

Amplifying Achievement: How Self-Efficacy Shapes Music Students' Success in English Medium Instruction (EMI)

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Abstract

English Medium Instruction (EMI) is increasingly adopted in higher education worldwide, yet its application in music education within non-English-speaking contexts remains underexplored. The application of EMI plays a crucial role in improving learners' English skills and subject matter, which can also affect learners' achievement. The most important predictor of learners' performance and success is self-efficacy, which is also a relevant concept in the area of music performance. This Review investigates the role of self-efficacy in shaping music students' academic achievement in EMI settings, where language and performance intersect. The study aims to identify how learners' self-efficacy in their musical and linguistic abilities influences their success and motivation. It contributes to EMI literature by highlighting self-efficacy as a mediating factor between language proficiency and academic performance in music education. The findings offer practical implications for curriculum design, instructional strategies, and learner support. Specifically, the study emphasizes the need to integrate self-efficacy-building practices—such as performance feedback, peer collaboration, and goal-setting—into EMI-based music instruction to enhance both linguistic and artistic development.

Keywords: conceptual review, English medium instruction (EMI), music, self-efficacy, students' achievement

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1. Introduction

Nowadays, the world is regarded as a global society, amplifying the effect of internationalization on higher education (Doiz et al., 2011). A significant indication of such internalization is the emergence of English-Medium Instruction (EMI), which is considered a tactical instrument for colleges looking for universal competitiveness and relevance. The internationalization of higher education entails raising the bar, which can be achieved through the internationalization of curricula and efforts to develop a global presence (Galloway et al., 2017). In today's world, the language of teaching is not always the student's first language, and specifically, English is the most commonly used non-native medium of instruction. Indeed, English is extensively employed for communicating research findings through papers and conferences (Macaro et al., 2018). The instruction of subject matter through a language other than the first language has come to be labelled differently (e.g., 'content-based instruction', or 'content- and language-integrated learning (CLIL)'). A close look reveals that these differences are mainly contextual; for example, such a construct is referred to as immersion in Canada, known as CLIL in Europe (Costa & Coleman, 2013), and EMI in Hong Kong. Furthermore, the contexts are different in terms of the extent to which English is used and what proportion is allocated to English given the content, teaching objectives, and educational methodologies (Lo & Macaro, 2015).

Given the importance attached to internationalization in the realm of higher education, there has been an increasing interest in the application of EMI across the globe, with Asian countries swiftly increasing some EMI programs (Curle & Derakhshan, 2021; Dearden, 2015; Derakhshan, 2021). Indeed, EMI is concerned with using the English language for the instruction of academic subjects (other than English itself) in countries or regions where most people do not speak English as their first language (Derakhshan et al., 2022; Macaro et al., 2018). Based on some approaches, even if an educational program is not directed at improving a learner's L2 level, it is still possible to bring about positive modification in a student's L2 skills by being exposed to significant L2 inputs. For instance, connectivity theory, such as the theory of language learning, argues for such a position. According to this approach, students gradually develop their second language knowledge by being

exposed to a wide variety of linguistic features they hear (Mueller et al., 2015). Likewise, in the EMI context, when learners are exposed for a period of time to L2 features in a linguistic or situational context, they make a strong network of "connections" between these factors. According to connection theory, students enhance their language competence by studying content (Mueller et al., 2015). Therefore, EMI not only serves as a medium for content delivery but also acts as a potential catalyst for second language acquisition, making it a multifaceted educational strategy.

EMI is neglected in some fields, like teaching music, in which its educational and linguistic applications can have a significant difference from other educational spheres, despite its increasing adoption. By investigating EMI as the core factor affecting students' results, especially from the perspective of self-efficacy and performance in teaching music, the present research aims to deal with that shortcoming. EMI, therefore, plays a pivotal role in shaping academic experiences and outcomes in these regions. The current status of EMI in higher education settings presents several significant issues. For example, based on its constitution, instruction in the mother tongue is a necessary right of the citizens. Although there is growing enthusiasm for English and despite an increase in the volume of government policies aimed at supporting and encouraging English as a medium of instruction in higher education, a low level of academic success in EMI courses has proved to be the main issue of controversy (Xie & Curle, 2022). Given EMI's expanding presence and its effect on achievement, understanding the factors that contribute to success in EMI contexts is essential.

The inquiry into why some learners learn better with almost the same competencies and talents has been the researcher's central issue. Undeniably, achievement in EMI is not only dependent on English proficiency, but also it seems that there are some factors and variables (e.g., self-image, self-efficacy, and motivational self-constructs) that can directly or indirectly impact learners' performance (Lasagabaster, 2016). Undoubtedly, among these variables, self-efficacy plays a crucial role in the learning process. This means that those learners who have confidence in their talent can perform effectively in a particular assignment

(Genç, Kuluşaklı & Aydın, 2016). Indeed, such a capability is an internal resource related to learners' internalized principles, which enables them to achieve predictable outcomes through the activities presented in that context (Chang & Chien, 2015). Notwithstanding the importance of individual characteristics or musical talent in attaining musical success, self-efficacy is considered a crucial element that immensely impacts how a person thinks, behaves, and feels (Zelenak, 2020). The key element in social cognitive theory is self-efficacy because individuals need to perceive themselves and their skills to handle their actions (Teng, 2024). Self-efficacy can be defined as a central part of self-determination theory, which is remarkably important in the examination of music students. This is because it is precisely related to belief in one's ability to bring about the crucial modification (Alessandri, Rose & Wasley, 2020). Despite their highly efficacious expressive or interpretive skills, music learners may lack adequate skills and competence in their performances. This is because each of these different aspects of a musician requires different psychological and physical capabilities, as they vary in difficulty. Moreover, self-efficacy for acquiring skills or accomplishing specific tasks differs from the individual's beliefs in their ability to apply them (Gill, 2020). Besides, the academic concepts associated with self-efficacy emphasize the four distinct sources that have a noteworthy function in musical teaching: the person's direct knowledge (mastery experiences), self-demonstrating (vicarious experience), encouragement by others (social persuasion), and emotional features (physical and emotional Conditions) (Bandura, 2010).

The studies conducted on the contribution of self-efficacy to music performance are of special interest. These studies have presented that self-efficacy is strongly related to music achievement (McCormick & Mcpherson, 2003; McPherson & McCormick, 2006). For instance, self-efficacy associated with music performance entails having more than knowledge of instruments or ability; that is, it also requires sound judgments about the skills one should execute in the presence of others such as a music examination or concert (McCormick & Mcpherson, 2003). These studies have indicated that efficacy plays a mediating role, influencing other variables, including formal practice and successful performance.

A review of the literature reveals that numerous investigations have been

conducted on self-efficacy in academic settings, with the majority empirically demonstrating a correlation between self-efficacy and academic success (Fan & Wang, 2022; Miksza, 2015; Zelenak, 2020). These investigations have indicated the effect of music students' self-efficacy on achievement; however, it is worth noting that no investigations have examined it in the context of EMI. This gap is particularly striking given the increasing adoption of EMI in music education programs worldwide. Furthermore, the expanding trend of EMI has been driven by the internationalization process, as some higher education programs have shifted to English to enhance their general competitiveness (Pan, 2022). Based on the literature, the implementation of EMI is growing more and more worldwide; however, to the best of the researcher's knowledge, music education can be turned into a large EMI discipline in higher education settings, though it has been ignored. This lack of attention to EMI in music education highlights the need for targeted research that examines how EMI impacts music learners' academic and performance outcomes. Accordingly, the researcher makes an effort to scrutinize the issue in this domain. As for related studies in EMI contexts, an investigation conducted by Tong and Shi (2012) showed that participants achieved superior learning consequences in science issues when they had a constructive attitude toward EMI. In the same vein, Lei and Hu (2014) asserted that there was a close relationship between learners' academic achievement in EMI and their attitudes toward the EMI program itself. In contrast, learners who had negative perceptions of EMI believed that their educational achievement was likely to be weakened by EMI. They expressed their eagerness to study academic subjects presented in their mother tongue (Tsui & Ngo, 2017).

As stated by Hu et al. (2014), the results obtained from the studies conducted on EMI; in particular, the recent ones are conflicting. Based on these findings, learners who had to use a language rather than their first language faced more problems than the learners who were allowed to use their L1 in their academic studies. As pointed out by Hu, Li and Lei (2014), this ability to use L1, in turn, led to poor performance of the learners in their academic studies. This was because the learners experienced difficulty while they demonstrated the required proficiency in the target language. Moreover, some investigations (Liu et al., 2019; Roo et al., 2018) have explored self-efficacy as a predictor of the success of EMI although its contribution to learners'

music performance has not been examined. Thus, the intersection of EMI and self-efficacy in music education remains an underexplored area, despite its potential to inform pedagogical practices and policy decisions. Also, it is not apparent whether EMI can assist learners to increase their English competency more successfully than teaching it just as a subject. Moreover, whether music learners learn music better through EMI has yet to be verified by further studies. This study tries to consider this gap by examining the role of self-efficacy in music learners' success within EMI contexts. As a result, this Review makes an effort to establish a theoretical path that starts with the role of self-efficacy and ends with music performance achievement in the EMI realm.

2. Review of the Literature

2.1. *Self-efficacy*

Self-efficacy alludes to individuals' self-notion and that they own the proficiency base to finish particular activities. Self-efficacy refers to individuals' expected attainments in various conditions (Fathi, Derakhshan & Saharkhiz Arabani, 2020; Han & Wang, 2021). In addition, Miksza (2015) characterized self-efficacy as an indicator that signals intrinsic motivation, which is manifested as goal setting and perseverance in doing a task. As far as learning is concerned, self-efficacy can enhance the attainment of respective skills, information, and structured learning approaches. In the area of musical learning, it results in the effective application of formal practice strategies (Zelenak, 2024). This is why individuals who enjoy a high level of self-efficacy face challenges upfront, making more efforts, applying a diverse range of strategies, and persisting for a longer period (Seif Alian & Derakhshan, 2017).

When used in the context of music performance, self-efficacy is considered an outcome of one's confidence in their own musical abilities. More specifically, as far the musical success is concerned, individual features or musical capabilities have a significant role, yet, self-efficacy is also considered a crucial element that greatly influences each person's way of thinking, behaviours, and emotions (Zarza-Alzugaray et al., 2020). Self-efficacy notions are concepts or thoughts individuals have regarding their capabilities to do those activities needed for gaining a favorable

result (Han & Wang, 2021). Self-efficacy refers to individuals' beliefs about their ability to generate certain levels of action that affect incidents impacting their lives (Bandura, 2010). According to Bandura, the self-efficacy notion specifies the methods by which individuals sense, contemplate, and encourage themselves.

The four data resources on which self-efficacy notions are founded include people's performance in the past, indirect experiences through observation of others' activities, verbal encouragement that a person has specific abilities, and physiological mood (Siegle & McCoach, 2007). A self-efficacy feeling is achieved as people successfully become proficient in something, watch others successfully performing an activity, gains constructive feedback regarding finishing an activity, or depend on physiological hints (Tsui, 2024). A large body of research has indicated that self-efficacy comprises an important predictor of learners' language learning attainment (Chen et al., 2015; Erten & Burden, 2014). People who have a powerful self-efficacy considered interactive classroom tasks (e.g. debates, and asking questions from educators) as growing chances, leading to language development, greater EMI attainment, and consequently firmer self-efficacy. In general, these learners potentially make higher efforts for readiness, while learners with lower performance usually concentrate on their skepticism, often considered as a mixture of lower second language capability and understanding of activity hardship, leading to a deconstructive period of lower involvement, infirm self-efficacy, and low achievement (Thompson et al., 2022). Learners with higher self-efficacy make higher attempts and persistence in their learning, indicate greater degrees of internal incentive, do better in adjusting their learning procedures, accept more difficult activities, will potentially accept a proficiency method to learning, experience lower tension in challenging conditions, and have better regulation in new educational conditions (Geitz et al., 2016).

It should be noted that a bulk of studies have been carried out on the role of self-efficacy in education, all of which have pinpointed the function of self-efficacy as a predictor of learners' educational achievement (Schöber et al., 2018; Talsma et al., 2018). For instance, Yusuf (2011) proved that self-efficacy has a facilitating function in achievement enthusiasm and learning approaches. Recently, more studies advocate

this link in EMI settings. Self-efficacy is a significant mediator in the link between music teaching and educational performance, particularly in EFL English settings (Sun, 2022). In a study conducted by Su et al. (2024), the dynamic link among learning results, learning motivation, self-efficacy, and flow in music teaching was investigated. Based on the results, learning motivation and self-efficacy had a common effect on the results of music learners, with previous experience that moderated these impacts. In a study conducted by Li and Liu (2023), the effect of self-efficacy on music learners' educational success in EMI settings, especially in EFL countries. It emphasized the dual difficulty of learning the musical material and English language proficiency. The article highlights that self-efficacy has a significant effect on students' confidence, performance, and motivation.

Investigation on teaching effectively in the context of EMI indicates that promoted self-efficacy may be related to how well they gain subject content by English as an instruction mean. Research by Tripathi (2013) explored the impact of teaching mediums among university pupils on self-efficacy. In general, the findings seem to indicate a greater level of self-efficacy among students of engineering than students of medicine. Furthermore, the findings show that the level of self-efficacy is higher among students trained in English in comparison to students of programmers trained in the first language. Wang et al. (2018) indicate that learners' English self-efficacy is closely associated with their actual English proficiency. The investigators have found a relation, a positive connection between high-confidence learners in their English knowledge and academic attainment concerning EMI scores and course content(Cassidy, 2012; Chun et al., 2017). Akçayoğlu et al. (2019) examine university students' views on EMI exercise and explore their attitudes toward English. The findings revealed a high level of self-efficacy of the final year students in teaching EMI and the general positive belief of the learners towards EMI.

2.2. Achievement

The definition of attainment includes "functions on multiple choice questions of grammar and aural understanding, writing, reading understanding, speaking, scores

in the language class (Gardner, 2010). Based on the socio-educational model, learning attainment originates from incentives and tension (Gardner, 2010). Great attainment is assured in the case of the existence of a constructive correlation between incentive and attainment and a deconstructive correlation between incentive and tension. That is, the extent of learners' learning attainment in an EMI graduate program greatly relies on their degree of learning incentive and tension. Other researchers argue that low incentive can decrease attainment (Gardner, 2010); on the contrary, great incentive increases the degree of learning attainment. Multiple factors affect the learners' degree of attainment in programs of EMI. Prior studies showed that student attainment in EMI programs greatly relies on their language skill and field-particular knowledge (Dearden, 2015). Internal or self-directed learning incentive enhances the self-efficacy state that encourages individuals to gain higher degrees of attainment (Hou et al., 2013; Gao et al., 2022). That is, in case the students are provoked to learn the language for their functional goals, they can highly profit, leading to greater degrees of achievement.

Since learners face problems in comprehending the book material or the speech in EMI, they often function poorly in tests or exams. These hardships are not constrained to learners with lower English skills. Although English skill has a vital effect on learners' educational attainments in EMI classrooms, learners with great language skill may experience the same hardships as well since the genre of academic English varies from that of daily-spoken English. Numerous learners can achieve good performance in common English classes; however, they often face significant problems in English-only educational classes. Li and Liu (2005) clarified that everyday English and academic English vary. In addition, the capability of reading and understanding educational passages greatly correlates with education (Kutieva, 2020). Comprehending the English reading passages in learners can assist them to comprehend English-only speeches. EMI learners and educators do not learn "about" English (in terms of the topic), however, they learn it "through" English (in terms of means). English as a means will possibly be used to do educational activities such as different class-pertaining communicative tasks such as obtaining input (reading and listening) and transferring output (writing and speaking). Such a condition surely exposes learners and educators to the language and opportunities to employ it, which

are significant for learning. Considering that the EMI objective is educational material (meaning) instead of the language of English (form), it recommends simultaneous or unintentional acquisition of a second language (Kuteeva, 2020).

One probable cause can be that since EMI employs English as the language, the class inherently offers a pleasant learning setting where learners are further exposed to English (Worp, 2017). The other probable cause can be that learners gain further chances to use English in everyday and educational environments through English as a means of educators - learners' communication and interaction. Regarding the impact of EMI on topic learning, a large body of research indicated that EMI cannot decrease learners' educational attainments (Dafouza & Camacho-Miñano, 2016; Dafouz et al., 2014) rather, it has a constructive effect on disciplinary information learning, and learners and educators have a constructive viewpoint, and understanding towards EMI (Aguilar & Rodríguez, 2012).

2.3. English Medium Instruction (EMI)

English medium instruction (EMI) involves using English in the courses run at educational institutions, including schools and universities (Macaro et al., 2018). These courses are delivered in countries where most people speak a language other than English. There has been an increase in the application of EMI in the last decades (Dearden, 2015), with some universities in non-English speaking countries presenting their programs (e.g., undergraduate and graduate) through English (Fenton-Smith et al., 2017; Kirkpatrick, 2012). Some studies conducted locally have provided evidence of the advantages associated with the use of EMI at the tertiary level. For example, EMI enables learners to be exposed to the target language, thereby creating more opportunities for acquiring it (Taşdemir & Gürbüz, 2021). Indeed, learners consider EMI a cultural richness. In the same vein, Alptekin and Tatar (2011) conclude that EMI enables students to stay informed about global developments by accessing materials written in English. English-medium Instruction has to do with the learners' engagement in acquiring a language and content, which is realized through the instruction of a non-language subject in a foreign language (Curle et al., 2020). Given that the EMI approach follows two aims, namely, learning

and teaching, it is claimed to raise learners' intrinsic motivation by creating the chances for being extensively exposed to comprehensible input and producing pushed output, as well as speeding up their learning (Kym & Kym, 2014).

English-medium Instruction is defined as the procedure whereby English is employed as the medium of instruction in situations where the dominant language is not English. This environment often involves non-native lecturers of English (Hellekjær & Hellekjær, 2015), an event that has been commonplace across Europe and the world over previous years (Pérez-Vidal, 2015). Elaborating on EMI, Dearden (2015) defines EMI as the employment of the English language for the instruction of educational subjects in nations or regions where the first language is not English. A large number of governments value EMI as a significant strategy used by teachers and students to gain access to new scientific knowledge and technological know-how. This strategy is also used for improving students' national competitiveness, particularly in knowledge production and technological innovation (Kim et al., 2017). Some European and Asian universities have used EMI to foster employability skills and hence the competitiveness of their graduates, which prepares them for employment in global markets (Hu et al., 2014). Last but not least, EMI can contribute to increasing the prestige or rankings of universities (Kim et al., 2017). Nevertheless, recent scholarship has begun to critically inspect EMI's conceptual clarity, implementation quality, and pedagogical impact. Akıncıoğlu (2024) argued that EMI's rapid expansion has outperformed its theoretical coherence, leading to confusion in policy and practice.

3. Conclusion

Students' achievement is considered a crucial issue in the majority of EMI studies given the application of English for communication in the classroom, which could influence learners' knowledge of content (Aizawa, Rose, Thompson & Curle, 2020). Besides, self-efficacy is an effective tool to predict students' academic performance in the context of the university that has proved to be positively correlated with academic achievement (Liu et al., 2019). This Review indicated that learners who have a high level of self-efficacy can perform more effectively in academic settings.

The in-depth examination of self-efficacy in music, which involves the analysis of one's perception of own aptitude to perform music in the presence of an audience or to become prepared for such a presentation via a learning procedure can be very helpful (Zelenak, 2024). This is because such preparation and contemplations provide an opportunity to attain a detailed comprehension of these personal dimensions related to music learners. So, self-efficacy in music influences performance and has to do with a heightened level of motivation (McCormick & McPherson, 2003). This reinforces the efforts related to learning activities, among other factors.

Engagement in EMI involves a high degree of self-efficacy and a low degree of anxiety. Although students with a lower level of self-confidence may avoid EMI classes, the previous studies reveal that as learners in EMI use English increasingly, their anxiety is reduced, and their positive experiences result in self-efficacy enhancement. Efficacy influences learner motivation and a high level of efficacy improve their involvement and attainment, which is associated with a feeling of self-confidence in an individual's skills, which can be greatly determined by an eagerness to more investigation or willingness to participate in tasks perceived as hardship concerning the tasks desired (Vecchio, Gerbino, Pastorelli, Bove & Caprara, 2007). Learners with a great degree of self-efficacy outperform those with a lower degree in terms of the quality of language learning and thinking. They also display better performance concerning their self-evaluation of learning. Self-efficacy has proved to be positively correlated with academic results. This, sequentially, influences their perceptions and they develop a positive attitude towards EMI. These communities of students are international ones. There is a correlation between identification with an international imagined community and the development of positive attitudes towards EMI. This shows that EMI can be used by students to connect with these communities. Within EMI, topic content is learned using a language; therefore, helping learners to learn the foreign language when mastering their content language. The reasoning beyond the two methods is that students are entirely faced with a foreign language when learning the content so they must employ the language and master it in a short time. In other words, EMI is believed to enhance learners' exposure to English, resulting in improvements in their English proficiency. The evidence supporting this conclusion is reflected not only in investigations examining teachers' and students'

perceptions of EMI (Lei & Hu, 2014; Li & Wu, 2017) but also in governmental- level EMI- based policies promoted by some countries in Asia (Tsou & Kao, 2017; Zhao & Dixon, 2017). English-medium Instruction classrooms at colleges have a constructive effect in decreasing learners' tension and increasing learners' incentive and subsequently English capabilities by encountering learners' natural and valid class language (Joe & Lee, 2013). Taking into account that the interpersonal language within the class has a quite significant effect on learning, EMI classes are effective in using the foreign language to nurture language learning. This research is consistent with the prior research, supporting the constructive link between EMI and students' English skill, and also the effect of self-efficacy on educational success. Nevertheless, it is inconsistent with the previous study in specific concentration on music teaching, a field which is usually neglected in EMI literature. The previous research has investigated self-efficacy in overall educational setting, however, this study highlights its specific effect on music students' achievement and motivation in an EMI setting. The present research provides a new view that links linguistic, mental, and educational aspects by incorporating information from EMI and music teaching studies. This combination emphasizes the necessity of more empirical examination of the effect of EMI on music students' self-efficacy and performance results, therefore, enhancing the more detailed comprehension of EMI's effect within various educational fields.

4. Implications and Suggestions for Further Research

Based on the literature, one can draw some cautious suggestions for music education, which can be also used in parallel EMI milieus. This paper can yield some implications for enhancing the quality of scholastic knowledge in related EMI circumstances. Seeking to uncover the factors contributing to learners' achievement can have implications for better course development, the use of effective instructional methods, and the improvement of the program. It might be stated that the best academic performance in the context of EMI instruction requires institutions to enhance classroom practice. Teachers need to teach to maximize the opportunity for mastery experience. Indeed, they are advised to foster a cooperative learning strategy.

This would improve the quality of learning so that both learners and teachers can learn from each other. Instructors also need to enhance task-based classrooms and create useful opportunities for having a more extensive range of communicative experiences. The interactive relationship between teacher and learners, as well as the provision of opportunities for verbal expression, reinforces the learners' self-efficacy. According to Teng (2024), instructors need to be highly attentive to learners' predictions about their potential and actual capabilities, as learners' predictions may be the best predictors of future motivation. Consequently, music instructors are advised to devote time to teaching approaches, and they should help to induce positive beliefs in learners, as these interventions enhance self-efficacy.

Accordingly, learners must be provided with ample opportunities to express their ideas to their peers and participate in discussions. Students who suffer from a low level of self-efficacy fail to involve themselves in the learning processes; they display a low level of eagerness for learning and avoid encountering difficulties. As a result, they refrain from investing effort to overcome such challenges (Bandura, 2010). Unlike students who perceive themselves as having a low degree of self-efficacy, those who enjoy a high level of self-efficacy invest more effort, working for longer periods to accomplish a given task presented in EMI. As self-efficacy plays an essential role in learning music, learners with higher self-efficacy are more eager to participate in the tasks required for development (e.g., rehearsing their instrument for an extended period; focusing on tasks that they believe will enable them to learn) (McCormick & McPherson, 2003).

It is reported in the literature that self-efficacy plays a functional role, which improves music education, and the main contributors to the growth of self-efficacy beliefs include family support, peer network, and instructor-learner relationship (Kym & Kym, 2014). The prospective studies can scrutinize the rapport between the following concepts: self-efficacy, the sociodemographic (e.g., social context and peer influence, economic status, etc.), and/or pedagogical variables (academic environment, materials, instructor-learner relations, etc.) The examination of such factors underlying achievement in EMI can enable educators to develop effective courses, employ more effective instructional methods, and enhance syllabuses (Macaro & Akincioglu, 2018). According to Tatzl (2011), EMI involves three main

challenging components; the level of language proficiency, useful teaching behaviour, and personal attitude. Accordingly, Andrade (2009) believes that these challenges emanate from the students' scant competence and confidence in English. Consequently, these considerations should be examined in the prospective studies to shed light on the efficacy of EMI and possible reasons for its failure or success. To gain better insights into self-efficacy and the successful performance of music learners, more empirical investigations — specifically qualitative — should be conducted. For instance, semi-structured interviews can be conducted in the case of music learners' EMI program to gather insightful information on the efficacy of EMI in relation to language learning and content learning success following its implementation, as well as changes in their success over time. Moreover, as for music students, their self-efficacy can be related to other variables such as grades, self-control, formal practice, and informal practice. Examining the relationships between these constructs in further research plays an essential role in enhancing the quality of music education. In addition, it is worth noting that self-efficacy beliefs and perceptions make a significant contribution to instrumental education, such as music, which requires a high level of practice. This might be the case for all educational fields. So, prospective studies need to explore it in other domains in EMI. There are multiple limitations, although this study emphasized the EMI potential to improve music students' self-efficacy and educational performance. Firstly, the present analysis is primarily theoretical and lacks empirical data to confirm the suggested links. Secondly, the generalizability is restricted because of the particular focus on teaching music, which cannot be applied to the activities of other fields within EMI. Thirdly, the effect of setting elements, like policies of the institutions, cultural views towards English, and accessibility of the resources, is partially investigated. Those constraints indicate that future research needs to accept mixed methods and encompass different academic settings to offer a more inclusive comprehension of EMI's effect. Compared to prior research, which has widely investigated EMI in general teaching settings, business, and science, the present study develops a new perspective by focusing on teaching music, a discipline in which language, mental elements, and performance specifically intersect. The present research suggests a structure for comprehending the effect of language teaching on linguistic competence

and educational and artistic success by highlighting the effect of self-efficacy in EMI. Eventually, subsequent studies need to examine more elements affecting teaching music, like classmate cooperation, performance anxiety, and affective resilience along with learners' self-efficacy perceptions. Those investigations contribute to refining EMI tactics and help students achieve higher efficiency in other fields.

References

Aguilar, M., & Rodríguez, R. (2012). Lecturer and student perceptions on CLIL at a Spanish university. *International Journal of Bilingual Education and Bilingualism*, 15(2), 183–197. <https://doi.org/10.1080/13670050.2011.615906>.

Aizawa, I., Rose, H., Thompson, G., & Curle, S. (2020). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programmed. *Language Teaching Research*, 1–25. <https://doi.org/10.1177/1362168820965510>.

Akçayoğlu, D. İ., Omer, O. Z. E. R., & Efeoğlu, İ. E. (2019). English-medium instruction in a state university and students' English self-efficacy beliefs. *Cumhuriyet International Journal of Education*, 8(3), 651–669. <http://doi.org/10.30703/cije.522904>.

Akıncıoğlu, M. (2024). Rethinking of EMI in higher education: a critical view on its scope, definition and quality. *Language, Culture and Curriculum*, 37(2), 139–154. <https://doi.org/10.1080/07908318.2023.2251519>.

Alessandri, E., Rose, D., & Wasley, D. (2020). Health and wellbeing in higher education: a comparison of music and sport students through the framework of self-determination theory. *Frontiers in Psychology*, 11(2), 566307. <https://doi.org/10.3389/fpsyg.2020.566307>.

Alptekin, C., & Tatar, S. (2011). Research on foreign language teaching and learning in Turkey. *Language Teaching*, 44(3), 328–353. <https://doi.org/10.1017/S02614481100005X>.

Andrade, A. D. (2009). Interpretive research aiming at theory building: Adopting and adapting the case study design. *The Qualitative Report*, 14(1), 42–60.

Bandura, A. (2010). Self-efficacy. In. B. Weiner, & W. E. Craighead (Eds.), *The corsini encyclopedia of psychology* (pp.1534–1536). Wiley. <https://doi.org/10,9780470479216>.

Cassidy, S. (2012). Exploring individual differences as determining factors in student academic achievement in higher education. *Studies in Higher Education*, 37(2), 793–810. doi: 10.1080/03075079.2010.545948.

Chang, F. D., & Chien, C. W. (2015). *Determining the relationship between academic self-efficacy and student engagement by meta-analysis*. 2nd international conference on education reform and modern management, Hong Kong. <https://doi.org/ 10.2991/ermm-15.2015.37>.

Chen, B. H., Chiu, W.C., & Wang, C.C. (2015). The relationship among academic self-concept, learning strategies, and academic achievement: A case study of national vocational college students in Taiwan via SEM. *Asia-Pacific Education Researcher*, 24(2), 419–431. <https://doi.org/10.1007/s40299-014-0194-1>.

Chun, S., Kim, H., Park, C.K., McDonald, K., Ha, O. S., Kim, D. L., & Lee, S. M. (2017). South Korean students' responses to English-medium instruction courses. *Social Behavior and Personality*, 45(6), 951–966. <https://doi.org/10.2224/sbp.6049>.

Costa, F., & Coleman, J. A. (2013). A survey of English-medium instruction in Italian higher education. *International Journal of Bilingual Education and Bilingualism*, 16(1), 3–19. <https://doi.org/10.1080/ 13670050.2012.676621>.

Curle, S., & Derakhshan, A. (2021). EMI trends in using questionnaires: Suggestions for future improvements. In J.K.H. Pun & S. M. Curle (Eds.), *Research methods in English medium instruction* (pp. 32–45). Taylor and Francis Group.

Curle, S., Yuksel, D., Soruç, A., & Altay, M. (2020). Predictors of English medium

instruction academic success: English proficiency versus first language medium. *System*, 95, 102378. <https://doi.org/10.1016/j.system.2020.10237>.

Dafouz, E., Camacho, M., & Urquia, E. (2014). Surely they can't do as well': A comparison of business students' academic performance in English-medium programmers. *Language and Education*, 28(3), 223–236. <https://doi.org/10.1080/09500782.2013.808661>.

Dafouza, E., & Camacho-Miñano, M. M. (2016). Exploring the impact of English-medium instruction on university student academic achievement: The case of accounting. *English for Specific Purposes*, 44(2), 57–67. <https://doi.org/10.1016/j.esp.2016.06.001>.

Dearden, J. (2015). *English as a medium of instruction-a growing global phenomenon*. British Council.

Derakhshan, A. (2021). Review of the book internationalizing learning in higher education: The challenges of English as a medium of instruction, by M. L. Carri' o-Pastor. *International Journal of Bilingual Education and Bilingualism*. <https://doi.org/10.1080/13670050.2021.1882379>.

Derakhshan, A., Rakhshanderoo, M., & Curle, S. (2022). Students and instructors' attitudes toward EMI at Iranian universities. In S., Curle, H., Ibrahim, A, Alhassan, & S. Saleem Scatolini (Eds.), *English-medium instruction in higher education in the Middle East and North Africa: Policy, research and pedagogy* (pp. 25–44). Bloomsbury Publishing.

Doiz, A., Lasagabaster, D., & Sierra, J. M. (2011). Internationalization, multilingualism and English-medium instruction. *World Englishers*, 30(3), 345–359. <https://doi.org/10.1111/j.1467-971X.2011.01718.x>.

Erten, I. H., & Burden, R. L. (2014). The relationship between academic self-concept, attributions, and L2 achievement. *System*, 42(3), 391–401. <https://doi.org/10.1016/j.system.2014.01.006>.

Fan, J., & Wang, Y. (2022). English as a foreign language teachers' professional

success in the Chinese context: The effects of well-being and emotion regulation. *Frontiers in Psychology* <https://doi.org/10.3389/fpsyg.2022.952503>.

Fathi, J., Derakhshan, A., & Saharkhiz Arabani, A. (2020). Investigating a structural model of self-efficacy, collective efficacy, and psychological well-being among Iranian EFL teachers. *Iranian Journal of Applied Language Studies*, 12(1), 123–150. <https://doi.org/10.22111/IJALS.2020.5725>.

Fenton-Smith, B., Stillwell, C., & Dupuy, R. (2017). Professional development for EMI: Exploring Taiwanese lecturers' needs. In B. Fenton-Smith, P. Humphreys, & I. Wilkinshaw (Eds.), *English medium instruction in higher education in Asia Pacific: From policy to practice* (pp. 195–217). Springer. <https://doi.org/10.1007/978-3-319-51976-0-11>

Galloway, N., Kriukow, J., & Numajiri, T. (2017). *Internationalization, higher education and the growing demand for English: An investigation into the English Medium of Instruction Movement in China and Japan*. The British Council.

Gao, Y., Zeng, G., Wang, Y., Klan, A., & Wang, X. (2022). Exploring educational planning, teacher beliefs, and teacher practices during the pandemic: A study of science and technology-based universities in China. *Frontiers in Psychology*, 13:903244. <https://doi.org/10.3389/fpsyg.2022.903244>.

Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model*. Peter Lang.

Geitz, G., Joosten-ten Brinke, D., & Kirschner, P. A. (2016). Changing learning behavior: Self-efficacy and goal orientation in PBL groups in higher education. *International Journal of Educational Research*, 75(3), 146–158. <https://doi.org/10.1016/j.ijer.2015.11.001>.

Genç, G., Kuluşaklı, E., & Aydin, S. (2016). Exploring EFL learners perceived self-efficacy and beliefs on English language learning. *Australian Journal of Teacher Education*, 41(2), 53–68. <https://doi.org/10.14221/ajte.2016v41n2.4>.

Gill, A. (2020). *Enhancing music performance self-efficacy through psychological skills training* (Doctorate Destiration). Germany.

Han, Y., & Wang, Y. (2021). Investigating the correlation among Chinese EFL teachers' self-efficacy, reflection, and work engagement. *Frontiers in Psychology*, 12:763234. <https://doi.org/10.3389/fpsyg.2021.763234>.

Hellekjær, G. O., & Hellekjær, A. I. (2015). Is anglophone complacency a virtue of necessity? The gap between the need for and supply of occupational second foreign language skills in Norwegian business and government. *Scandinavian Journal of Educational Research*, 59(2), 143–161. <https://doi.org/10.1080/00313831.2014.904412>.

Hou, Y. C. A., Morse, R., Chiang, L. C., & Chen, J. H. (2013). Challenges to quality of English medium instruction degree programs in Taiwanese universities and the role of local accreditors: a perspective of non-English-speaking Asian country. *Asia Pacific Education*, 14(2), 359–370. <https://doi.org/10.1007/s12564-013-9267-8>.

Hu, G., Li, L., & Lei, J. (2014). English-medium instruction at a Chinese university: Rhetoric and reality. *Language Policy*, 13(1), 21–40. <https://doi.org/10.1007/s10993-013-9298-3>.

Huang, D. F. (2015). Exploring and assessing effectiveness of English medium instruction courses: The students' perspectives. *Procedia-Social and Behavioral Sciences*, 173(3), 71–78. <https://doi.org/10.1016/j.sbspro.2015.02.033>.

Joe, Y., & Lee, H. (2013). Does English medium instruction benefit students in EFL contexts? A case study of medical students in Korea. *The Asia- Pacific Education Researcher*, 22(2), 201–207. <https://doi.org/10.1007/s40299-012-0003-7>.

Kim, E. G., Kweon, S.O., & Kim, J. (2017). Korean engineering students' perceptions of English-medium instruction and L1 use in EMI classes. *Journal of Multilingual and Multicultural Development*, 38(2), 130–145. <https://doi.org/10.1080/01434632.2016.1177061>.

Khan, S. S., & Takkac, M. (2021). Motivational factors for learning English as a second language acquisition in Canada. *Higher Education Studies*, 11(1), 160–170.

Kirkpatrick, A. (2012). English in ASEAN: Implications for regional multilingualism. *Journal of Multilingual and Multicultural Development* 33(4). 331–344. <https://doi.org/10.1080/01434632.2012.661433>.

Kuteeva, M. (2020). Revisiting the ‘E’ in EMI: Students’ perceptions of standard English, lingua franca and translingual practices. *International Journal of Bilingual Education and Bilingualism*, 23(3), 287–300. <https://doi.org/10.1080/13670050.2019.1637395>

Kym, I., & Kym, M. H. (2014). Students’ perceptions of EMI in higher education in Korea. *The Journal of Asia TEFL*, 11(2), 35–61.

Lasagabaster, D. (2016). The relationship between motivation, gender, L1 and possible selves in English-medium instruction. *International Journal of Multilingualism*, 13(3), 315–332. <https://doi.org/10.1080/14790718.2015.1105806>.

Lei, J., & Hu, G. (2014). Is English-medium instruction effective in improving Chinese undergraduate students’ English competence? *International Review of Applied Linguistics in Language Teaching*, 52(3), 99–126. <https://doi.org/10.1515/iral-2014-0005>.

Li, M. Y., & Wu, T. C. (2017). Creating an EMI program in international finance and business management. In W. L. Tsou & S. M. Kao (Eds.), *English as a medium of instruction in higher education: Implementations and classroom practices in Taiwan* (pp. 95–114). Springer.

Li, P., & Liu, Y. (2023). Revisiting the role of self-efficacy in music students’ academic achievement in English Medium Instruction . *Language Related Research*, 14(2), 1–23.

Lightbrown, P., & Spada, N. M. (2006). *How languages are learned*. Oxford

University Press.

Liu, X., Gao, X., & Ping, S. (2019). Post-1990s college students' academic sustainability: The role of negative emotions, achievement goals, and self-efficacy on academic performance. *Sustainability*, 11(3), 1–18. <https://doi.org/10.3390/su11030775>.

Lo, Y. Y., & Macaro, E. (2015). Getting used to content and language integrated learning: What can classroom interaction reveal? *The Language Learning Journal*, 43(3), 239–255. <https://doi.org/10.1080/09571736.2015.1053281>.

Macaro, E., & Akincioglu, M. (2018). Turkish university students' perceptions about English medium instruction: Exploring year group, gender and university type as variables. *Journal of Multilingual and Multicultural Development*, 39(3), 256–270. <https://doi.org/10.1080/01434632.2017.1367398>.

Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, 51(01), 36–76. <https://doi.org/10.1017/S0261444817000350>.

Mccormick, J., & Mcpherson, G. (2003). The role of self-efficacy in a musical performance examination: an exploratory structural equation analysis. *Psychology of Music*, 31(1), 37–51. <https://doi.org/10.1177/0305735603031001322>.

McPherson, G. E., & McCormick, J. (2006). Self-efficacy and music performance. *Psychology of Music*, 34(3), 322–336. <https://doi.org/10.1177/0305735606064841>.

Miksza, P. (2015). The effect of self-regulation instruction on the performance achievement, musical self-efficacy, and practicing of advanced wind players. *Psychology Music*, 43(3), 219–243. <https://doi.org/10.1177/0305735613500832>.

Mueller, S., Wang, D., Fox, M. D., Pan, R., Lu, J., Li, K., & Liu, H. (2015). Reliability correction for functional connectivity: Theory and implementation. *Human Brain Mapping*, 36(11), 4664–4680.

Pan, Z. W. (2022). L2 grit and foreign language enjoyment: Arguments in light of control-value theory and its methodological compatibility. *Language Related Research*, 13 (5), 325–357. <https://doi.org/10.52547/LRR.13.5.12>.

Pérez-Vidal, C. (2015). Languages for all in education: CLIL and ICLHE at the crossroads of multilingualism, Mobility and internationalisation. In M. Juan-Garau & J. Salazar-Norguera (Eds.), *Content-based language learning in multilingual educational environments*, (pp. 31–50). Springer.

Roo, A. K., Ardasheva, Y., Newcomer, S. N., & Vidrio Magaña, M. (2018). Contributions of tracking, literacy skills, and attitudes to science achievement of students with varied English proficiency. *International Journal of Bilingual Education and Bilingualism*, 1–17. <https://doi.org/10.1080/13670050.2018.1434125>.

Schöber, C., Schütte, K., Kölle, O., McElvany, N., & Gebauer, M.M. (2018). Reciprocal effects between self-efficacy and achievement in mathematics and reading. *Learning and Individual Differences*, 63(2), 1–11. <https://doi.org/10.1016/j.lindif.2018.01.008>.

Seifalian, M., & Derakhshan, A. (2017). *The relationship between EFL teachers' burnout and self-efficacy across English-related vs. not-English related academic degrees*. The second conference on challenges in foreign language teaching in Iran, faculty of literature and humanities of Hakim Sabzevari University.

Sener, S., & Erol, I. K. (2017). Motivational orientations and self-efficacy beliefs of Turkish students towards EFL learning. *Eurasian Journal of Educational Research*, 67(3), 251–267. <https://doi.org/10.14689/ejer.2017.67.15>.

Siegle, D., & McCoach, D. B. (2007). Increasing student mathematics self-efficacy through teacher training. *Journal of Advanced Academics*, 18 (2), 278–312.

Su, P., Kong, J., Zhou, L., & Li, E. (2024). The interplay of flow, self-efficacy, learning motivation, and learning outcomes in music education: A comprehensive analysis of multidimensional interactions. *Acta Psychologica*, 250, 104515.

<https://doi.org/10.1016/j.actpsy.2024.104515>.

Sun, J. (2022). *Exploring the impact of music education on the psychological and academic outcomes of students: Mediating role of self-efficacy and self-esteem*. *Frontiers in Psychology*, 13, 841204. <https://doi.org/10.3389/fpsyg.2022.841204>.

Talsma, K., Schüz, B., Schwarzer, R., & Norris, K. (2018). I believe, therefore I achieve : a meta-analytic cross-lagged panel analysis of self-efficacy and academic performance. *Learning and Individual Differences*, 61(3), 136–150. <https://doi.org/10.1016/j.lindif.2017.11.015>.

Taşdemir, H., & Gürbüz, N. (2021). An investigation into the cultural dimension in EFL classes: Turkish instructors' views and practices. *Canadian Journal of Applied Linguistics*, 24(1), 54–74.

Tatzl, D. (2011). English-medium masters' programmers at an Austrian university of applied sciences: Attitudes, experiences and challenges. *Journal of English for Academic Purposes*, 10(4), 252–270.

Teng, L. S. (2024). Individual differences in self-regulated learning: Exploring the nexus of motivational beliefs, self-efficacy, and SRL strategies in EFL writing. *Language Teaching Research*, 28(2), 366–388. <https://doi.org/10.1177/13621688211006881>

Thompson, G., Aizawa, I., Curle, S., & Rose, H. (2022). Exploring the role of self-efficacy beliefs and learner success in English medium instruction. *International Journal of Bilingual Education and Bilingualism*, 25(1), 196–209.

Tong, F., & Shi, Q. (2012). Chinese–English bilingual education in China: A case study of college science majors. *International Journal of Bilingual Education and Bilingualism*, 15(2), 165–182. <https://doi.org/10.1080/13670050.2011.607921>.

Tripathi, A. K. (2013). Effect of medium of instruction on self-efficacy: A study of PMT/PET course aspirants. *Journal of Psychology and Behavioral Science*, 1(1), 36–41.

Tsou, W., & Kao, S. M. (2017). *English as a medium of instruction in higher education: Implementations and classroom practices in Taiwan*. Springer.

Tsui, A. P. Y., & Ngo, H. Y. (2017). Students' perceptions of English-medium instruction in a Hong Kong university. *Asian Englishes*, 19(1), 57–78. <https://doi.org/10.1080/13488678.2016.1230484>.

Tsui, C. (2024). Impact of English proficiency and self-efficacy on EMI content learning: a longitudinal study in Taiwan. *Journal of English as a Lingua Franca*, 13(1), 139–162.

Vecchio G. M., Gerbino M., Pastorelli C., Bove G. D., & Caprara G. V. (2007). Multifaceted self-efficacy beliefs as predictors of life satisfaction in late adolescence. *Personality and Individual Differences*, 43(2), 1807–1818. <https://doi.org/10.1016/j.paid.2007.05.018>.

Wang, C-H., Harrison, J., Cardullo, V., & Lin, X. (2018). Exploring the relationship among international students' English self-efficacy, using English to learn self-efficacy, and academic self-efficacy. *Journal of International Students*, 8(1), 233–250. <https://doi.org/10.5281/zenodo.1134299>.

Worp, K.V D. (2017). English medium instruction: away towards linguistically better-prepared professionals in the Basque autonomous community? *International Journal of Multilingualism*, 14(1), 53–68. <https://doi.org/10.1080/14790718.2017.1258994>.

Xie, W., & Curle, S. (2022). Success in English medium instruction in China: Significant indicators and implications. *International Journal of Bilingual Education and Bilingualism*, 25(2), 585–597. <https://doi.org/10.1080/13670050.2019.1703898>.

Yusuf, M. (2011). The impact of self-efficacy, achievement motivation, and self-regulated learning strategies on students' academic achievement. *Procedia – Social and Behavioral Sciences*, 15 (2), 2623–2626. <https://doi.org/10.1016/j.sbspro.2011.04.158>.

Zarza-Alzugaray, F. J., Casanova, O., McPherson, G. E., & Orejudo, S. (2020). Music self-efficacy for performance: an explanatory model based on social support. *Frontiers in Psychology*, 11, 1249. <https://doi.org/10.3389/fpsyg.2020.01249>

Zelenak, M. S. (2020). Developing self-efficacy to improve music achievement. *Music Educators Journal*, 107(2), 42–50. <https://doi.org/10.1177/00274321209508>.

Zelenak, M. S. (2024). Self-efficacy and music performance: A meta-analysis. *Psychology of Music*, 52(6), 649–667. <https://doi.org/10.1177/03057356231222432>

Zhao, J., & Dixon, Q. (2017). *English medium instruction in Chinese universities: Perspectives, discourse, and evaluation*. Routledge.

