

Emotional Responses of Taiwanese English Major Students to EMI Courses Taught by Native English-Speaking Teachers

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The Asian Conference on Education 2024
Official Conference Proceedings

Abstract

With the drive for increased internationalization, the Taiwanese government has expanded English as a Medium of Instruction (EMI) courses in higher education. English major students are particularly exposed to these courses. To understand their emotional responses, the authors conducted a survey completed by 200 Taiwanese English major students for the purpose of examining their feelings towards EMI courses and how their past English learning experiences influenced their positive and negative emotional reactions. The findings suggest that participants generally experienced more positive than negative emotions towards EMI. Students who majored in English in senior high school and had previous EMI course experience perceived EMI more positively and less negatively compared to those who did not. Additionally, students who had been taught by native English-speaking teachers showed stronger positive and negative emotions towards EMI than those who had not. These findings have implications for EMI teachers, suggesting they should consider students' past learning experiences to better address their emotional responses.

Keywords: English Major Students, EMI, Emotional Responses

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Introduction

In the context of increasing global internationalization, the acquisition of foreign languages, particularly English due to its role as a global lingua franca, is considered essential for promoting educational internationalization and fostering global citizenship. Consequently, there is a growing global trend toward implementing bilingual or multilingual policies (Fantini, 1991; Singh et al., 2012).

Responding to this trend, the Taiwanese government introduced the “2030 Bilingual Nation Policy Development Blueprint” in December 2018. By September 2021, the Ministry of Education (MOE) launched the "Higher Education Bilingual Learning Program." This initiative seeks to equip students with international expertise in their respective fields, enhancing their ability to communicate, collaborate, and engage with global professionals (National Development Council, 2018).

The program is centered on two key pillars: “Key Cultivation” and “Widespread Enhancement.” It emphasizes strengthening students' English proficiency and expanding English-Medium Instruction (EMI) courses, with the overarching goal of enhancing the international competitiveness of Taiwan's higher education sector (Ministry of Education, 2021).

The expansion of English-Medium Instruction (EMI) in Taiwan is evident in the significant increase in EMI courses: from 16,450 courses in the 2009 academic year to 24,077 courses in 2015 (MOE, Taiwan, 2015, as cited in Tsou & Kao, 2017, p. 11). Many universities have actively promoted EMI programs and courses, creating a trend aimed at advancing English proficiency through EMI pedagogy. This movement is guided by five key principles: "enhancing students' competitiveness in the job market, helping students build foundations for advanced studies, attracting international students, improving the quality of higher education, and fostering a multicultural environment" (Tsou & Kao, 2017, p. 11).

To gain a deeper understanding of how EMI impacts students' learning experiences, this study explores the experiences of local university students in Taiwan when English-speaking foreign instructors deliver courses in English. Specifically, it examines the emotional responses of English majors in EMI courses taught by native English-speaking teachers.

Literature Review

This section reviews previous studies on students' emotional responses to EMI courses across different countries.

Chien and Valcke (2020) found that certain learning activities in EMI courses may induce anxiety and a sense of alienation if the instructor does not clearly communicate the purpose or function of the activities. However, when instructors are friendly and supportive, students tend to feel more at ease, making them more inclined to engage in discussions. Additionally, providing students with more waiting time and pauses during questioning can reduce stress levels in EMI courses. For students with lower English proficiency, the use of their first language (L1) by instructors can also alleviate anxiety and foster greater participation in learning activities.

Huang (2015) identified insufficient English proficiency as the primary source of anxiety among participants. Learning anxiety, motivation, and a sense of achievement were inversely related, with participants experiencing the highest levels of anxiety due to their perceived lack of English proficiency. The study revealed significant differences in anxiety levels between local and international students, with local students reporting higher anxiety levels. This was attributed to difficulties in understanding course content and the pressure of competing with peers, all of which were exacerbated by their perceived lower proficiency in English.

Similarly, Hillman and colleagues (2023) found that students from non-majority language schools and similar linguistic backgrounds frequently experienced feelings of frustration, anxiety, disappointment, shame, and embarrassment in EMI courses due to their inadequate English proficiency. These emotions also affected their sense of belonging in the university environment. Conversely, students from EMI schools and higher socioeconomic backgrounds felt more confident in their EMI experiences. On the other hand, students from Nepali-medium schools and lower socioeconomic backgrounds expressed a lack of confidence in English, which led to feelings of frustration, disappointment, and embarrassment.

Yuan and colleagues (2023) explored the emotional experiences of graduate students from China enrolled in an EMI teacher education program in Macau. Initially, students felt positive emotions such as hope and excitement as they entered the program with high expectations. However, as time progressed, emotions like anger, boredom, and disappointment emerged, leading to feelings of marginalization and confusion.

Hopkyns and Gkonou (2023) highlighted that EMI courses present both opportunities and challenges, often provoking mixed emotions. Participants reported positive emotions, including confidence and pride, but also negative emotions such as anxiety, guilt, shame, and a sense of (un)belonging. While EMI courses tend to evoke more negative emotions overall, individual experiences vary. In particular, female students, regardless of their performance, identity, or sense of belonging, experienced emotions tied to language use in EMI contexts. While most students expressed neutral emotions towards translanguaging practices in EMI settings, about one-third reported negative feelings toward these practices.

Adamson (2022) identified shame as a predominant emotion among students in EMI secondary classrooms in Tanzania. Fear and shame were commonly experienced, particularly when one student's persistent silence during class led to others becoming reluctant to speak English. In over 50 classroom observations, nearly 30 instances revealed students visibly expressing discomfort through body language. Fear and shame were often discussed together and linked to low self-esteem and confidence, with students indicating that their fear stemmed primarily from the anticipation of shame. It is speculated that this may be due to the public nature of classroom activities, where high visibility may trigger feelings of shame and humiliation.

Based on the above review of relevant literature, it is evident that EMI courses have a substantial impact on students' emotions. These effects may include positive emotions related to language learning, such as confidence, pride, a sense of achievement, and interest. However, EMI courses can also evoke negative emotions, including anxiety, shame, anger, boredom, and a sense of not belonging.

To build upon the existing literature, this study seeks to explore the various factors that may influence English major students' emotional responses to EMI courses taught by native English-speaking teachers in Taiwan. The factors under consideration include gender, academic major, prior EMI course-taking experiences, and previous interactions with native English-speaking teachers. The research questions are as follows:

- RQ1: To what extent do the participants agree with the various emotional reactions experienced in EMI classes taught by native English-speaking teachers?
- RQ2: Does gender (male or female) make a difference in the extent to which the participants respond emotionally to EMI courses?
- RQ3: Does their past major (in English or not) make a difference in the extent to which the participants respond emotionally to EMI courses?
- RQ4: Do their past EMI experiences (yes or no) make a difference in the extent to which the participants respond emotionally to EMI courses?

Methodology

The primary participants of this study were university students majoring in English. The research specifically focused on students who had experienced English instruction delivered by foreign instructors, selected through convenience sampling.

The questionnaire was divided into three sections and collected basic demographic information about the participants. The survey aimed to explore participants' emotional experiences in English-medium instruction (EMI) and examine how their demographics, along with past learning experiences, influenced their emotional responses to EMI courses taught by native English-speaking teachers.

What follows presents the items in the survey:

1. Gender : Male Female
2. Was your senior high school major applied foreign languages? Yes No
3. Did you have classes taught by foreign teachers before university? Yes No

Ranking to indicate the extent of agreements	1	2	3	4	5
4. I feel proud in the classroom.					
5. I feel confident in the classroom.					
6. I look forward to the next class in the classroom.					
7. I am satisfied with the EMI course.					
8. I find the EMI course interesting.					
9. I feel scared in class.					
10. I feel ashamed in class.					
11. I feel confused in class.					

12. I feel frustrated in class.					
13. I feel uncomfortable in class.					

The survey items were distributed as an online questionnaire to the participants who were approached on social media platforms popular with Taiwanese university students, namely, Dcard in February, 2024. 150 valid questionnaires were successfully collected.

An independent sample t-test is a statistical method used to compare whether there are statistically significant differences in the means between two independent groups. In this study, we have two independent samples composed of different participants, such as males and females, those who majored in English and those who did not. Through this test, the researcher can assess whether there are statistically significant differences in the extent of emotional responses to EMI courses between these groups. This is an appropriate choice because it allows for comparisons in the study and determines if there are significant differences between different subgroups.

Findings

Findings for RQ1: To what extent do the participants agree with the various emotional reactions experienced in EMI classes taught by native-speaking instructors?

As shown in Table 1, participants generally expressed stronger agreement with positive emotional responses compared to negative ones, as indicated by the respective mean values. The average mean for positive emotions was 3.38, while the average mean for negative emotions was 2.59.

In terms of positive emotional responses, participants showed the highest agreement with the emotion "Satisfied" (Mean=3.65), followed by "Interested" (Mean=3.62), and "Looking forward to the next class" (Mean=3.42). The least endorsed positive emotion was "Confident" (Mean=3.09).

Regarding negative emotional responses to EMI courses, the emotions ranked highest by participants were "Scared" (Mean=2.72), followed by "Confused" (Mean=2.69), and "Frustrated" (Mean=2.55). The least chosen negative emotional response was "Uncomfortable" (Mean=2.24).

Table 1: Emotional Reactions Towards EMI Classes

Descriptive Statistics				
Emotions		N	Mean	Average
Positive Emotion	Satisfied	150	3.65	3.38
	Interested	150	3.62	
	Looking forward to the next class	150	3.42	
	Proud	150	3.11	
	Confident	150	3.09	
Negative Emotion	Scared	150	2.72	2.59
	Confused	150	2.69	
	Frustrated	150	2.55	
	Ashamed	150	2.38	
	Uncomfortable	150	2.24	

Findings for RQ2: Does gender (male or female) make a difference in the extent to which the participants respond emotionally to EMI courses?

As indicated in Table 2, independent-samples t-tests revealed no significant differences in participants' emotional responses to EMI courses based on gender.

However, in terms of mean values, male students showed slightly higher endorsement than female students in two positive emotions: "Proud" (Mean for males=3.22; Mean for females=3.04) and "Confident" (Mean for males=3.17; Mean for females=3.03), as well as in two negative emotions: "Ashamed" (Mean for males=2.43; Mean for females=2.34) and "Uncomfortable" (Mean for males=2.25; Mean for females=2.23). Despite this, the average mean values of positive emotions were identical for both genders (Average Mean for males=3.38; Average Mean for females=3.38).

Conversely, female students showed slightly higher endorsement than male students in three positive emotions: "Looking forward to the next class" (Mean for females=3.46; Mean for males=3.37), "Satisfied" (Mean for females=3.70; Mean for males=3.57), and "Interested" (Mean for females=3.66; Mean for males=3.57). Additionally, females reported higher levels of three negative emotions: "Scared" (Mean for females=2.80; Mean for males=2.60), "Confused" (Mean for females=2.82; Mean for males=2.50), and "Frustrated" (Mean for females=2.66; Mean for males=2.40). In terms of the average mean values for negative emotions, females demonstrated slightly higher levels of negative emotional responses compared to males (Average Mean for males=2.44; Average Mean for females=2.57).

Table 2: Emotional Responses to EMI Courses by Gender

Group Statistics					Independent Samples Test			
Gender			N	Mean	t	df	Sig	
Positive Emotion	Proud	Male	60	3.22	1.210	148	0.228	
		Female	90	3.04				
	Confident	Male	60	3.17	0.923	148	0.358	
		Female	90	3.03				
	Looking forward to the next class	Male	60	3.37	-0.618	148	0.538	
		Female	90	3.46				
	Satisfied	Male	60	3.57	-0.956	148	0.341	
		Female	90	3.70				
	Interested	Male	60	3.57	-0.627	148	0.532	
		Female	90	3.66				
	Average Mean of positive emotions for male: 3.38							
	Average Mean of positive emotions for female: 3.38							
Negative Emotion	Scared	Male	60	2.60	-1.222	148	0.224	
		Female	90	2.80				
	Ashamed	Male	60	2.43	0.586	113	0.559	
		Female	90	2.34				
	Confused	Male	60	2.50	-1.932	148	0.055	
		Female	90	2.82				
	Frustrated	Male	60	2.40	-1.540	148	0.126	
		Female	90	2.66				
	Uncomfortable	Male	60	2.25	0.110	148	0.913	
		Female	90	2.23				
	Average Mean of negative emotions for male: 2.44							
	Average Mean of negative emotions for female: 2.57							

Findings for RQ3: Does their past major (in English or not) make a difference in the extent to which the participants respond emotionally to EMI courses?

As shown in Table 3, independent-samples t-tests revealed several significant differences in emotional responses based on whether students' past major was English or not.

In terms of mean values, students who had majored in English during senior high school generally exhibited stronger endorsement of positive emotions and lower endorsement of negative emotions compared to those who did not major in English. For example, the average mean value for positive emotions among students who had previously majored in English was 3.45, while it was 3.29 for those who did not. Similarly, the average mean value for negative emotions was 2.35 for students who had majored in English, compared to 2.71 for those who had not.

Table 3 also highlights that students who majored in English in senior high school differed significantly in their emotional responses to EMI courses compared to those who did not, particularly in relation to four negative emotions: "Scared" ($t(148)=-2.294$, $p=0.023^*$), "Ashamed" ($t(148)=-2.937$, $p=0.004^{**}$), "Frustrated" ($t(148)=-2.370$, $p=0.019^*$), and "Uncomfortable" ($t(148)=-2.412$, $p=0.017^*$).

The mean values further indicated that students who had previously majored in English showed significantly lower endorsement of negative emotions towards EMI courses. For instance, the mean values for "Scared" (2.55), "Ashamed" (2.19), "Confused" (2.55), "Frustrated" (2.38), and "Uncomfortable" (2.08) were lower compared to those who did not major in English, whose mean values were "Scared" (2.91), "Ashamed" (2.60), "Confused" (2.86), "Frustrated" (2.76), and "Uncomfortable" (2.43).

Table 3: Emotional Responses to EMI Courses by Past Majors

Group Statistics					Independent Samples Test			
English major or not in senior high school		N	Mean	t	df	Sig		
Positive Emotion	Proud	Yes	80	3.19	1.136	148	0.258	
		No	70	3.03				
	Confident	Yes	80	3.21	1.918	148	0.057	
		No	70	2.94				
	Looking forward to the next class	Yes	80	3.53	1.605	148	0.111	
		No	70	3.30				
	Satisfied	Yes	80	3.71	1.031	148	0.304	
		No	70	3.57				
	Interested	Yes	80	3.63	0.077	148	0.939	
		No	70	3.61				
	Average Mean of positive emotions for those with English major: 3.45 Average Mean of positive emotions for those without English major: 3.29							
	Negative Emotion	Scared	Yes	80	2.55	-2.294	148	0.023*
No			70	2.91				
Ashamed		Yes	80	2.19	-2.937	148	0.004**	
		No	70	2.60				
Confused		Yes	80	2.55	-1.874	148	0.063	
		No	70	2.86				
Frustrated		Yes	80	2.38	-2.370	148	0.019*	
		No	70	2.76				
Uncomfortable		Yes	80	2.08	-2.412	148	0.017*	
		No	70	2.43				
Average Mean of negative emotions for those with English major: 2.35 Average Mean of negative emotions for those without English major: 2.71								

Findings for RQ4: Do their past EMI experiences (yes or no) make a difference in the extent to which the participants respond emotionally to EMI courses?

As suggested in Table 4, students with experience in EMI courses showed positive emotions to a greater extent than those without, given the relative average mean values: 3.48 for those with EMI experience vs. 3.01 for those without. Conversely, students with experience in EMI courses showed negative emotions to a lesser extent than those without, given the relative average mean values: 2.40 for those with EMI experience vs. 2.96 for those without.

The results from independent-samples t-tests on this question showed several significant differences in emotional responses based on the experiences of taking EMI courses. Specifically, students with experience in EMI courses demonstrated significantly different endorsement levels of emotional responses compared to those without such experiences, in terms of five positive emotions: “proud” $t(148)=2.768$, $p=0.006^{**}$; “confident” $t(148)=3.526$, $p=0.001^{***}$; “looking forward to the next class” $t(148)=2.952$, $p=0.004^{**}$; and “interested” $t(148)=2.345$, $p=0.02^{*}$.

Among the aforementioned significant differences in endorsement levels of emotional responses, the relative mean values suggested that those with EMI course-taking experiences endorsed the following positive emotions to the following levels: means for “proud”=3.21; means for “confident”=3.21; means for “looking forward to the next class”=3.53; means for “satisfied”=3.73; and means for “interested”=3.70. All of these means are significantly higher than the corresponding mean values observed in those who did not have experience with taking EMI courses: means for “proud”=2.75; means for “confident”=2.63; means for “looking forward to the next class”=3.03; means for “satisfied”=3.34; and means for “interested”=3.31.

Table 4 also indicates that students without experience in EMI courses demonstrated significantly higher endorsement of five negative emotional responses, according to the independent-samples t-tests: “scared” $t(148)=-2.897$, $p=0.004^{**}$; “ashamed” $t(148)=-3.485$, $p=0.001^{***}$; “confused” $t(148)=-2.577$, $p=0.011^{*}$; “frustrated” $t(148)=-3.357$, $p=0.001^{***}$; and “uncomfortable” $t(148)=-2.995$, $p=0.003^{**}$.

The corresponding mean values observed in those without experiences in EMI courses are listed as follows: means for “scared”=3.16; means for “ashamed”=2.84; means for “confused”=3.09; means for “frustrated”=3.06; and means for “uncomfortable”=2.66. In contrast, the corresponding means for those who have experience with taking EMI courses are as follows: means for “scared”=2.60; means for “ashamed”=2.25; means for “confused”=2.58; means for “frustrated”=2.42; and means for “uncomfortable”=2.13.

Table 4: Emotional Responses to Experiences of Taking EMI Courses

Group Statistics					Independent Samples Test			
Experience with or without taking EMI courses			N	Mean	t	df	Sig.	
Positive Emotion	Proud	Yes	118	3.21	2.768	148	0.006**	
		No	32	2.75				
	Confident	Yes	118	3.21	3.526	148	0.001***	
		No	32	2.63				
	Looking forward to the next class	Yes	118	3.53	2.952	148	0.004**	
		No	32	3.03				
	Satisfied	Yes	118	3.73	2.344	148	0.02**	
		No	32	3.34				
	Interested	Yes	118	3.70	2.345	148	0.02**	
		No	32	3.31				
	Average Means of positive emotions for those with experiences taking EMI: 3.48 Average Means of positive emotions for those without: 3.01							
	Negative Emotion	Scared	Yes	118	2.60	-2.897	148	0.004**
No			32	3.16				
Ashamed		Yes	118	2.25	-3.485	148	0.001***	
		No	32	2.84				
Confused		Yes	118	2.58	-2.577	148	0.011*	
		No	32	3.09				
Frustrated		Yes	118	2.42	-3.357	148	0.001***	
		No	32	3.06				
Uncomfortable		Yes	118	2.13	-2.995	148	0.003**	
		No	32	2.66				
Average Means of negative emotions for those with experiences taking EMI: 2.40 Average Means of negative emotions for those without experiences taking EMI: 2.96								

$p < .05$ * $p < .01$ ** $p < .001$ ***

Discussion and Conclusion

What comes next summarizes the main significant differences identified in this study in terms of the emotional responses demonstrated by different kinds of survey participants.

First, it appears that participants of the two genders held similar preferences for EMI courses, as no significant differences were found in independent-samples t-tests. However, in terms of the Mean values, females tended to feel more negative towards EMI courses than males, while both genders demonstrated positive emotions to the same extent.

Second, those who did not major in English in senior high school felt significantly more scared, ashamed, frustrated, and uncomfortable than those who did. Overall, those without English major experiences in senior high school felt more negative towards EMI courses than positive.

Third, those who had taken EMI courses felt significantly more proud, confident, interested, satisfied, and looked forward to the next class more than those without such learning experiences. Conversely, those who had no experience with EMI courses felt significantly more scared, ashamed, confused, frustrated, and uncomfortable than those who had taken EMI courses. In general, those with EMI course experiences felt more positive towards EMI than those who didn't, while those without EMI course experiences felt more negative towards EMI than those who did.

To compare the findings derived from this thesis to those in relevant studies in existing literature, it is found that this study identified similar patterns. For instance, the findings of the present study align with Hillman (2022) in terms of positive emotions, such as pride, in taking EMI courses. As seen in the present study, participants enrolled in EMI courses tended to feel prouder compared to those who weren't. The findings of the present study regarding participants not taking EMI (English-Medium Instruction) courses feeling more ashamed than those enrolled in EMI courses align with the studies conducted by Hillman and colleagues (2023) and Hopkyns and Gkonou (2023). Hillman and colleagues (2023) delve into the emotional impacts of educational settings, particularly focusing on negative emotions such as frustration and stress experienced by students in EMI in higher education. Hopkyns and Gkonou (2023) explore the complex emotional experiences of stakeholders in EMI, highlighting a range of emotions such as pride, confidence, anxiety, guilt, shame, and feelings of (un)belonging.

Furthermore, the findings of this study emphasize the importance of participants' EMI-related experiences and their non-EMI background in high school, which can profoundly influence their emotional reactions to EMI in college. As shown in the survey responses, participants with experiences of taking EMI courses felt more positive towards EMI than those who didn't. Conversely, those without experience in EMI courses felt more negative towards EMI than those who did. These findings resonate with prior research indicating that students' high school background and their unfamiliarity with EMI (e.g., not majoring in English or not being taught by foreign teachers in high school) serve as significant challenges during their transition to college-level EMI (e.g., Aizawa & Rose, 2020; Zhou & Rose, 2021).

Understanding these dynamics can provide valuable insights into the emotional journey of students navigating the shift to EMI environments, thereby informing strategies to support adjustment and well-being. It emphasizes the importance of understanding students' backgrounds in terms of their previous learning experiences to accommodate them appropriately and to be more aware of potential emotional responses, such as anxiety or fear. By recognizing and addressing these emotional aspects, educators and institutions can create a more supportive and conducive learning environment for all students.

Moreover, this study contributes to the existing literature by delving into the dimension of gender. The examination of gender differences reveals intriguing insights into the emotional responses of participants towards EMI courses. Specifically, the findings indicate that females tended to exhibit more negative emotions concerning EMI courses compared to their male counterparts. This gender discrepancy in emotional reactions underscores the need for a nuanced understanding of how individuals from different gender backgrounds perceive and engage with EMI learning environments. Furthermore, while females demonstrated a tendency towards negative emotions, it is noteworthy that both genders displayed positive emotions within EMI courses.

This finding suggests that despite potential gender differences in emotional responses, EMI environments have the capacity to evoke positive sentiments among students regardless of gender. Understanding these gender dynamics enriches our comprehension of the complex interplay between individual characteristics and emotional experiences in educational settings. In essence, the exploration of gender in this study not only expands upon existing research but also highlights the importance of considering gender as a relevant factor in understanding students' emotional responses to EMI courses. By acknowledging and addressing gender-specific emotional needs, educators and institutions can tailor support mechanisms to foster a more inclusive and supportive learning environment for all students, irrespective of gender.

Some limitations must be acknowledged in this thesis, based on which some future research suggestions can be proposed.

Firstly, concerning the survey, there is a possibility of self-report bias: participants' responses to the questions may tend to be more favorable (i.e., positive emotions are preferred), leading to potential bias in the results. It is suggested that future researchers employ a qualitative research approach to examine the same topics. For example, they can conduct interviews to explore potential triggering factors that explain participants' various emotional responses in English-taught courses, such as which particular teaching techniques employed by EMI teachers cause students' anxiety or stress in class.

Secondly, this study did not take into account the relationship between students' English proficiency levels and their various emotional responses. Future research could collect such information to examine the correlation between students' proficiency levels and their endorsement of emotional responses.

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