enforce unwillingness to engage in the learning activities. Khan (2020) identifies English as a significant hindrance to learners' engagement consequently causing failure in adopting locally relevant knowledge due to a lack of meaningful learning experience. This identification exposes the relationship between learners' efficiency and effectiveness of EL learning in an EMI setting. It further explains how student engagement is either positively or negatively controlled by their contextual knowledge. On that account, researchers found that besides self-motivation, achievement emotions or the feeling of competence during EL learning is regulated by the level of learners' previous knowledge (KOJIMA & YASHIMA, 2017). For example, previous knowledge of English vocabulary helps in reading comprehension and acts as an antecedent to instigate autonomous learning (Chowdhury & Ara, 2021); Rahman et al. (2023) affirm that learners with relevance to schematic knowledge are more likely to develop confidence in English listening proficiency in the EMI-based EAP courses. The following studies suggest that learners' linguistic outcomes in the EMI context may depend on intrapersonal factors as well as relevance to content materials and motivational factors.

2.4 Attentiveness and Comprehension in EMI

Attentiveness is a significant psychological state that performs as a cognitive factor to motivate learners toward English learning (Zhang et al., 2023). It is crucial to consider attentiveness as a major aspect because teaching in English usually results in the impediment of active participation and allows the students to be distracted (Yang & Tsai, 2023). Zhou et al. (2023)

thoroughly described in their findings that students' attention to the content taught in EMI depends on multiple factors. The results of this study revealed that curiosity leads learners to have more cognitive presence and learn in a meaningful way. Besides, their self-confidence is another determinant of an uplifted learning spirit which assists in the critical understanding of EMI-based academic English content. The study further stated that the relevance to learners' context stimulates their curiosity and consequently creates internally driven linguistic goals that eventually develop deeper concentration. Zhou et al (2023) asserted that both intrinsic learning goals and self-efficacy significantly predicted the use of guided attention.

On the contrary, a study conducted in the Bangladeshi context revealed that learners' apprehension and diminished self-assurance impede their ability to acquire English proficiency in an English-only setting (Chowdhury, 2024). Solhi (2024) illustrated the aftermath of this impediment. This study found that demotivation or amotivation develops hindrances to engaging in learning tasks and thus presents poor learning performance. Considering the following facts, Dimova et. al (2023) revealed that pedagogical strategies like code-switching are practiced by the EMI instructors to keep the students attentive and handle their distractions in the classroom space. However, there remains scope for examining strategies to analyze the maximum comprehension in an English-only setting. These researches mostly present how learners' focus is a major stakeholder of their academic performance in English in the Asian context.

2.5 Cognition and Language Competence

Some challenges in English language skills are visible in EMI classrooms in Bangladesh that are pertinent to the socio-psychological implications on learner performance. Hosan et al. (2022) revealed that Bangladeshi students face speaking difficulties as a result of nervousness that inhibits their motivation to develop speaking skills. Other studies also indicated that negative

factors like anxiety, lack of self-efficacy (Seraj & Habil, 2021) and nervousness (Islam & Stapa, 2021) affect learners' spoken English. However, Mamaghani and Birjandi (2017) pointed out that when students paid conscious attention to their learning, their development in English speaking improved. Apart from the speaking skills, studies also showed the impact of EMI on learners' attitudes and self-efficacy relevant to their listening skills. Akter & Mitul (2020) indicated that insufficient knowledge and comprehensive skills, alienation, and class division, and the Bangla medium (BM) background of the learners may lead them to reduced ability to concentrate and capture the class lecture. Zhou et al. (2023) added that students in such cases develop personalized metacognitive listening strategies and this process is influenced by different levels of self-efficacy depending on individual learners' preferences. On the other hand, a different approach is observed in the case of developing writing skills. Bangladeshi instructors are observed to use bilingual methods as an agency for the progress of their students' L2 writing proficiency in EMI (Rahman, 2023) which implies the fact that learners' writing proficiency possibly demands the involvement of their L1 for their cognitive involvement. Besides writing skills, students are found to struggle with reading comprehension due to less access to English vocabulary and Chowdhury & Ara (2021) revealed that pre-teaching vocabulary does not necessarily impede autonomous learning of their reading comprehension.

The following literature review thematically discusses different factors related to social, psychological, and motivational aspects that directly or incidentally affect L2 learners' attention in an EFL or EMI context and its impact on their English command. The studies revealed how distraction hinders diligence and challenges the linguistic outcomes of the students. Besides, the literature review presents the influence of social and educational context on Bangladeshi undergraduate students' engagement in EMI-based classrooms. Studies further reveal how

learners' personality traits influence their English skills in English as a Medium of Instruction (EMI) classes and highlight the importance of self-motivation, interaction, and willingness to communicate in enhancing English comprehension. Moreover, the literature illustrates students' struggles pertinent to academic English proficiency that involve their cognitive and psychological implications. It also elucidates the importance of attention to the language learning process of the students.

2.6 Conceptual Framework

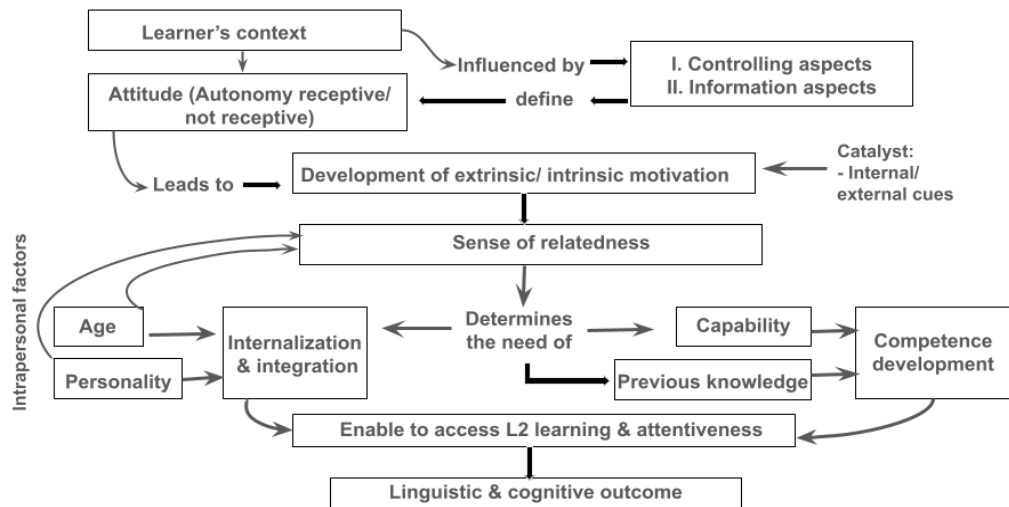
This study is based on Bernard Spolsky's (1989) general theory of second language learning. This is employed as a part of the conceptual framework to discuss the socio-psychological implications of the EMI classes on the L2 learner's autonomous learning and attentiveness during content learning. The Self-Determination theory (Ryan & Deci, 2000) is integrated into Spolsky's theory of L2 acquisition (1989) as a holistic conceptual base further to examine the cognitive, besides socio-psychological factors. Deci & Ryan (2012) stated,

SDT researchers have examined links among autonomy-support (relative to control) within classrooms and homes, students' autonomous motivation and perceived competence, and the outcomes of improved learning, achievement, and well-being.

This theory establishes a connection between the learners' context and the psychological implications of building L2 language comprehension by describing the process of mindfulness and awareness. The dynamic linkage of psychological factors including self-motivation or autonomous learning not being controlled by deliberate choices, but through the articulation of supporting the learner's actions, substructure the language learning in EMI classrooms (Deci & Ryan, 2012). The following figure illustrates the conceptual framework for understanding the derivation of attentiveness among learners in an EMI context.

Figure 1:

Adapted conceptual framework from the integration of Spolsky's (1989) General theory of second language learning and Self-determination theory (Ryan & Deci, 2000).



Note: Figure: 2 Spolsky's general model of second language learning (Source: Spolsky, 1989: 28). From "Malaysian learners and their perceptions towards online English language courses" by P. Krish & B. Wong, 2009.

The figure manifests a robust diagram to assess the reasons behind changes in learning motivation and their impact on the cognitive level of students' learning concentration. Researchers have found that external factors like non-negative factors and anxiety-free learning space lead to positive learning experiences and increased learning motivation (Kopinska & Fernández-Costales, 2023). Hence, suitable learning surroundings play a vital role in deriving positive emotions from the learners. Apart from the learner's context, their innate quality is a substantial feature affecting their L2 comprehension. Pekrun's Control Value Theory is such an example proving that achievement emotions significantly affect cognitive development and so, instigate positive academic performance (Pekrun, 2006, p. 328).

Cognitive matters are pertinent to optimistic achievement emotions in the academic domain in terms of attention, language perception, remembrance, and problem-solving competencies that eventually lead to the development of positive emotions and attentiveness. Positive emotions momentarily create a mental space to develop attentiveness as the positivity helps in the retention of the thinking process of the students (Fredrickson, 2004). According to the CET (Cognitive evaluation theory) of SDT (Self Determination Theory), an instructor's structured reward results in the limitation of self-regulated class response (Deci & Ryan, 2012) that may inhibit successful learning. On the contrary, an instructor's feedback on a student's performance may act as an informative aspect (Deci & Ryan, 2012) influencing to widen the thinking space in the students as stated by Fredrickson's broaden-and-build theory (2004). Depending on the type of social interaction, either controlling or informative, the student's cognitive ability responds to different learning attitudes (Spolsky, 1989). Spolsky (2009) stated that the learning attitude of language e.g. in the EMI context- English, is externally managed by the instructors as they act as authority to modify the process of the learner's linguistic understanding. This notion connects to the impact of applying SDT's external and internal cues while developing learning motivation. Banerjee and Halder (2021) asserted that any sort of aid from the instructor determines whether the learner will be influenced to learn or to develop amotivation regardless of any individual learning characteristics. Apart from these extrinsic factors, amotivation or motivation of learning create a sense of student internalization or integration (Ryan & Deci, 2000) with the learning process. This need for achieving internalization is influenced by different personal traits (Dörnyei, 1994). Besides, individual language proficiency level and schema (Gilakjani & Ahmadi, 2011) perform as the factors in identifying SDT's "competence" of the learners. Figure 1 portrays how SDT's three basic universal psychological needs, autonomy, relatedness, and competence (Ryan & Deci,

2000) are associated with enabling language learning opportunities (Spolsky, 1989) eventually generating linguistic outcomes.

To specify, the integrated model of Spolsky's general model of second language learning and the Self-Determination Theory shows the following steps to understand the effectiveness of L2 learning effects through attentiveness and autonomy:

1. Impact of learner's context on their attitude depending on the type of cognitive evaluation aspect.
2. Learner's attitude towards the development of autonomy considering the extrinsic or intrinsic motivating factors
3. Emergence of either amotivation or relatedness from learner's attitude deriving the need for internalization or integration for autonomous learning
4. Impact of interpersonal factors and learner proficiency in the internalization and competence generation process.
5. Development of learning opportunities, motivation, and attentiveness depending on the learner's competence and integration that determine the linguistic and cognitive outcome.

The integrated model is applicable to find answers to the research questions as relevant study on Vietnamese tertiary students discovered that the primary navigation of their motivation to have autonomous learning in EMI courses is led by inherent cognitive goals and the psychological demand for the development of language proficiency and connection. However, academic stress thwarts their intrinsic motivation resulting in a lack of willingness to learn (Nguyen et al., 2023). Besides, language learning success in an English medium of instruction class depends on intrapersonal features, for instance, the capacity of self-regulation and self-efficacy to connect to the learning environment (Soruç et al., 2022).

Relating to the discussed framework and problem stated, three research questions have been formulated linked to the research objectives:

1. How does attentiveness in EMI affect the diligence and self-efficacy of undergraduate foundation English course learners in Bangladesh?
2. To what extent does the students' attentiveness in the EMI-based courses impact their learning comprehension?
3. What socio-cognitive factors affect the learning attitude and learning outcomes of the students?

Chapter Three

3. Research Methodology

The method of this research is a holistic approach to identifying necessary data as a process of fulfilling the research aim. This study primarily aimed to understand and observe the impact of self-consciousness and cognitive presence of the students on their learning behavior in the EMI context and their implication on the student's comprehension and outcomes. The research aim identifies this study as investigative research since its fundamental goal is to explore and observe empirical data from the participants' subjective opinions (Chawla & Sodhi, 2011). This chapter is organized into sections namely, research type, research design, sampling and population, data collection procedure, data analysis technique, methodological limitations, ethical consideration, and conclusion to holistically represent the rationale and specification of the methodology of this study.

3.1 Research Type

The aim of this study as mentioned earlier focuses on aspects that need probing, for instance, conscientiousness, learners' psychology, learning attitude and cognition, contextual impact on comprehension, etc. Consequently, the methodology follows interpretivism as its research philosophy since the research is completely focused on subjective interpretations (Ryan, 2018). Researchers followed this philosophy in similar types of research conducted on learners' affective facets in ELT (Sarker et al., 2021). The objectives of this study require subjective observation, hence interpretivism is selected. The study was intended to examine the most effective results of the research questions, so an inductive approach or bottom-up approach is fundamentally applied in the process (Strauss & Corbin, 1998). Although it primarily applied an inductive approach, the methodology follows the integrated conceptual framework of Sposky's second

language acquisition theory and Ryan and Deci's SDT (Ryan & Deci, 2000). Therefore, a mixed approach of mostly inductive and lesser deductive approach is applied identifying this study as a mixed method research work.

3.2 Research Design

The study is conducted based on a mixed methodology as it intends to portray an in-depth illustration of the target issues and present the data from a complementary angle (Mackey & Bryfonski, 2018). The combination of quantitative and qualitative methods, as in the mixed method (Creswell, 2013) of research assists the researcher in presenting an exploratory vision of the problem statement. In this research design, the objective of data collection is to obtain complementary findings (Morse, 1991) following the identical method utilized in other studies as well (Hlas et al., 2017; Allison, 2020, p. 59). Since the method predominantly investigates in an exploratory manner it is characterized as ethnographic research (Hanks, 2019). Conversely, the method also uses a control group as a specification of the sample population's context. Overall, a mixed strategy of experiments and observation is applied in the methodology. It is inevitable to understand the nature of learners' context who attended the EMI-based foundation English courses to examine its impact on their cognitive development following the conceptual framework. Additionally, the research questions significantly inquire about the subjective aspects that require qualitative inspection (Damaskinidis, 2017). So, both the quantitative and qualitative measures are taken to find a productive solution to the problem statement. Therefore, it applied a mixed methodology with some triangulation strategies to increase the validity of the study (Heale & Forbes, 2013).

3.3 Sampling Technique and Participants

A non-probability sampling strategy is employed in the research method for the convenience of accessing the target population (Merriam, 1998). The research has been conducted through randomly selected undergraduate students from different public and private universities in Bangladesh for the interview. Some of the universities are located outside the capital city. The average age of the participants was 24 and all of them attended preparatory English courses that practiced full EMI pedagogy. The participants belong to different years of study and have diverse educational backgrounds namely, Bangla medium, English version, and English medium. The fundamental aim of this study was to inspect undergraduate students coming from diverse backgrounds allowing the researcher to find results from diverse perspectives (Drosou et al., 2017). The primary selection of interviewees is recruited through the network of the researchers' previous workplace followed by unknown participants reaching from the previous network. The purpose of selecting participants in this way is to present an unbiased and diverse perspective as the researcher aims to find different psychological, social, and cognitive factors on attentiveness and its implication on their academic English performance.

For the focused group discussion, the participants were the learners from the University of Liberal Arts Bangladesh, who attended the foundation courses in their undergraduate first year because the context of the problem statement of this study depends on foundation English courses that are conducted in the first undergraduate year. Around 20 undergraduates participated in the group discussions. They are selected randomly from different disciplines following the requirements of the research questions (Makwana et al., 2023).

A survey was conducted among 54 university students from inside and outside of Dhaka city and different public and private universities. The students were from other departments apart

from the English department to ensure the wide accessibility of this study's findings Drosou et al., 2017). The survey population was randomly selected through virtual media. Virtual space is one of the most convenient spaces to circulate a survey questionnaire as this research is conducted in a very short period with cost-effectiveness (Chen & Hinton, 1999).

For interviews, nine student interviewees were selected based on their interest in contributing to this study. The interviewees are from an age range of 23 to 26 years old and attended the EMI courses as foundation English courses. Interviewee sampling followed the arrangement where the letters S and I symbolize the participant and their institution respectively.

Furthermore, 3 instructors, T1, T2 and T3 were invited who participated in the interview process to share their observations inside the EMI class. This step was taken intentionally to validate the triangulation process by accepting teachers' perspectives that may add to more acceptable results as recommended in the study conducted by Kojima and Yashima (2017). The faculty members are carefully selected based on their area of expertise in teaching foundation English courses and their areas of interest in conducting research similar to the topic of this research. Their insights contributed to the formation of holistic results from the findings as they are directly involved in teaching the EMI contents to the learners. The figure below shows all the data population of this study:

Data Collection Demography								
Open-ended Survey		Students' interview		Teacher's Interview		Focused Group Discussions		
Number of respondents	54	Student's code	Institution code	Teacher Code	Specialization	FGD-1	FGD-2	FGD-3
University location	Different location inside and outside Dhaka	S1	I1	T1	EFC instructor and ELT researcher	F1	F1'	F1''
Criterion	Attended EFCs	S2	I2	T2	EFC instructor and ELT researcher, experienced in teaching similar subjects at three different universities.	F2	F2'	F2''
		S3	I3	T3	EFC instructor; Area of interest- Educational Psychology	F3	F3'	F3''
		S4	I4			F4	F4'	F4''
		S5	I5			F5	F5'	F5''
		S6	I6			F6	F6'	
		S7	I7					
		S8	I8					
		S9	I9					

Three Focused Group Discussions were conducted with six participants in each of the groups. All the participants were current students of Foundation English Courses.

3.4 Data Collection Procedure

The data is collected considering sensitivity, psychological freedom, and unbiasedness, ensuring clarity of the questionnaire language for the participants (Polit & Beck, 2015). Moreover, for this study, the questionnaire was prepared considering the valid intention to explore the research objective following accuracy and consistency (Seliger and Shohamy 1989). The interview questions are prepared based on similar aspects as the survey questionnaire, but more focus is given to the freedom of speech of the participants. The survey questionnaire was circulated through online social media (Chen & Hinton, 1999), mentioning the conditions to fill out the questionnaire beforehand so that the participants are aware of the context. The participants were given background information about the purpose and context of the study during the online circulation to execute in-depth interviews and discussions (Rutledge & Hogg, 2020). For the interview process, participants were contacted beforehand to know their availability, and they were informed

about the integrity followed in the interview process, which is further described in the *Ethical Consideration* section of this chapter. Besides, they have been confirmed that their personal information will not be disclosed and will be kept confidential. The interview questions were presented using mixed language, Bangla and English to ensure inclusiveness, whichever the interviewee chose to feel comfortable with. To maintain unbiasedness, the researcher decided to interview the participants from outside her institution. Therefore, the data collection process successfully maintained transparency, impartiality, and confidentiality.

Apart from the quantitative questionnaire, the researcher carried out a qualitative method comprising two online FGDs (focused Group Discussion) and individual interviews of the participants. The reason behind selecting OFGD and separate interviews is to inspect contextual factors and the impact of individual psychological determinants on performance. The FGD is conducted online due to the researcher's limitation of gathering the participants in person. Online FGD is an adapted form of the traditional FGDs to experiment with the participants' opinions considering their social involvement (O. Nyumba et al., 2018). Each FGD took 30 minutes. Besides, the qualitative inquiry included semi-structured interviews. Semi-structured interviews allow the researcher to closely observe individual insights to find necessary connections to objectivity with reliable and more plausible results (Kallio et al., 2016). Finally, a descriptive method is employed to execute an in-depth assessment of the findings. It helped the researcher to identify and interpret the results that are not observable directly from the qualitative method (Kostova, 2017). Different literature showed similar research methods to explore the attentiveness of participants related to the second language (Hlas et al., 2017; Cicekci & Sadik, 2019; Allison, 2020). To exemplify, the study used a mixed method of data collection aiming at finding new information from diversified statistical and exploratory data.

3.5 Instrument of Research

Three sets of questionnaires were used in the data collection method. Set X is for the survey, Set Y is for the learners' interviews, and Set Z is for the instructors' interviews. Set X questionnaire contained mixed questions, both structured and unstructured. The interview questions are prepared from scratch following similar questionnaire formation (Zannat, 2021). It was created based on the keywords found in the research questions and the research gap. The Google Form was circulated (Bhalerao, 2015) as the instrument to present the questionnaire for the online survey. It contained three sections with a total of 23 questions. Set Y questionnaire consisted of 24 questions and mostly comprised of opinion-based questions. Google Meet was used as the medium of interaction while conducting the interviews to collect the qualitative data in the shortest period (Alam & Pal, 2024). The researcher turned the interview speech into text and translated it into English. The interview questions were arranged thematically, as in attentiveness, relevance, and competence following the inquiries of the research questions.

The FGDs have been conducted based on an FGD planning structure and a thematic rubric to document the findings. An FGD planning, starting from pre-session activities, and facilitation process up to primary data documentation, is prepared based on the FGD technique of O.Nyumba et al. (2018). The planning specifies every step of the FGD.

To measure the self-attention of the participants, the quantitative method includes questionnaires on frequency-based and on a 5-point scale similar to the Likert scale: 1-5, with 0 (zero) given for "thinking about something else" and 1-5 indicating degrees of measuring the participants' self-focus (Farley et al., 2013, as cited in Allison, 2020). Moreover, to obtain a data-based finding exploring the relevance of EMI, attention, and outcome, the quantitative survey is carried out with open-ended questions to the participants (Nardi, 2018). For the FGDs, a set of

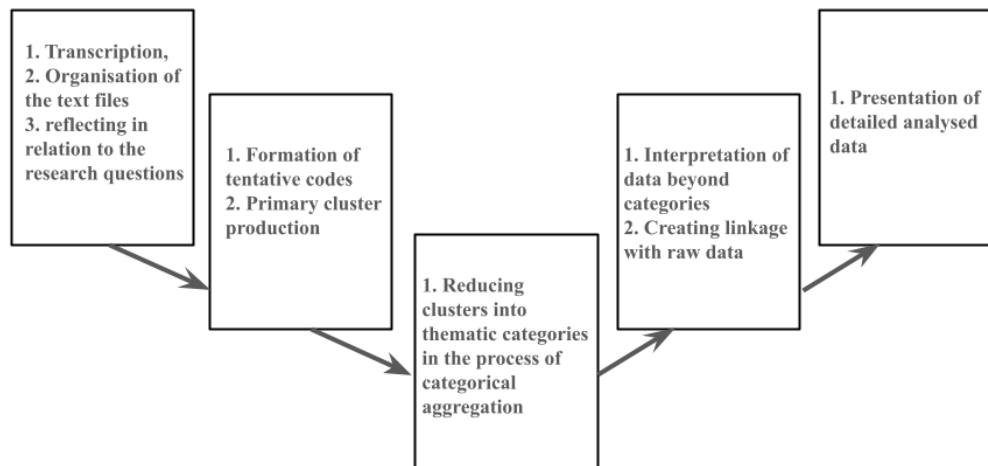
questions and topics were selected and documented following the exploratory sections from the research objectives to determine, evaluate, and reflect on the themes of this research (Yulianti & Sulistyawati, 2021).

3.6 Data Analysis procedure:

The obtained data of this research is analyzed following the thematic analysis by presenting the logical relationship among the variables to demonstrate the data more effectively (Creswell, 2009). Thematic analysis is proved to be the most effective analysis to assess subjective opinions and experiences when data is collected from several sources (Creswell, 2003). More specifically, the reflexive thematic analytical process is applied to exercise flexibility while interpreting from different perspectives (Damaskinidis, 2017). Results obtained from the survey with trends are analyzed using the pie charts obtained from the Google Spreadsheet. The researcher particularly followed different filtering processes and categorizations according to the themes. Once all the data were collected, they were put in thematic order to hold an interpretative analysis of the data.

Moreover, the qualitative analysis is accomplished by collecting the clues from the speech of each interviewee and divided into themes. In other words, the qualitative data, for instance, the insights from the interviewees and FGD participants are transcribed for discourse analysis (Potter, 2004) and categorized into several themes according to the research objectives. This intervention assisted the researcher in finding relevant information from the speech of the participants. The detailed data analysis used five steps of thematic analysis following Creswell (2013). The following diagram illustrates the five steps of data analysis

Figure 2: *Creswell's thematic data analysis steps*



3.7 Ethical Considerations

All the data collection processes of this study ensured ethical boundaries. Ethical activities, for instance, voluntary participation of the participants, interviewee, and discussion participants were ensured. All interviewees and FGD participants were verbally communicated before initiating the process (Mohd Arifin, 2018). The open-ended survey respondents provided their consent when filling out the survey form. The student interviewees verbally agreed to record and utilize their interviews. The instructor interviewee provided their consent by signing the consent forms (Mohd Arifin, 2018). A Google consent form was sent to all the participants of the Focused Group Discussions, and it was recorded in a spreadsheet.

To reach out to the data population, the researcher sent formal emails with relevant documents to the interviewee and FGD participants to ensure their time of availability (Mohd Arifin, 2018). The survey was conducted randomly, so the researcher did not have direct access to the respondents. Before initiating any data collection procedures, all the participants and interviewees were given background information to ensure they were comfortable and aware of

the topic (Mohd Arifin, 2018). They were informed of having the full right to withdraw from participating if they felt not to attend. Moreover, they were informed that the study would maintain confidentiality and anonymity when addressing their responses. Instead of names, codes were used to ensure anonymity.

The data analysis followed the transcription and translation of the recorded interviews and FGDs. No language was distorted when transcribing or translating. It followed anonymity when transcribing (Mohd Arifin, 2018).

Chapter Four

4. Findings and Analysis

The prime motive of this study was to explore and identify the factors influencing their attentiveness and its implication on their metacognitive attitude toward learning in an English-only setting. The hybrid method of data collection comprising open-ended surveys, interviews from both student's and instructor's perspectives, and FGDs (focused group discussions) significantly contributed to understanding the objective of this pilot research. The findings are presented under the three research questions on a thematic ground. Since the study is carried out considering the EMI context, the learner's educational context is used as the constant term to assess other behavioral and psychological aspects. It can be further justified by the fact that Bangla is the majority population's first language and up to the higher secondary level it has a dominance on learning practices of undergraduate learners in Bangladesh. Therefore, considering the impact of a different first language, the researcher found it inevitable to measure the data using educational background as a constant term.

4.1 Findings from RQ 1

To inspect the correlation between students' diligence or self-efficacy and their attentiveness in the context of EMI a survey with open and closed-ended questions was conducted to obtain exploratory data. The questions connecting to the keywords from RQ 1 were asked to the selected student and instructor interviewees. Both the survey participants and interview respondents were asked to provide insights from their observations. Interview data from the instructors added a range of different points of view on the impact of learners' attention in their self-regulated learning. Furthermore, discussions of the focused groups provided in-depth data on the connection between the aforementioned factors.

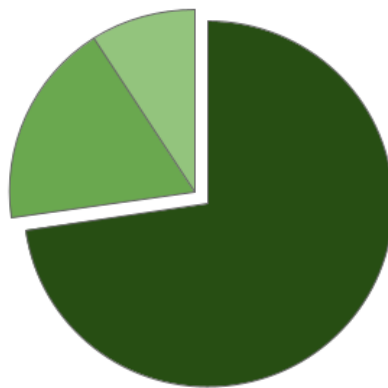
4.1.1 Psychological Domain (Attentiveness and Autonomy)

When exploring the connection between attentiveness and self-regulated approach to learning, it was found that 66.67% of the student respondents from the survey positively addressed that individual attention assists in practicing self-regulated learning in an English-only class.

Figure 3: *Attentiveness and self-regulated learning*

Does attention influence self efficacy?

- Attentiveness helps autonomy
- May help
- Attentiveness does not help autonomy



Most of these students identified ‘grades’, ‘earning needs’, ‘humorous way of teaching’, ‘urge to learn’, ‘interesting class topic’, and ‘real-life examples in the lecture’ as the determining factors to instigate their attentiveness leading to self-regulated learning.

The student’s interview disclosed several similar factors, such as familiarity with the English topic and the interest in learning English resulting in the successful retaining of focus. Indicating the area of interest, S6 said, *“I often in a reflexive manner answered questions that were of my personal focus.”* A different observation was shared by S7, *“I think when the teaching content is known to me I feel easier to connect, but it is not necessarily the main thing to learn by myself. I find the learning mindset as a big fact to stay attentive. It develops my self-confidence to learn by myself.”* S8 shared a similar opinion regarding study focus, *“When I am sure that I know*

the answer, it gives me the confidence to participate. If there is not a good mindset, it naturally leads to hampering my focus.” Other students identified ‘competitiveness’ or the urge to take ‘challenges’ as the determinants of attentiveness that lead to learning diligence.

Besides, observations from the instructors revealed that student’s understanding of the outcome of a lesson leads them to self-regulated attention and learning. Instructor T3 argues, *“To actively understand on their own and they will feel the excitement to learn as they can visualize the impacts in the reality.”* This observation connects to what the students opined about having a mindset to learn. Instructor T2 added the aftermath of T3’s statement with an example where attention and interaction are presented as the product of autonomy, *“Students with better understanding from their past academic life tend to be a bit more autonomous....Suppose I said something and they could easily understand the remaining part and produce those remaining activities.”* Here, the previous experience of studying in EMI determined their learning focus which eventually led them to recognize the latter part of the missing information on their own.

Furthermore, the focused group discussions revealed several linkages between attentiveness and autonomous learning. Besides ‘learning urge or learning mindset’, the three focused group discussions identified ‘negative consequences of not being attentive’, ‘lesson outcome’, and ‘practicality’ as three different factors of holding attention that leads to self-regulate their learning.

On the whole, in terms of the psychological state of the learners, the ‘mindset/ urge to learn English’, ‘self-confidence from previous English knowledge’, and ‘clear vision of practicality’ are three major aspects encouraging learners to develop their self-efficacy.

4.1.2 Pedagogical Domain

The participants of the qualitative survey responded about a number of teaching practices that assisted in holding concentration and led to learning on their own. Using ‘fun’ and ‘interesting topic’ and ‘contents relevant to real-life’ are identified as the teaching practices in EMI for which students were automatically stimulated to pay attention to learn in the class.

The instructor, T1 added with a personal observation, *“In EMI contexts, where language and subject content are both new or complex, students may experience cognitive overload if they don’t receive enough scaffolding from the teacher.”* This statement indicates the importance of customization in teaching to develop students’ stimuli. It connects to the demand of the students regarding the use of ‘fun’ or ‘interesting topics’ to develop the urge for ‘self-regulated’ learning. Indicating the negative impact of not having proper pedagogical support, T1 further said, *“Without adequate support, autonomy may lead to confusion rather than mastery.”* However, instructor T3 stated during the interview that, students becoming self-reliant and attentive does not only depend on pedagogical practices but also on how they use their learning stimuli beyond the classroom. As an example, T3 said, *“We are giving sometimes some group work some pair work in the class... Measuring autonomous learning is really difficult the reason is the learner who are autonomous learners will be taking stimulation from the classroom practices and they will be applying and taking those stimulations outside the classroom boundaries.”* To exemplify, teaching modification to develop autonomy becomes successful if the learners acknowledge the importance of putting focus on and applying it practically.

Findings from the FGDs suggested that autonomy is often negatively affected due to non-stop teaching of the contents. It may imply and connect to the statement of Instructor T3 about scaffolding. Students opined that when EMI classes have no breaks in between, it takes a lot of

energy for them to focus. F3' of the FGD participants shared that the instructor asked her to take a small break when the content was more informative. A different observation from F5' stated that it was easier to concentrate and develop a self-learning attitude when the instructor clarified the benefit of learning the academic lessons taught in the class.

S1 opined that when the teaching in EMI had contents with a common topic it turned into a self-responsive mode of learning. S1 said, *“When there is a common topic, it develops my self-responsive mode and increases my concentration.”* This statement contributes to the necessity of assessing learners' areas of interest before identifying the EMI pedagogical contents. Attention to the class is also dependent on the materials used as S9 addressed, *“By showing slides with pictures and video, it influences positively my autonomous learning inside an EMI based class, because I dont have to imagine by only hearing the things, It becomes more easy to concentrate in the lecture on that class.”*

The pedagogical practices like customizing content according to learner's areas of interest, teaching based on contextual relevance, and humor-oriented interaction are mainly found as effective ways of instigating self-regulated learning from being attentive inside the EMI class.

4.2 Findings from RQ 2

The second research question inquires about the interrelation among mindful presence, motivation, and comprehension in the EMI foundation course.

4.2.1 Psycho-cognitive Domain (Attention and Comprehension)

The combined data collected from 56 survey participants, 9 student interviewees, and 3 FGDs reveal that on average, students coming from different educational backgrounds can approximately stay mindful in the EMI academic environment for 1 hour. In most cases, their focus inside the classroom gets distracted once the time crosses one hour. As for the factors

influencing attentiveness and content understanding, the open-ended questions revealed the complexity of English, the monotonous class environment, the prolonged time of EMI class, the relevance of the topic, student's affective factors, and unknown vocabulary as the reasons influencing the mindfulness and understanding of academic topics in EMI.

About the impact of being mindful in class, S1 asserted, *"When I am attentive, I can easily understand and learn English faster."* Similarly, S2 stated, *"I could achieve 75% of my target learning when I put attention to the class. It depended on the instructor's approach too."* Adding to the importance of staying focused, S3 mentioned that *"Instructor's personal approach of motivating to engage seemed interesting to me. It helped me to concentrate better. And I believe in full English class, it needs more effort to get the learning."* These observations suggest that attention directly or indirectly contributes to the learner's comprehension. Besides, S6 commented, *"As a different first language speaker, if any portion of the class lecture is missed it becomes hard to bring back the focus and then it needs more hard work to understand."* A similar observation is shared in FGD-1 by the F4 participant, *"...there is a fear that if I am not paying attention, I may miss out on any important information and so I cannot write it in the exam."* These opinions reflected the importance of continuous mindfulness in English cognition.

The instructors had similar opinions regarding the importance of attentiveness on learner comprehension. Instructor T2 commented, *"I know one thing whenever it was a matter of doing activities they were very attentive and their understanding automatically increased. So I saw lots of time in the class that mindful presence definitely positively influences the speed of comprehension. No doubt about it."* Moreover, instructor T3 added that attentiveness influences comprehension through internalization of the learning process. He opined, *"Whenever learners are cognitively present during the class, they will be able to interact and internalize the content"*

and internalize the ideas the best possible. So, definitely, that will be triggering and accelerate their level of comprehension.” Regarding the negative impact of not being attentive and not understanding the contents in English, instructor T1 stated, *“Often students ask for instruction which I may have already shared and explained several times if they are unmindful.”* It refers to the use of extra effort when students fail to comprehend due to inattentiveness.

4.2.2 Factors Affecting Psycho-cognition

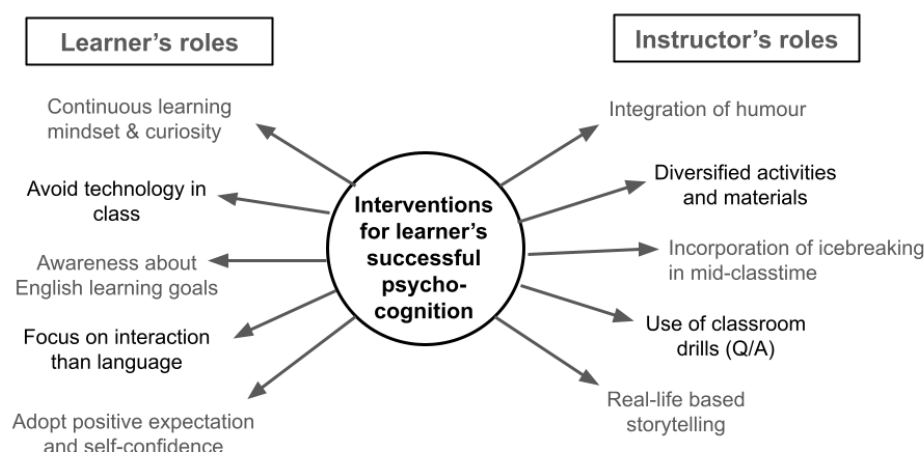
As previously identified, participants of the open-ended survey pointed out the complexity of English, class environment, time of EMI class, the relevance with the topic, student’s affective factors, instructor’s communicating language and unknown English vocabulary as the reasons influencing the mindfulness and understanding of academic topic in EMI. Moreover, interviewees S3 and S7 pointed out ‘motivation’ and ‘emotion’ as the affective factors as two important components influencing the mindfulness and understanding of the EMI classes. Further data from the focused group discussions and instructors’ interviews revealed more factors affecting attentiveness in the EMI setting.

F4 in FGD-2 and F3 in FGD-1 identified the reckless use of mobile phones in the English class having a negative impact on class attention and understanding. Similarly, Instructor T2 and T3 strongly agreed that smartphones are negatively affecting mindfulness. T2 asserted when asked about distracting elements, *“Number one issue is the EMI, and number two a very common problem is the smartphone which they carry in their hand. That is a big big distraction.”* The FGDs further identified complex informative lectures, discussions without diversity or variation in teaching approach regularly, slide and PDF-based contents, side-talks of the classmates, repetitive lecture style, line-to-line reading during lectures, no fixed learning goals and longer classes without any breaks as some of the major negative reasons for hampering learner’s attention

in EMI. The discussions argued that as a consequence, the learners develop boredom, and eventually the effectiveness of the EMI learning drops. Taking the educational background of the learners into consideration, the FGD results represent the existing nervousness for having assumptions about being judged by classmates and teachers is another psycho-cognitive inhibition toward successful learning.

When discussed in the focused groups, explored through qualitative inquiries, and interviewed the instructors, a wide range of proposed expected interventions from the students and practiced interventions by the instructors have been revealed recognizing the importance of mindful presence to execute successful comprehension of academic English. These findings are categorized into two sections, firstly the learner's role and secondly, the teacher's role. These interventions are shown below in a diagram:

Figure 4: *Interventions for learners' successful psycho-cognition in EMI*



The following diagram illustrates the expected interventions to execute maximum cognition in an EMI setting according to the explored observations and opinions from the instructors and expectations from the learners.

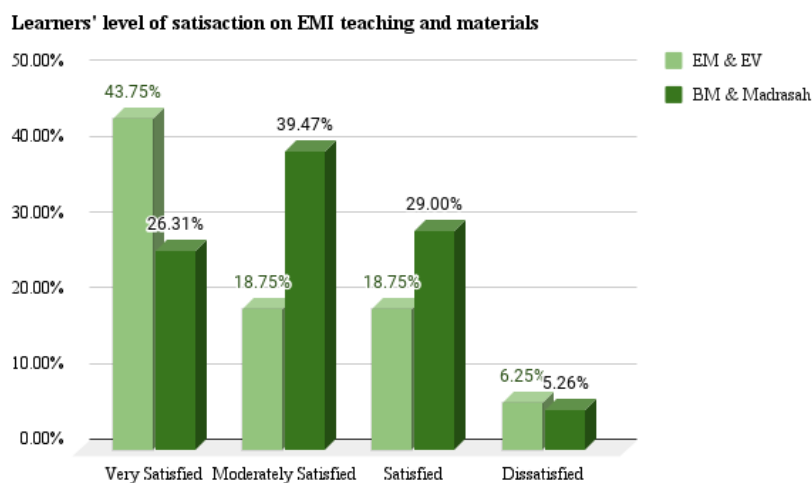
4.3 Findings from RQ 3

Addressing the inquiries of RQ 3, the findings uncover the simple relationship among learning cognition, learner's attribution and the skills and outcomes from their mindfulness in the EMI classes. The findings considered the higher secondary academic background of the learners as their perspectives toward EMI learning is highly measured by their academic practices and beliefs.

4.3.1 Attribution and Learning Attitude

Out of all the survey respondents, 70.37% belonged to Bangla Medium and Madrasa higher secondary school background and 29.6% from English Medium and Version background.

Figure 5: *Learners' academic context and satisfaction with EMI*



To understand their primary point of view regarding the satisfaction of EMI teaching and contents, the findings suggested several indications about how their attributions and attitude are closely related to defining their focus in EMI learning. The table below illustrates the satisfaction levels in percentage:

MoI in Higher	Total	Very satisfied	Moderately	Satisfactory	Dissatisfied
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Secondary level	Participants	(Perfect to practice EMI)	satisfied (Helpful to practice EMI)	(Neutral)	(Lack of proper teaching content)
Bangla Medium & Madrasa	70.37%	26.31%	39.47%	29%	5.26%
English Medium and English Version	29.60%	43.75%	18.75%	18.75%	6.25%

The data represents a high variation between the *Very satisfied* and *Moderately satisfied* responses from the Bangla Medium and Madrasa group and the English Medium (EM) and English Version (EV) group. It is evident that 43.75% of learners doing EMI courses from English Medium and Version and only 26.31% of Bangla Medium (BM) and Madrasa students consider the English courses to be “perfect to practice EMI”. On the contrary, results from the *Moderately satisfied* responses reveal that fewer EM and EV background students (18.75%) than BM and Madrasa background students (39.47%) find the EMI practices “helpful” only when learning foundation academic English.

Several affecting causes have been identified from learners’ and instructors’ interviews regarding the reasons for less satisfaction from BM and Madrasa background students finding EMI academic English courses more difficult to concentrate and adapt. S1, S2, S4, S7, and S9 commented on ‘complex language’ and ‘unknown vocabulary’ as two main causes responsible for their discomfort with the EMI classes as they came from BM backgrounds. Interestingly, S5 and S6 asserted, “*My BM background did not affect my attention and performance because I love English instinctively*” and “*Coming from BM did not affect my focus at all, I had previously*

developed English knowledge from watching documentaries and online videos. So, I feel positive and understand 90% of English lessons properly.” Their statement indicated ‘Finding English interesting’ and ‘previous knowledge’ as two causes that can allow students coming from a different language background to instinctively adapt and concentrate on the EMI classes. Instructor T2 shared a similar observation, *“...if I compare the Bangla medium, those who are good in English, those who have got a knack for developing English, they react positively to the English only teaching and contents, they want to learn. They even use the Google dictionary to see and check.”*

Regarding the intrinsic interest from relevance to EMI, instructor T2 opined, *“Compared to Bangla Medium students, English medium students have got some better contextual knowledge that they bring from their past. Because of that, they relate comparatively better to the contents that we taught in the class...when students cannot relate they have a lack of motivation, a lack of any kind of positive attitude. They feel bored and sometimes a group of students feel very annoyed.”* Earlier knowledge and habit of attending EMI influence learners’ positive or negative attitudes toward understanding English. Indicating the main reason affecting concentration, Instructor T3 asserted, *“They go through some sort of adapting challenges and the major reason for these challenges is kind of paradigm shift they experience...”* Again, instructor T1 commented, *“Cultural and contextual clues help them stay focused. I think most often they can relate to what they have learned in previous institutions. With further guidance, they perform better.”* These observations from the instructors revealed a positive attitude, change in paradigm, and influence of previous EMI practices as the determinants of class attention and performance.

The FGD-1 identified the learner’s interactive anxiety, unknown complex vocabulary, and unknown exercises due to the variation in educational background as the reasons affecting learning

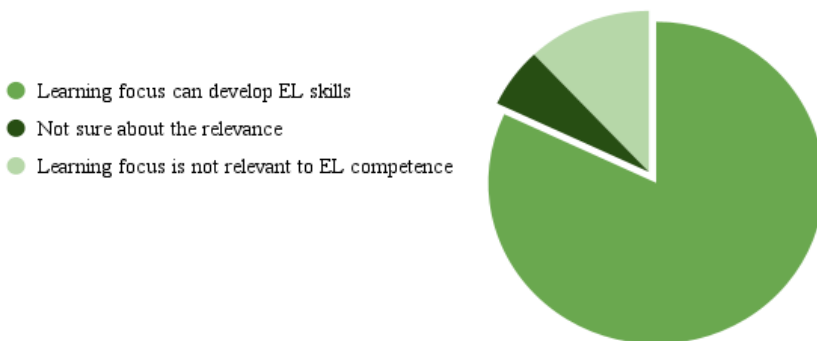
focus inside EMI class. Besides, FGD-2 found two other factors, fear of peer judgment and previous English proficiency in shaping individual learning focus and performance. Moreover, considering a different L1 academic background FGD-3 participant F1” shared an observation on mitigating “unknown complex vocabulary” in the class. F1” stated, *“I observed my faculties use very basic English when they taught academic English, although I am from Bangla medium, I have a minimum understanding of basic spoken English...teachers use English with basic words, I think it helps a lot to focus.”*

4.3.2 Learning Focus and Competence

When inquired about the interrelation between classroom attention and English skills, regardless of the learners’ context 74.07% of the survey participants agreed that being attentive in the classroom has a direct or indirect impact on developing English language skills.

Figure 6: *Learning focus and EL competence*

Can Learning focus increase EL competence?



The survey response further depicts positive attitudes towards the development of English speaking and listening skills due to imposed attention in the EMI class. Most of the respondents signify attentiveness in ‘English-exposed academic class’ as a dominant factor for effective English learning focus. A significant finding from the respondents demonstrates that students’

cognitive shift happens due to EMI exposure. It helps the learners to promote a deeper understanding of the English language and consequently, develop target skills. Additionally, qualitative inquiries uncovered the relationship between EMI activities in positively influencing learners' learning concentration and resulting in effective academic outcomes.

Student interviewees S1, S6, and S7 asserted that activities like free-hand analytical discourse writing, text analysis, and interpretative writing and writing exercises from listening practices require more thinking involvement of the students and develop a certain level of attention. S9, on a different note, opined that speaking practices like presentations require more attention to vocabulary and lead to boosting self-confidence. Similarly to S1, S6, and S7, Instructor T2 opined that *“One thing is critical creative ability of thinking and another issue is English writing skills these two things need extreme focus for students to be competent.”* However, similar to S9 student, Instructor T3 stated, *“The most important thing I believe is communication, alright. As I say communication I do not emphasize language, it doesn't matter what language, does not matter what ways they are communicating, what I mean is their interaction.”* To exemplify, analytical writing and interactive activities enforce more attention to details resulting in better EMI cognition.

Findings from the FGDs shared further in-depth insights. All the discussions identified that the use of visual content in EMI exercises was compelling to retain their attention. Eventually, exercises from those visual contents develop connectivity and comprehension. F2 participant of FGD-1 said, *“It is because the English topics are visualized. Though it is fully in English, I find it understandable when there are videos.”* F5' in FGD-2 shared that comparative exercises help retain attention and develop a potent understanding of the EMI contents.

Regarding learning outcomes, the results from survey inquiries showed that 26% of the responses consider the development of speaking competency in EMI for paying enough learning attention. The lowest response of 5.6% represents the contribution of attentiveness in developing a writing competence that contradicts the aforementioned qualitative inquiries. Comparatively, a moderate number of respondents, 18.5% and 16.67% think that conscious presence can positively influence listening and reading competence. To what extent students can effectively use their competence is further identified from the instructor's perspective.

Instructor T2 thinks, that though students attend academic courses in EMI to learn English, it is very rare that they perceive the practicality of their learning. T2 stated, “...*to be very honest in our country outcome of the learning goals in any discipline is very difficult to understand by the students.*” He argues that Bangladeshi higher secondary education policies are designed in such a manner that students will only pay attention to English for better results or employment purposes. However, Instructor T3 added a different point of view, “*To achieve the goals if the students are not mindful enough definitely, they will not be autonomous learners. Ultimately they will be struggling to reach or meet their learning goals.*” It implies that autonomy is supported by the state of mindfulness, eventually productive outcomes are visible when learners are mindful. The participant's recommendation to the EMI learners in FGD emphasizes that knowing practical outcomes intrinsically activates a learner to stay mindful.

Chapter Five

5. Discussion and Conclusion

The findings from research question 1 of this study reveal the ways of interdependence of learner's attentiveness and self-regulated learning, and the factors negatively or positively influencing the pace of autonomous learning. Besides, results from research question 2 identify the relationship between learners' attention and their cognition in an EMI setting. Moreover, findings from the third research question demonstrated the consequence of effective classroom activities on retaining learners' mindfulness and its influence on identifying learners' competence and outcomes. The results find an intricate relation among motivation, mindfulness, cognition, competence, and outcome of learners in academic English learning in EMI.

It is evident from the results that the state of learners' attentiveness is the aftermath of self-motivation which is followed by different external and internal controlling aspects. The external aspects identified from the result are the complexity of teaching materials, peer environment, exposure to the learning benefits, mental assurance, and affirmation from instructors. Moreover, these findings revealed internal controlling aspects regulating EMI learners' autonomy in English. For instance, the findings of this study indicated that learners' awareness of the EMI applicability, the urge to learn English as a part of self-interest, and knowledge of the expected outcome internally create a drive to develop mindfulness. Eventually, mindfulness triggers the intrinsic motivation to maintain EMI cognition. To exemplify, self-interest and awareness of expected EMI outcomes are determinants responsible for learners' expectancy value for self-initiated mindfulness. Previous research found the importance of learners' expectancy values to address achievement emotion during SLA (Shurovi et al., 2024) and the present study adds self-awareness of outcomes and self-interest for EMI cognition. Although existing literature emphasizes the

reward system as an important factor in instigating autonomy, the present study finds that mindfulness due to awareness of the practicality of EMI is another expectancy value of EMI learners.

Moreover, the findings reveal that other intrinsic facets like curiosity to take English language challenges, competitive mindset, and optimistic affirmation from instructors (external support) highly influence the positive state of the EMI learners' mindfulness irrespective of their social or academic background. The optimistic affirmation from the instructors acts as a solving element to the diminished self-assurance impeding learners' successful English comprehension (Chowdhury, 2024). Therefore, this study identifies verbal and action-based positive affirmations as mental support to increase English learners' cognition.

When exploring the impact of attention, the study finds that pedagogical practices, like customizing class activities (Baker & Wright, 2017) and change in interactive mode (Alam et al., 2022) in the classroom positively form mental presence in the L2 environment. As a result, this adapted positive mindful attitude contributes to internalizing the received knowledge from the EMI space. Eventually, this study indicates that intrinsic motivation develops mindfulness resulting in the formation of a positive learning attitude and executing a fast cognitive shift.

This study found similar results on the negative role of unknown linguistic elements of English in creating detachment of learners' cognition with the learning environment when they practice reading and writing besides practicing speaking. Akter and Mitul (2020) identified this issue as negatively influencing learners' comprehension. This study further found that not only speaking but also writing and reading skills in EMI require more mental presence and cognitive involvement to develop native practices. It adds to the gap in a previous study conducted by Islam and Stapa (2021) on speaking motivation and demotivation. Specifically, the findings suggest

critical creative analytical writing and oral interaction regardless of linguistic perfection as two major practical activities that stimulate learning focus and cognition. These findings indicate that EMI success is the result of externally controlled motivation (Akhteruzzaman, 2024), however, this study signifies the importance of learners' mindset, curiosity (Zhou et al., 2023), and awareness of EMI practicality as intrinsic controlling factors developing mindfulness and cognition.

5.1 Limitation of the Study

This research is a pilot study conducted on the psychological and cognitive implications of EMI learning. It identified various connections among mental presence, comprehension, and competence of English in a short period. The limitations of this study lie in using thematic data analysis and lesser statistical data representation that may give rise to errors of interpretation. Besides, it did not experiment with any practical intervention to obtain the presented data. The complex language used in the conceptual framework and discussions may cause difficulties in understanding the research interpretation. Data from this study is collected in a span of a very short period which may leave a scope to explore more realistic data from longitudinal observations.

Despite the limitations, this pilot study successfully analyzed data collected from a diverse range of data populations including diverse educational institutions, academic backgrounds, and undergraduate disciplines. Moreover, despite having a short time to collect data, the researcher managed to receive valuable insights from three specialized instructors to have in-depth observations. The discussion and thematic analysis followed a complex integrative conceptual framework to organize the data.

5.2. Conclusion

This study attempted to understand the connection between attentiveness and learning comprehension, the factors affecting the relationship between them, and their impact on competence and outcome in the context of EMI-based foundation English courses in Bangladesh undergraduate level. The key findings suggest that conscious mindful presence directly affects EMI understanding and this influence is controlled by several external and internal factors related to the learner's attitude and their classroom practices. This study specifically identifies 'awareness of EMI learning benefits on practical application' and 'curious mindset' of the learners as two main intrinsic factors; on the other hand, it identifies the 'instructors' positive affirmation' and 'customized teaching based on learners' interest' as two external factors highly influencing the interrelationship of learners' positive mental presence leading them to successful EMI comprehension.

The aforementioned findings contribute to the ELT field's educational psychology addressing the importance of conscious presence resulting from motivational factors. Although as stated in the problem statement previous studies highlighted motivational factors, external linguistic interventions and achievement motivation in positively influencing SL comprehension, there remained a scope for understanding the aftermath of motivational factors in the EMI setting. Consequently, the identification of new determinants to develop cognitive involvement allows the EMI field to explore productive pedagogical practices with modified practical experiments. Section 4.2.2 of the present study revealed a two-way teacher-learner role in applying interventions that may assist future EMI practitioners and EMI learners to effectively use positive mindfulness on productive cognition. Besides, future researchers may find this study as a podium to execute in-depth longitudinal studies on this topic. Besides, EMI materials and activity design may

consider the importance of identifying students' areas of interest as findings suggested, to avoid any distraction. As the learners' conscious presence in the learning process determines successful cognitive involvement (Kuroda et al, 2022), EMI material developers and practitioners may consider including attention-seeking elements in the learning content.

Learning focus undoubtedly predominantly controls learning comprehension. The EMI learning comprehension depends on the learners' cognitive internalization, understanding of the learning goals, and their practical applications on the outcome. Relevance to the areas of interest and previous knowledge creates comfort and self-confidence. Eventually, self-confidence gives rise to the conscious presence that leads to the successful development of EMI-related competence. All these components are externally and internally controlled by the learner's attributes, expectations, attitudes, and learning environment.

5.3 Recommendation for future research

The research findings suggest the following recommendations for future research:

1. Future research should design and apply a practical pedagogical model to justify the connection between attention and comprehension.
2. It is not recommended to repeat the findings of this study, but rather to take the results and conduct a longitudinal study.
3. A bigger data population should be used to execute the longitudinal study.
4. Practical implications of the designed pedagogy on learners' outcomes needs to be represented with a more organized data setting.

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7. Appendices

7.1 Open-ended survey questionnaire (Set X)

1. Have you attended primary English courses in your first year of study? / Are you currently attending a primary English academic course?
2. Do all the course teaching methods follow an English-only system?
3. Is there any connection between your self-motivation to engage and your educational background? If yes, comment on it.
4. What is your feeling about attending these courses?
5. Do you find any problems while attending these courses? If yes, please mention the issues.
6. Rate your diligence in the classroom space.
7. Do you find English attractive to study?
8. How does only English interaction affect your self-confidence?
9. How long can you be attentive in the English academic environment?
10. What are the things that have an impact on your focus inside the EMI-based class?
11. Rate your level of satisfaction with the EMI-based teaching materials.
12. How often are you concentrating on the class lecture?
13. How often are you concerned about your inclusion in the class?
14. Rate your feelings about being a part of your classmates in the EMI-based course.
15. Is there any connection between your focus in the class and the English skills you want to develop? If yes/no, please write the reason in short.
16. How often do you willingly listen to the class lecture?
17. Rate your motivation to speak up in the class.

18. What makes you attend your English class?
19. How do you see the EMI learning environment?
20. Have you experienced any situations when you were unknowingly motivated to participate in the class? If yes, please write the situation in short.
21. Are you distracted in the EMI-based class? If yes, what makes you so? If not, what helps you to stay concentrated?
22. Please share your comment on the impact you observe on your learning attitude depending on the rate of your focus and concentration.

7.2 Interview Questions (Students): Set Y

1. What are the foundation English courses you attended?
2. Is it fully conducted in English?
3. Can you mention their course title or course code?
4. Do you think EMI-based fundamental courses are helpful for your study?
5. Which higher education background are you from? (e.g., BM, EM, EV, Madrasah)
6. Did you face any impact of your educational background in the EMI class? What was it?
7. Do you think there is any impact of it on your study focus inside the class?
8. Do you mind sharing your social background? Is there any connection between your classmates' social background and their classroom presence in those courses?
9. What is your opinion about the relationship between your academic background and your mental presence in the class?

10. What do you find most interesting in that class, and what is the most uninteresting fact there?
11. Does the interesting fact affect your study focus? If so, how does it happen?
12. How often do you respond to the class discussion?
13. There is a term called “amotivation” referring to the state when a person does not feel the necessity to take any action to participate or concentrate. Have you ever met such a situation? Can you explain why it happened?
14. In the EMI class, have you ever willingly responded to the classroom activities? (e.g., teachers’ questions, participating in discussions). Is there any relationship between your willingness to participate and your level of focus? Please share your opinion.
15. Is there any factor affecting your automatic response (when you unknowingly respond or participate) in the EMI class?
16. How does English-only instruction impact your self-confidence?
17. How long can you remain concentrated in the lecture? Is there anything that distracts you from being attentive? Please share how it happens.
18. Sometimes we have different levels of emotional states in our mind. Did your emotional state ever affect your concentration in class? And since you have a different mother tongue, how do you find the EMI in that emotional state?
19. Do you think it is important to stay attentive in the EMI class? If so, why do you think so?
20. What makes you feel like you want to **participate**?
21. Does EMI help you achieve your English skills in the way you want?
22. Is there any relationship between the language skills you want to achieve and the amount of attention you give in the EMI class?

23. Please share your thoughts on which skills you achieved or could not achieve due to your attentiveness.

24. How does your level of concentration affect your performance?

7.3 Interview questions for instructors

1. What is your observation about the level of student's willingness to engage in the EMI lessons during class time?
2. What makes your students distracted or attentive during class time?
3. How do the students react to the English-only teaching and contents? What is the reason behind such a reaction?
4. How do you consider autonomous learning inside the classroom? How does it affect the student's understanding of EMI content?
5. Is there any factor to encourage the students to actively participate or understand on their own? Kindly provide your opinions.
6. Do you encourage your students to exercise mindfulness inside the classroom? Please justify your opinion.
7. Does EMI require extra effort to teach your students? Why yes/no?
8. What strategies do you use for maximum effectiveness of the content deliberation?
9. How does your students' level of attentiveness impact their speed of comprehension?
10. How do you think mindfulness inside EMI class may impact the outcome of the learning goals?

11. On average, what is the probable ratio of the students belonging to different higher secondary educational backgrounds in your course?
12. Does their educational background directly or indirectly affect their cognitive ability? How?
13. What learning attitude of your students makes you feel comfortable teaching them? If they are not cooperative in learning EMI contents, are there any specific measures you generally follow to execute successful teaching?
14. How do you perceive the impact of your student's conscientiousness in measuring their learning efficiency?
15. Is there any implication of the student's proficiency level on their attitude towards learning? How?

7.4 Focused Group Discussion (Framework)

- Number of group discussions: two (3)
- Average number of participants: 6 students
- Background of the students: CSE, BBA, and DEH students who attended foundation English courses in the first three semesters.
- Time of each group discussion: 1 hour
- Medium of discussion: Google Meet/Zoom (online)
- Type of discussion: qualitative (opinion-based and ideation)
- Logistics: Recording software, consent form, and contextual document for the participants

Pre-session preparation	During discussion		Post-session activity
	Introduction (3 minutes)	Main discussion (22 minutes)	
1. Delivering contextual documents to the participants one day before the discussion	1. Verbal consent about recording	1. Introducing questions and topic: a. What is your feeling about English-only classes? Does EMI have anything to relate to your educational background? Why yes/ no? b. What type of content teaching allows you to learn comfortably? Why? c. How long can you mentally stay inside the classroom learning? What affects your mental presence? d. Suppose your classmates are distracted inside the class. What do you think may help them to reach their learning goal at that moment? e. Since the course is about basic contents, is there any impact of your 'capacity to understand' on the outcome of the content? How do you think so? f. Do you think your personal traits affect your attentiveness and your understanding of the contents? Why yes/ no? g. There are external steps that the instructors often apply to engage their students. Let us talk about the internal factors. How do you think you can influence your internal drive to practice self-regulated mindfulness during class time? Is there any strategy you apply to self-control your learning behavior? h. Have you heard of amotivation (Zoning out)? Do you or your classmate encounter such a situation? If yes, why do you think it happened during the class? What would you decide when you are aware of such a situation? i. What could be suggested to the learners about practicing attentiveness?	1. Transcribing the recording
2. Receiving consent form through e-mail	2. Ensuring confidentiality		2. Fill in the prepared rubric according to the themes (Coding)
3. Set rubrics for documentation	3. Introducing ground rules: a. Online meeting responding rules. b. Time-limit		3. Thematic analysis
			4. Discourse analysis

Rubrics for FGD: thematic clusters

	Themes				
Participant no.	Self-efficacy & Diligence	Motivation	Attentiveness/ Mindfulness	Intrapersonal factors/ contextual impact	Comprehension & cognition
1.					
2.					
3.					
4.					

5.					
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