Specific Anxiety Situations and Coping Strategies in Full English Medium Instruction Engineering Programs

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Abstract—While there is an increasing number of research studies on English medium instruction in Thailand in the university context, very few have explored the strand of foreign language anxiety. Not only that, methodological limitations exist concerning real-time anxiety reports. To broaden the research scope on English medium instruction and foreign language anxiety as well as to overcome limitations in methods, the present study used a smartwatch, journaling, and semi-structured interview to explore the specific anxiety situations and coping strategies in full English medium instruction among engineering students in Thailand. Among four volunteer participants purposely drawn from the anxiety survey, their average heartbeat per minute ranges from 72.3 to 107.8. Based on their journals and individual semi-structured interviews, several factors of specific anxiety situations found were communication apprehension, cognitive processing anxiety, the difficulty of the English medium instruction course, fear of making mistakes, lack of autonomy, perceived negative teacher acts, peer negative evaluation and test anxiety. In addition, the factor common among the participants was lack of autonomy. Further findings demonstrated coping strategies to relieve their feelings of anxiety such as preparation, relaxation, positive thinking, peer support, resignation, asking teacher's help, translation, self-talk, being focused on a task, lesson review, and metacognition. Finally, pedagogical implications were discussed to help language and content teachers address anxiety experienced by students in EMI programs.

Keywords—English medium instruction, language anxiety, engineering programs, Thailand

1 Background of the study

Numerous studies on foreign language anxiety (FLA) proposed by Horwitz, Horwitz, and Cope [1] were conducted in EFL and ESL classrooms. Findings have claimed the debilitative effect of foreign language anxiety on language performance, motivation, speaking, listening, reading, and writing scores. Such studies have yielded very practical implications for English language teaching, for example, on how language teachers help minimize FLA's pervasive effects. Moreover, with the advent of English as medium instruction (EMI) in international programs in Thai universities and elsewhere,

it is imperative to explore FLA emanating from content and language to help students cope with the challenges in learning and promote their wellbeing [2].

In the literature, minimal FLA-related studies were conducted in a setting where English is not only the object of learning but used as a medium of instruction (EMI). In this study, EMI refers to the use of English as a medium of teaching and learning content subjects such as Calculus, Statistics, Coding, and Programming in a university context and where English is not the language of lingua franca outside the classroom. While there are a plethora of studies on FLA, little has been known about its causes among university students in Engineering programs using English as medium of instruction in Thailand. In fact, Macaro [3] has described the spread of EMI as "an unstoppable train which has already left the station (p. 232)." Thus, there is a pressing need to explore this topic.

As stated earlier, limited language anxiety-related studies have looked at the context of EMI, specifically among undergraduate Engineering students in international programs. However, since EMI and language anxiety are challenging constructs that could result in learner deficits, it remains a significant concern to content and language teachers and researchers. This study has the following objectives: (1) to identify factors of specific anxiety-provoking situations experienced by engineering students when English is used as a medium of instruction in content courses; and (2) to elicit their coping strategies. To this end, two questions are asked: *What are the factors of specific anxiety situations experienced by engineering students when English is used as a medium of instruction*? *What are their coping strategies*?

2 Literature review

2.1 Foreign language anxiety

Horwitz et al. [1] conceptualized foreign language anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p. 128). Three factors are known to provoke in-class foreign language anxiety: communication apprehension (the fear of communicating with others in the classroom), fear of negative evaluation (the worry about what others think of you in the classroom), and test anxiety (the fear of exams and quizzes). Such framework is the most relevant and popular found in the literature. In addition, various causes of anxiety were found such as academic evaluations, negative evaluations, comprehension problems, teacher's use of English, and teacher's personalities [4, 5].

Specific domains have also identified factors causing language anxiety. For example, in speaking, Akkakoson [6] found factors driving moderate anxiety levels among Thais such as test anxiety, fear of negative evaluation, communication apprehension, and limited vocabulary repertoire. In writing, four significant sources of anxiety are fear of writing test, anxiety about making mistakes, fear of negative evaluation, and low confidence in English writing [7]. In reading, Tsai and Lee [8] reported four factors: unknown vocabulary, unfamiliar cultural background, unfamiliar topic, and text format. In listening, three leading causes were found were lack of listening practice,

content knowledge, and input [9]. It is possible that similar reasons appear in two or more domains of language learning.

Many studies have reported anxiety's adverse effects on language performances inside or out of class. For example, previous research on engineering students in Thailand has shown negative associations between language anxiety and presentation, language anxiety and in-class discussion, language anxiety and final exam, language anxiety and final grade [10–12]. Such results correlate with previous studies where anxiety's effect is pervasive in various contexts [13–16].

Measures of FLA have been diverse. However, due to the limitations of a single method, a combination of methods was preferred to triangulate findings and provide a more profound sense of the topic at hand. For example, among six graduate students in Thailand, Wilang and Vo [12] explored the complexity of speaking anxiety using a survey, observation, heart rate, and idiodynamic self-rating measure. The authors concluded that using different sources could provide static and dynamic data to triangulate results. Thus, using dynamic data sources could identify fluctuations in students' anxiety feelings and can be complemented by self-reports.

2.2 English medium instruction

English medium instruction (EMI) has been a recent practice in Thailand with the advent of internationalization in universities. It is defined as "the use of the English language to teach academic subjects in countries where the first language of the majority population is not English" [17, p. 2]. Two types of EMI are found in the literature – full and partial. Herein, full EMI pertains to classes where English is the only medium of instruction while partial uses both L1 and L2 forms of instruction [18].

Accordingly, EMI is beneficial as graduates can work globally [19], promotes students and staff mobility [20], enhances career goals [21], and improves student's proficiency [22, 23]. However, despite the advantages, EMI brought challenges in lesson comprehension due to student's low English proficiency level [24, 25], students 'feeling of being distanced' from their L1 [26], failure to deliver the academic content effectively [27], hinders acquisition of the content [28], lecturer's inadequate vocabulary and code-switching [29], and students' high speech anxiety, lack of confidence and negative attitudes toward English learning [30], and students' preference of their native language as medium of instruction [31]. It is possible that these challenges may cause anxiety in English-led classes.

In Thailand, studies have focused on perceptions of teachers towards content and language instruction in EMI [32], teacher beliefs and practices [33, 34], and attitude of students towards EMI [35, 36].

Recently, Wilang and Nupong [36] elicited eight factors among engineering and nursing students affecting their attitudes toward EMI including difficulties with the English language, availability of resources and opportunities, personal goals in life, limitations of time when studying EMI courses, providing activities to improve English language proficiency, enhancement of career goals, supports needed, and motivation and intercultural ability. Without the 'right' attitude in learning, the novelty of EMI can be questioned. Apart from students' needs and challenges, other issues remain unaddressed, specifically on student's affective state.

2.3 Coping strategies

Other topics such as lifelong learning strategies in content subject learning have been reported [37, 38] but coping strategies for FLA experienced in the EMI context have been largely ignored. Nevertheless, coping strategies were reported separately in both strands of research.

In dealing with foreign language anxiety, Kondo and Ying-Ling [39] reported 70 tactics of Japanese students for coping with language anxiety categorized into preparation (e.g., studying hard), relaxation (i.e., taking a deep breath), positive thinking (e.g., trying to enjoy tension), peer seeking (i.e., finding friends who have the similar experience), and resignation (e.g., sleeping in class). In addition, teachers can help reduce anxiety by carrying out a comprehensive and entertaining lesson, being supportive and encouraging, and giving quizzes with minimum scores [4].

To cope with language anxiety experienced in EMI programs or courses, Japanese students have used practicing speaking English, preparing before class, using affective strategies (e.g., not being afraid of making mistakes), using communication strategies, and others such as listening to other students and avoiding speaking English [40]. It would be interesting to know if engineering students in Thailand use similar coping strategies.

3 Methodology

The study was conducted at a science and technology university in northeastern Thailand. It offers international undergraduate programs in civil engineering, mechanical engineering, and petrochemical and polymer engineering.

Mixed methods design was adopted to gain a more complete picture of specific anxiety experiences of engineering students when English is used as medium of instruction. Qualitative and quantitative data were combined or contrasted to enrich the evidence collected in the study. All data were collected online due to the Covid-19 pandemic.

3.1 Participants of the study

There were two phases in this study, and the number of participants varied. In the first phase, 140 students answered an online questionnaire about their anxiety. The findings were published elsewhere. In the second phase, ten students were chosen based on purposive sampling. However, only four cases were presented in this paper to provide in-depth insights on the topic at hand. The others could not complete the required activities, so their data were not reported in this paper. All the participants indicated a moderate level of anxiety (see Table 1) and are currently enrolled in international engineering programs specializing in petrochemical, polymer, and civil engineering.

Table 1. Participants in the study

Participant	Engineering Major	Level of Anxiety
Ric	Petrochemical engineering	Moderate
Kar	Polymer engineering	Moderate
Angel	Polymer engineering	Moderate
Kon	Civil engineering	Moderate

3.2 Instruments, data collection procedures, and analysis

In the larger study, four methods were used to collect the data. However, only three methods were considered here needed to answer the questions posed in this study.

The smartwatch was used to measure the heart rate of the participants. Such physiological evidence would be used to ascertain the real-time anxiety feelings of the participants during an EMI class. Despite the limitations of such instrument (as other factors affect heart rate), other data sources were considered to triangulate the findings. Each participant was asked to wear a smartwatch a few minutes before class until the end of their lesson. Then, they were asked to upload the data to the researcher's Google Drive. Each participant's average heartbeat per minute (bpm) was calculated and presented in this paper per session.

The participants were asked to record their anxiety experiences during class to triangulate the smartwatch data. They were told to specifically take notes of those high anxiety moments that correspond with the smartwatch data. At the end of each class, they were requested to accomplish the online journal.

The data were coded manually and inductively. To ensure coding validity, two colleagues agreed as raters. Recoding of some specific anxiety situations was done to ensure validity. For example, initially, communication apprehension and engagement anxiety were coded separately but merged to cover all situations where students felt anxious when asked to respond to the teacher's query. Lack of autonomy was elicited when students were 'forced' to answer the teacher's questions. The raters reached 90 percent agreement, suggesting a high level of consistency.

Individual semi-structured interviews were conducted to gain deeper insights into their anxiety experiences, but primarily to collect data on their coping strategies during their anxiety moments in class. Extracts from the interviews were presented in the results to triangulate the elicited factors from the online journals and the smartwatch data. Each participant spent 10–15 minutes sharing their views about the topic at hand.

Each interview was transcribed to analyze the data. After reading and familiarizing myself with the data, manual coding followed afterward. Similar codes were then grouped, resulting in themes [41], herein, referred to as factors.

Two colleagues agreed to look at the codes to ensure validity. Some factors with ambiguous meanings were negotiated and reworded accordingly. For example, the let-it-go strategy was elicited from one of the participants' views but was reworded into let-it-be strategy to cover other acts such as 'not doing anything' and 'taking deep breaths'.

4 Results

4.1 Factors of specific anxiety situations among engineering students

Eight factors of specific anxiety situations were elicited and shown in Table 2. Further, the physiological evidence of each participant was presented individually, including specific anxiety situations they had experienced in each session (n=10). Selected extracts were also provided to know more insights into their anxious feelings during class.

Table 2. Factors of specific anxiety situations

No.	Factors of Specific Anxiety Situations	Examples of Specific Anxiety Situations
1 (F1)	Communication apprehension	Not familiar with the teacher's accented speech Afraid of my pronunciation and accent Afraid to speak in a class with different L1s The thought of facing my classmates the whole time Students led discussions in class It was my turn to answer a question Shared our thoughts individually The teacher asked if we have questions for her
2 (F2)	Cognitive processing anxiety	Thinking answers to difficult questions Do not enjoy the course because of thinking hard Unable to understand the topic of relativity Falling behind the topic Unable to recall concepts previously mentioned Unable to find words to express my thoughts I could not catch up with the lesson The translation was not enough to understand the lesson I am slow because the teacher switched to Thai to say something Some discussions were in Thai
3 (F3)	Difficulty of the EMI course	It is a difficult subject I cannot understand the lesson well because it was difficult Confused about the problem given due to its difficulty The calculation was very difficult
4 (F4)	Fear of making mistakes	My answer was grammatically incorrect Thinking that my answer was wrong My grammar was wrong I was unsure of my answer I gave wrong answers
5 (F5)	Lack of autonomy	Forcing students to answer the question Forcing students to answer without preparation Was asked to open the camera The teacher calling out students to answer the question Asking us to answer within 3 seconds Tight deadline of assignment given
6 (F6)	Perceived negative teacher acts	Low engagement of the teacher with the students The teachers questions randomly The teachers is hostile in teaching The teacher does not accept my answer
7 (F7)	Peer negative evaluation	Afraid to be perceived by others as slow Afraid of negative impression of friends Being judged by other students
8 (F8)	Test anxiety	The thought of having a quiz A quiz was given

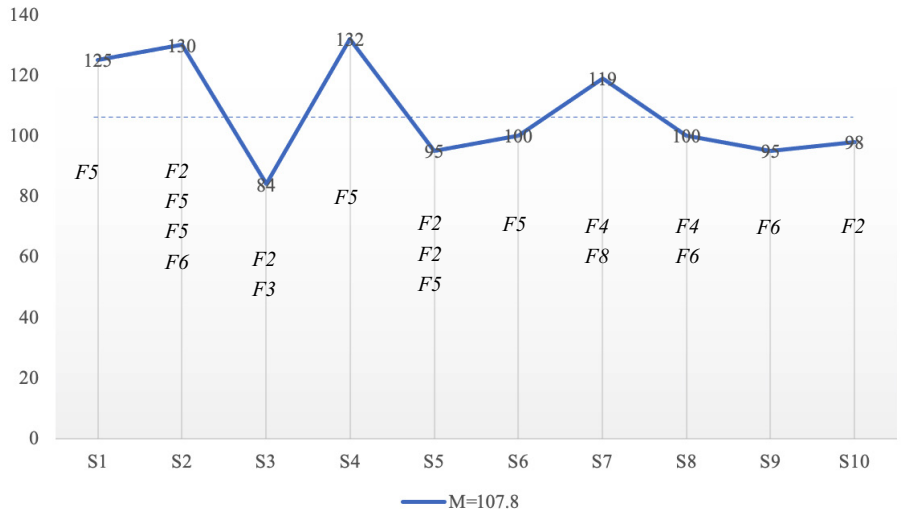
Case 1: Rica. The first case is Ric, with an average bpm of 107.8, has the highest among the participants. The most frequent specific anxiety factors coded were lack of autonomy (F5, *n*=5) and cognitive processing anxiety (F2, *n*=5). Her anxiety peaked during Session 4 due to lack of autonomy (F5). Further findings have shown that test

anxiety (F8) was the only factor above the *M* threshold and was not also found below the *M* threshold. The specific anxiety factors that were not reported include communication apprehension (F1) and peer negative evaluation (F7).

In the interview, Ric mentioned the lack of autonomy. Teachers call out students individually to answer the question. Such acts are aggravated by other negative teacher acts such as giving immediate feedback for wrong answers. She said,

> *"When you give an answer, the teacher keeps asking about how you solve this or that. There was a lot of pressure I experienced. When someone gave an answer, the teacher would say 'that's wrong' and sometimes 'cut us off' when wrong answer is said."*

Ric also noted that the teacher requires all students to turn on their cameras, contributing to her high anxiety feelings during classes. She felt there was no freedom as they were forced to do so. The ugly feeling is heightened by negative teacher acts, fear of making mistakes, and peer negative evaluation.

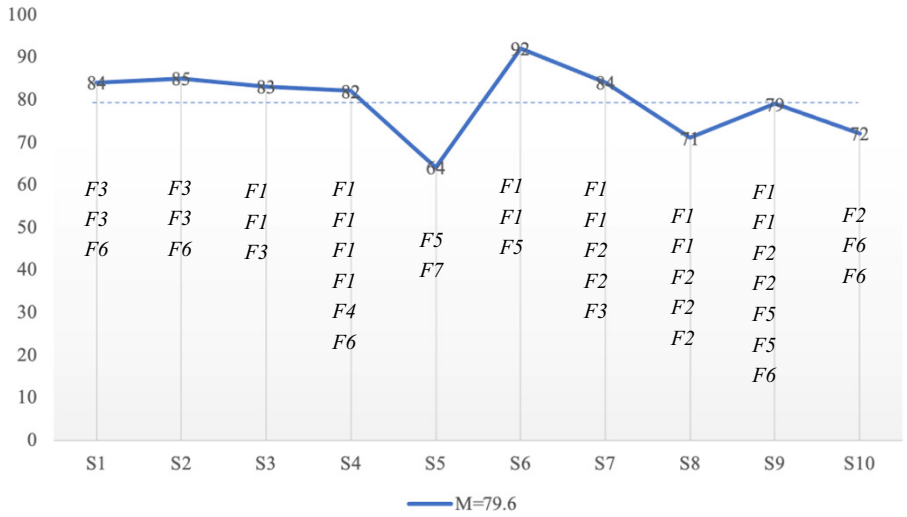


Case 1. Ric's average bpm and factors of specific anxiety situations

Case 2: Kar. Kar is the second most anxious participant in this study, with an average bpm of 79.6. He experienced the highest number of specific anxiety situations (n=40), except for specific anxiety situations related to test anxiety (F8). The most frequent factor of specific anxiety situations coded was communication apprehension (F1, n=14), followed by cognitive processing anxiety (F2, n=8). His anxiety peaked in Session 6 due to communication apprehension (F1) and lack of autonomy (F5). Both difficulties of the EMI course (F3) and fear of making mistakes (F4) were found above the *M* threshold and were not also found below the *M* threshold.

In the interview, Kar noted the teacher's accented speech resulted in cognitive processing anxiety.

"I am anxious with the teacher's language, specially his pronunciation because it's different from what I am used to. This makes me slow understanding the difficult lessons. I like the teacher who makes us comfortable in learning like giving enough details, giving enough background and giving us enough time to process the lesson."

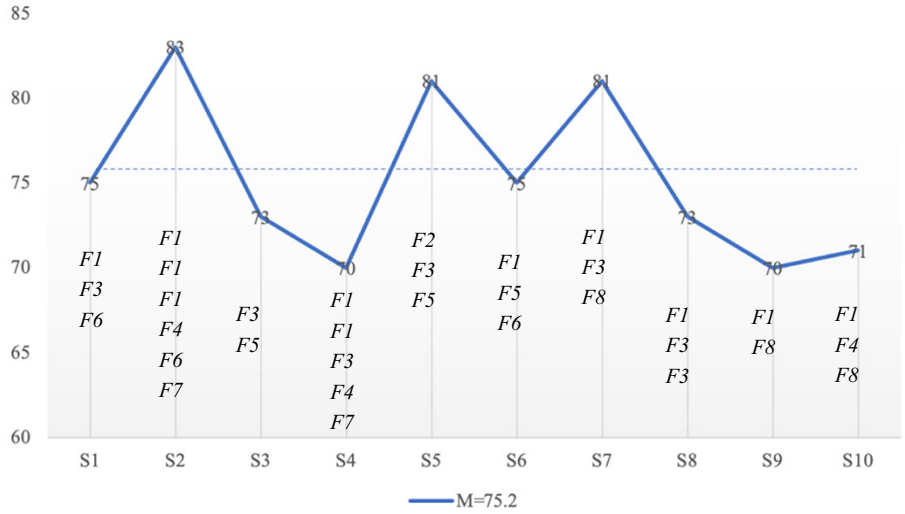


Case 2. Kar's bpm and factors of specific anxiety situations

Case 3: Angel. The third case is Angel, who had an average bpm of 75.2. The most frequent specific anxiety factors coded were communication apprehension (F1, *n*=10) and difficulty of the EMI course (F2, *n*=7). His anxiety peaked during Session 2 due to factors – communication apprehension (F1), fear of making mistakes (F4), perceived negative teacher acts (F6), and peer negative evaluation (F7). Further findings have shown that cognitive processing anxiety (F2) was the only factor that is above the *M* threshold and was not also found below the *M* threshold. Angel experienced all factors of specific anxiety factors.

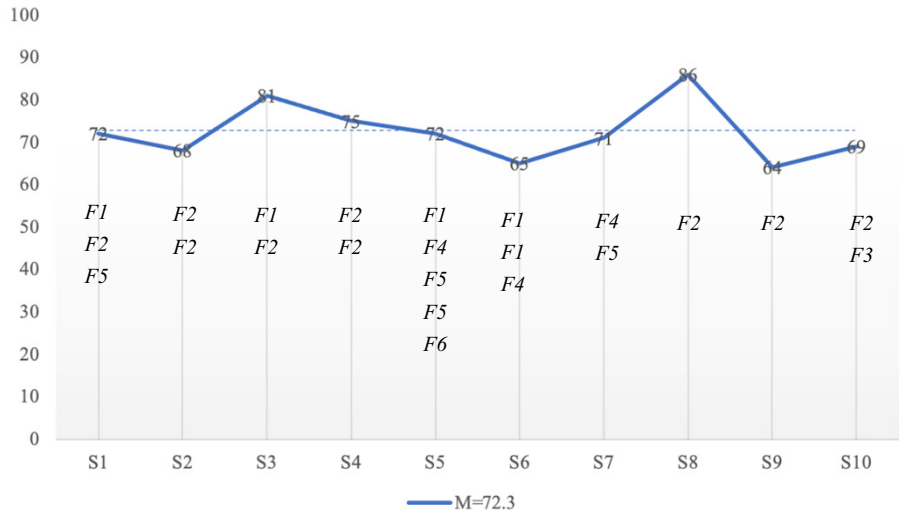
Angel noted that the more complex the lesson, the higher his anxiety. For example, he thought that whenever the teacher called his name to answer a question, he had difficulty finding words to say even though he knew the answer, and he felt *'all eyes were on me'* moment.

"I always feel the tension in my head whenever I answer a question even if I know the answer. Also, I keep thinking that my answer may be wrong and that my teacher would react negatively and that my friends might be thinking that I'm weak. The classes are small so I think that when I have to answer, all their eyes are on me and that that makes me so anxious."



Case 3. Angel's bpm and factors of specific anxiety situations

Case 4: Kon. Kon had the least anxiety among the participants, with an average bpm of 72.3. The most frequent factor of specific anxiety situations coded was cognitive processing anxiety (F2, *n*=9), followed by communication apprehension (F1, *n*=5). His anxiety peaked during Session 8 due to cognitive processing anxiety (F2). Two factors of specific anxiety situations were not reported such as negative peer evaluation (F7) and test anxiety (F8).



Case 4. Kon's bpm and factors of specific anxiety situations

Although Kon feels anxious when he doesn't know the word to say, he is comforted by his teacher's kind words such as 'just let your English flow' and 'keep going'. He said that he likes the teacher who allows student mistakes, the one who keeps asking students if they understood the lesson, and a teacher who is 'slow in teaching' so that he can catch up with the content lessons.

4.2 Coping strategies of engineering students

The participants employed several coping strategies when they were asked to record their specific anxiety situation experiences. In total, 12 coping strategies were elicited including (1) preparation, a tactic before class to pre-empt anxiety provoking situations due to difficulties of the EMI course; (2) relaxation refers to doing activities that reduce feelings of uneasiness or anxiety; (3) positive thinking is about seeking enjoyment experiences to overcome feelings of uneasiness or anxiety; (4) peer support refers to help seek from friends to alleviate their anxiety from peer negative evaluation and fear of making mistakes; (5) resignation is about giving up or doing nothing on the task and doing nothing about their anxiety; (6) Googling refers to quick solutions to ease 'fear of making mistakes' anxiety from lack of knowledge on something; (7) teacher's help is used to reduce anxiety due to confusion arising from difficult lessons; (8) translation is used to ease cognitive processing anxiety and communication apprehension; (9) self-talk refers to encouraging words to stay on the task regardless of anxiety, (10) being focus is quite similar with self-talk but differentiated by doing acts to stay on the task despite the feelings of anxiety; (11) reviewing, a tactic after class to reduce anxiety due to cognitive processing anxiety and difficulty of the content course; and (12) metacognition is about thinking of the cause of anxiety and acting on it accordingly.

Ric mentioned three coping strategies such as relaxation (i.e., eating foods), Googling (i.e., searching Google for the answer), and being focused (i.e., focusing on the teacher's pointer). She said,

> *"My browser is always open so I can Google the teacher's question. At least I have something to say if I am not prepared to answer the question. Well, it's not about the language but the answer – the right content. Also, if I am instructed to open the camera, I will just focus on the pointer even if I don't understand the lesson. Looking at my teacher's face would make me more anxious as he might ask a question to me."*

Pertaining to the coping strategies employed by Kar, nine were elicited such as preparation (i.e., reading the topic in advance even if I don't like it), relaxation (i.e., listening to music after class), positive thinking (i.e., thinking about upcoming holidays), peer support (i.e., asking friends in the Line chat), resignation (i.e., keeping quiet), Googling (i.e., quickly look for answers online), self-talk (i.e., telling myself to calm down), staying focus on the task (i.e., engaging myself with the teacher instead of taking notes), and metacognition (i.e., actively knowing about my mistakes). Kar insinuated about knowing and learning about his mistakes:

> *"Saying wrong answers makes me really nervous in class. Imagine when everyone is looking at you. So after class, I have to reflect on those mistakes in class, for example, wrong calculation. This would help me become more prepared*

in the next lessons. I think thinking about what happened and enough preparation can help me better deal with my anxiety."

Angel used nine strategies, including preparation (i.e., reading the topic before class), relaxation (i.e., rewarding myself by buying things that I like), peer support (i.e., asking for help from friends), resignation (i.e., let-it-go technique), Googling (i.e., looking for references on Google), teacher's help (i.e., asking more information from the teacher), self-talk (i.e., telling myself that I can do it), staying focus on the task (i.e., sorting lessons and assigned tasks), and reviewing (i.e., reading notes and watching recorded videos after class). In the interview, he emphasized on resignation. Angel said:

"Many times I just let it go. I experienced a lot of anxiety. It's a complex feeling. Sometimes I cannot deal with it so I just let it go by rewarding myself with things I like. In the next lessons, I review by reading my notes and watching videos. During lessons, I ask my friends and dare to ask the teacher. I think teachers should give more time to explain difficult concepts."

With regards to the coping strategies employed by Kon, he used seven strategies such as relaxation (i.e., taking a deep breath, drinking water), resignation (i.e., doing nothing), Googling (i.e., searching for information on Google), translation (i.e., translating into my L1), staying focus on the task (i.e., telling myself several times to remain focus on the task). Kong explained about translation below.

"I capture the screen and quickly translate in my language. The concepts are really difficult to understand. When I translate, at least I can understand some words to help me guess the content of the lesson. Doing this could at least give me an idea on what to ask the teacher. I cannot just ask the teacher without knowing what to ask. So yes translating to L1 is helpful reduce my anxiety."

5 Discussion

One goal of this study is to investigate the factors of specific anxiety situations in a full EMI engineering program. The smartwatch data indicated individual physiological evidence of anxiety feelings. Also, the participants' insights were collected through journaling and semi-structured interviews. With the use of multi-methods, it is established that EMI is an anxiety-provoking learning context due to eight factors.

The elicited factors are related to anxiety-provoking factors and situations such as communication apprehension, comprehension problems, fear of anxiety, unfamiliar topic, test anxiety, among others [1] [22] [23] [24] [26]. What is interesting are those content-related factors elicited from their journals, including cognitive processing anxiety, the difficulty of the EMI course, lack of autonomy, and perceived negative teacher acts. Caution, however, is necessary for interpreting data due to the very limited number of participants presented in this paper.

Cognitive processing anxiety may hinder the receptive process of the participants because they have to *think hard*, *do not understand the words*, and productive output as they take time to *find the word* to say something. It can be discerned from these results that language *per se* can influence the language learner's receptive and productive

skills negatively. Previous literature has mentioned the challenges in comprehension due to students' low proficiency in English [24] [25]. Moreover, there appears to be a spiral of anxiety aggravated by the difficulty of the EMI course, for example, when the lesson was about 'calculation' and when the students were asked or 'forced' to show 'solutions' to the given problems. The spiral of negative emotions needs further research in EMI context.

Turning to lack of autonomy as one of the factors that contributed to the highest average *bpm* of the participants, although the findings cannot establish causal relationships of factors, it could be possible that the difficulty of the EMI class coupled with 'thinking hard' trigger the teacher to 'force' students to respond resulting to the negativity of student perceptions toward the teacher act. In this case, the class becomes teacher-directed and non-interactive. Unlike language classes where interactions are encouraged, EMI courses may have to focus on delivering content with a minimal language component. As found in EMI literature, content teachers hardly integrate language into their teaching due to a lack of linguistic competence or time constraints [36]. Further investigation of this issue using CLIL [32] would enhance our understanding of how lack of autonomy happens or at least how autonomy can be promoted in EMI programs, courses or lessons.

Three common coping strategies were relaxation, Googling, and staying focused on a task. However, it is more important to discuss the lesser-known coping strategy - metacognition to alleviate their ugly feelings of anxiety. As Angel said, thinking about his mistakes could help him deal with anxiety by knowing what went wrong and preparing for the upcoming lessons. In language learning and teaching, research on metacognition is burgeoning. Future studies may establish how metacognition regulates a learner's emotional state in EMI settings.

Research on FLA in the EMI context could be improved based on the limitations of the current study. Apart from the smartwatch, other anxiety detection technology, for example, MRI could be considered. Next, to be able to generalize findings, a more significant population is needed. Qualitative-based studies may consider a more sizable number of participants. Moreover, the relationships between the participants' background variables, the anxiety-provoking situations, and coping strategies can be explored quantitatively.

6 Conclusion and pedagogical implications

Despite some limitations, this study's findings elicited anxiety factors in full EMI engineering programs. The factors include communication apprehension, cognitive processing anxiety, the difficulty of the EMI course, fear of making mistakes, lack of autonomy, perceived negative teacher acts, negative peer evaluation, and test anxiety. Further findings demonstrated coping strategies to relieve their feelings of anxiety such as preparation, relaxation, positive thinking, peer support, resignation, use of teacher's help, translation, self-talk, staying focused, reviewing, and metacognition.

Further investigations of anxiety in the EMI context should be encouraged as it would help anxious students to overcome stressful learning situations. In addition, researchers should consider a larger number of participants. Future research may also explore the relationship between FLA and coping strategies. Lastly, content teachers may undergo training to alleviate 'fear' and encourage autonomy in students.

6.1 Pedagogical implications

Language teachers may help content teachers or vice versa raise awareness and practice key related terms in language teaching such as anxiety, autonomy, and metacognition. Perhaps, when students are given autonomy, not only are language and content goals met, but learners feel less anxious during the lesson or course duration.

More specifically, language and content teachers may raise students' awareness about metacognition as a coping strategy for anxiety in the EMI class. To cultivate metacognition, teachers may not just have to deliver the lessons but to give time to students to reflect on their answers or the process of getting the 'right' answer. Like in the study, teachers may encourage journaling and recording, so students become aware of their struggles and later use them to regulate their acts.

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