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Re-examining Productive-Skills Anxiety Constructs in Online Instructional Contexts Involving Thai Undergraduates Following the COVID-19 Pandemic

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Article information	
Abstract	This study reexamines various foreign language anxiety (FLA) predictors that may be applicable to the Southeast Asian and Thai contexts beyond the dimensions initially validated by Horwitz et al. (1986) and Cheng (2004). This study explores two frameworks, namely, the Foreign Language Classroom Anxiety Scale (FLCAS) (Horwitz et al., 1986) that measures classroom speaking anxiety, and the Second Language Writing Anxiety Inventory (SLWAI) (Cheng, 2004) that samples writing anxiety across three factors (i.e., somatic anxiety, avoidance behavior, and cognitive anxiety). The present study sought to understand how the online classroom apparatus during the context of the COVID-19 pandemic affected the degree of FLA towards productive skills (i.e., classroom speaking and writing) among Thai learners of English in two universities. The field work took place over a period of four months and used questionnaire data from 44 students. Individual focus groups were conducted with two professors teaching academic English. Content analysis of the qualitative data identified emerging themes. The results suggest that further research on FLA predictors in the Thai classroom could include dimensions such as that of perceived

	disharmony, perceived unpredictability, and exteriority of emotional life.
Keywords	productive skills anxiety, online classroom anxiety, anxiety constructs in Thai classrooms
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1. Introduction

Anxiety has been studied since the late 1970s, but it was not until the mid-1980s that the construct of foreign language anxiety (henceforth FLA) was coined by Horwitz et al. (1986). The concept of anxiety is multidimensional—numerous kinds of anxieties have been dichotomized by psychologists including that of state anxiety, achievement anxiety, trait anxiety, and facilitative-debilitative anxiety (Horwitz, 2001). FLA is deemed a situation-specific anxiety—that is, an apprehensive expression similar to that of test anxiety or stage fright (Horwitz, 2010). Deconstructing classroom management techniques and social interactions online is vital for understanding FLA in its variation.

Although the literature suggests that FLA is well-studied, skill-based anxieties in reading, writing, listening, and speaking have been lesser studied in the Southeast Asian EFL context, let alone in that of Thailand. Classroom learners in many L2 contexts report that anxieties related to speaking influence their ability to learn (Hsu, 2009). It is possible to assume that particular situations stir up anxiety more than others in each individual. Under such conditions, the anxieties experienced are characterized as specific, because they arise from certain situations in the L2 classroom (Yan & Horwitz, 2008).

Past studies in foreign language anxiety (FLA) have markedly been in nonvirtual classrooms. While many scholars have adapted their instruments for East Asian contexts (e.g., the Taiwanese context in Cheng et al., 1999), the scales itself (e.g., communication apprehension, performance anxiety, and fear of negative evaluation) often remain unchanged. Therefore, there is opportunity to reexamine various FLA predictors that may be applicable to the Southeast Asian

and Thai contexts beyond the dimensions validated by Horwitz et al. (1986) and Cheng (2004). Additionally, this study sought to understand how learning within the online classroom apparatus since the COVID-19 pandemic affected the degree of FLA towards productive skills (i.e., classroom speaking and writing) among Thai EFL undergraduate students enrolled in an English for Academic Purposes course online to determine the extent to which past learnings about anxiety-reducing strategies in traditional classrooms remained congruent in online contexts. The study also explored teacher-held misconceptions about online classroom anxiety.

The two research questions that guided this study were as follows:

1. What FLA predictors cause speaking and writing anxieties in an online English language classroom since the COVID-19 pandemic among Thai undergraduate EFL students?
2. What anxiety-reducing strategies associated with speaking and writing anxieties can teachers employ as they manage their class in the online apparatus?

2. Literature Review

2.1 The Construct of Foreign Language Anxiety (FLA)

In terms of classroom speaking anxieties, the original Foreign Language Classroom Anxiety Scale (FLACS) developed by Horwitz et al. (1986) focuses on three specific dimensions. Communication apprehension can be thought of timidness due to a fear or anxiety of talking to others. This is characterized by challenges while speaking in groups or in front of others (i.e., stage fright). Performance anxiety is deeply connected with a fear of failure. That is, learners often place high expectations on themselves and feel sensitive to minor errors. Fear of negative evaluation principally refers to the distress caused by worrying about how evaluations take place in a classroom. Learners feel that there is a looming expectation that others would negatively rate their language production.

By way of classroom writing anxieties, the Second Language Writing Anxiety Inventory (SLWAI) developed by Cheng (2004) consists of three subscales. Somatic anxiety refers to the items that speak to physiological arousal due to anxiety. An example of such anxiety is “I tremble or perspire when I write English compositions under time pressure in an online classroom." Cognitive anxiety is

related to the worry or fear of negative evaluation when writing. Avoidance behavior is concerned with the pushing away of writing tasks and writing situations.

Both the FLACS and SLWAI instruments are applicable for online learning environments because both instruments are designed to measure context-specific situations (Horwitz et al., 1986) and learners' tendencies (i.e., traits) that arouse anxiety when utilizing language. Context plays a crucial role not only for social and interpersonal dimensions, but also for psychological contexts, which includes affects (MacIntyre, 2017). The instruments measure learners across such social, interpersonal, and psychological aspects that can occur in the online learning apparatus.

2.2 Beliefs about English Language Learning and Prior FLA Studies in the Thai Context

Beliefs about English language learning among Thai EFL learners have been studied since the early 2000s. Among these is the work by Chirdchoo and Wudthayagorn (2001) which reported that within 107 12th graders, the majority felt that English was easier to learn than other foreign languages. Such beliefs are reflected in studies decades later, such as in the one by Akkakoson (2016a), which reported that 71% of the 88 Thai EFL undergraduate students interviewed demonstrated positive attitudes towards speaking English in EFL classrooms. Extensive research has shown that holding appropriate attitudes (i.e., beliefs, affective attitudes, and behavioral attitudes) is related to language achievement (Riffin, 2000). That is, students who have positive beliefs about language learning will likely dedicate a longer time for working towards greater fluency (Chirdchoo & Wudthayagorn, 2001).

While the scope of this study did not explore belief characteristics held by Thai undergraduate EFL learners, it is important to note that student views of language learning interplay with skill-based anxieties. In line with relatively moderate to positive beliefs about language learning, many studies report moderate anxiety levels among Thai EFL learners. For example, Inthakanok (2011) used the FLCAS to examine speaking anxiety of 28 Thai EFL university students.

The study showed that participants had medium-level anxieties (Inthakanok, 2011 as cited in Akkakoson, 2016b).

Existing research in the Thai EFL context with regards to FLA have centered around language acquisition strategies to ameliorate FLA in offline classrooms. For instance, Suwantarathip and Wichadee (2010) reported that low proficiency Thai second-year university students experienced less anxiety if they were placed in cooperative learning environments.

Studies in the Thai context mentioned touch upon skill-based anxieties, namely that of speaking, but it remains to be known whether the learnings apply to the online classroom in virtual modalities forever changed by the COVID-19 pandemic. There is much to be learned in terms of best classroom management practices and the interactions as well that may cause the most FLA in the Thai context.

2.3 Characteristics of Online Classrooms, Anxiety, and the Technology Acceptance Model (TAM)

One of the primary differences between face-to-face communication and that of online is the interaction patterns. Paralinguistic feedback and non-verbal language exchanges can take place in brick-and-mortar classrooms, but for online classrooms, instructors must have a heightened awareness of their communication skills (Bommanaboina & Madhumathi, 2021). How well a teacher can use technical materials and applications influences the degree of engagement and co-construction of meaning online. Heretofore, past studies of skills-based anxiety through the framework of FLACS and SLWAI have taken place in the traditional classroom. It is known that computers and technology can be influencing factors for the onset of FLA.

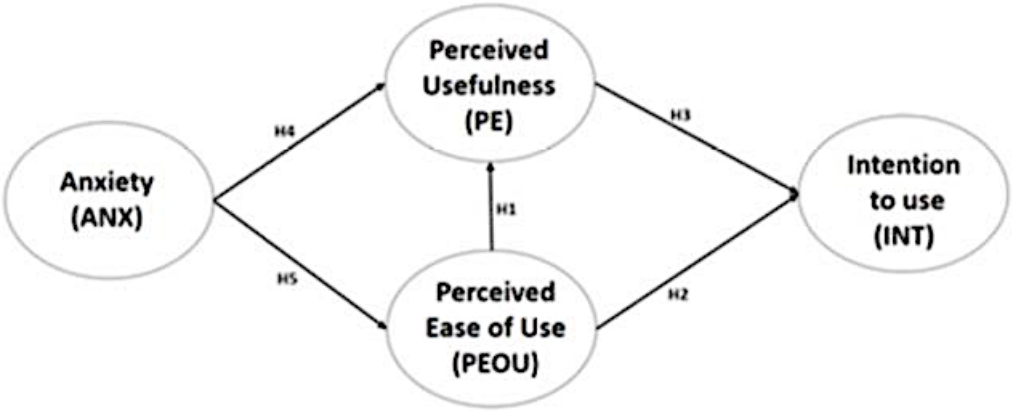
Learners who are new to online classrooms may confront a ‘pain barrier’ because videoconferencing technologies may feel ominous or discomforting (Carr et al., 2010). To this end, the apprehension that students feel during language learning in virtual spaces may be associated with the trepidation of adopting various videoconferencing applications. To better explain how a learner may

accept an information system, the Technology Acceptance Model (TAM) developed by Davis (1989) can be used.

Researchers Alrajawy et al. (2018) have adapted the TAM (Davis, 1989) to account for how anxiety (ANX) is agentive to a user's intention to use (INT) (c.f. Figure 1). Users who have higher anxiety might be less willing to adopt technologies relative to those who are not anxious. That is, researchers have found that there is a negative effect on both perceived ease of use and perceived usefulness (Chen & Tseng, 2012). By incorporating inventory items measuring PE and PEOU alongside questions sampling skills-based anxieties, it will be possible to see a more complete picture of student engagement and sources of FLA in online classrooms.

Figure 1

Technology Acceptance Model (TAM) adapted by Alrajawy et al. (2018, p.2)



2.4 Previous Studies Attempting to Redefine FLA in Online Contexts

'Specific' FLA refers to anxieties that arise from particular situations. For example, in Hurd (2007)'s longitudinal study on FLA in distance learning among tertiary-degree students studying French, it was found that the distance mode caused several anxiety-inducing states stemming from the loss of instant feedback, greater opacity in task instructions, lack of opportunities to practice speaking with others, feelings of isolation, and challenges for learners to compare their progress with that of their classmates. The specific experience of connectedness found in brick-and-mortar classrooms was gone, causing some

anxiety in online contexts. Some researchers have explored situation-specific contexts found only online such as that of turn-taking strategies among teachers and learners that would best avoid embarrassment and reduce isolation (Pu, 2020). The online context also necessitates students to become more autonomous learners (Müller & Goldenberg, 2021) and maintain cognitive presence (Carr et al., 2010) to a greater degree than in traditional classrooms. These specific situations in the online apparatus invite opportunities to further re-examine measures for capturing FLA.

3. Methodology

Using a mixed-method approach, this study investigates productive skill-based anxiety by building upon both the Foreign Language Classroom Anxiety Scale (FLACS) by Horwitz et al. (1986) and the Second Language Writing Anxiety Inventory (SLWAI) by Cheng (2004).

In order to sample skill-based anxiety from a population of Thai undergraduate students, the study took place across two universities that are both public, which will be called University A and University B. Data were collected from classes fully conducted online, and all students attended online English for Academic Purposes (EAP) courses. The students reported not having attended online classes in a university setting before. The undergraduate classes were mainly academic writing-focused classes, but L2 speaking was also highly weighted in midterm and final project assignments.

The online video-conferencing program Zoom was selected (instead of Google Hangouts, Skype, LINE video, etc.) because of it being conventionally accessible and stable compared to other programs (see Nakatsuhara et al., 2016 for a detailed rationale for selecting this software).

3.1 Participants

Although 44 students were surveyed, ten participants from University A were removed because they were fifth-year students studying English for Dentistry. The remaining 34 participants from University A and University B were either first-year (22 participants) or second-year (12 participants) undergraduate students studying in online EAP classrooms. In University A, the online course was

named 'Academic Writing' under the B.A. Communication Management (International Program), while in University B, the online course was named 'English for Academic Purposes' with students from both the International Academy of Aviation Industry and the Business School.

Participants were equally representative (17 men and 17 women), and all were less than 20 years of age. Fifty nine percent were from University A (20 students), while 41% (14 students) were from University B. In terms of the years of English instruction that students had received prior to attending the online EAP classes, one student had less than eight years of English study, eight students had eight to 12 years of English learning (23.5% of the participants), eleven students had 12-16 years of English instruction (32.4% of the participants), while most participants (41.2% or 14 students) had 16-20 years of English learning experience.

3.2 Research Instruments

3.2.1 Questionnaire

In total, the questionnaire contained two parts (38 questions in total). The first part adapted the FLACS from its original 33 items to 18 items, focusing on L2 speaking anxieties. The second part adapted the SLWAI from 27 items to 20 items, focusing on L2 writing anxieties. In sum, 18 questions pertained to speaking anxieties, while 20 questions addressed writing anxieties. In part one, the statements sampled FLACS speaking anxiety predictors along the dimensions of communication apprehension, performance anxiety, and fear of negative evaluation. An example statement from part one is that of question 15, "Even if I am well prepared for an online English class, I feel anxious about speaking," which looked at fears of negative evaluation. In part two, SLWAI statements explored writing anxiety predictors across dimensions of somatic anxiety, cognitive anxiety, and avoidance behavior. An example statement from part two is that of question 36, "I'm afraid of my English composition being chosen as a sample for discussion in an online classroom," which looked at avoidance behavior.

Most critically, the questionnaire items were adapted to investigate anxieties in online classrooms—the original inventories did not measure virtual classrooms. The sequence of items was also randomized. The questionnaire encompassed a series of statements using a five-point Likert scale (i.e., Strongly

Disagree to Strongly Agree). The adapted questionnaire was validated by three experts who were university professors at University A. Items that received a -1 on the Index of Item-Objective Congruence (IOC) were either removed because they duplicated some constructs. Other items were re-translated in the Thai for more natural phraseology. The Thai translation was verified by three professors whose L1 was Thai with a background in linguistics.

Descriptive statistics and reliability (Cronbach's Alpha) were analyzed using SPSS Statistics 28. For the qualitative interview data, the responses were stored and coded to develop themes. In terms of the questionnaire's overall reliability, Cronbach's Alpha was 0.856, which fell within the acceptable range of 0.70 and 0.95 (Tavakol & Dennick, 2011). Since this instrument had more than one construct, each section's reliability statistics were analyzed, as a larger number of questions would inflate the value of alpha (Tavakol & Dennick, 2011).

3.2.2 Semi-structured Interviews

To triangulate the dataset, after collecting quantitative data from 44 participants, extensive interviews were conducted with 21 students through random sampling. The data were normalized by using min-max feature scaling. The interview participants were coded by either M or F according to gender, as well as a randomized number (e.g., M4, F6). Emergent themes were noted, and interview questions were formulated to qualitatively probe deeper into the quantitative data collected. Eleven open-ended questions were asked in total.

The qualitative interview questions were developed in concert with two L1 Thai professors who taught the students responding to the original survey. The translations of Thai to English were verified by two bilingual lecturers who used the methodology of 'back-translations' to verify the translation accuracy. The discussion was about the perceived challenges and the potential sources of FLA experienced by students. In terms of the follow-up interview questions, the first portion focused on online tools. This included asking learners' feelings towards how they thought the video camera should be used to most effectively support learning, as well as their opinions on the effectiveness of Zoom polls, the Zoom chat function, and Microsoft/Google forms as alternatives for class participation. Direct questions were also asked about what students thought teachers could do

to reduce anxieties. Additionally, questions comparing online/offline classroom management practices such as participating anonymously, giving peer feedback via breakout rooms, and conversation turn-taking online were also addressed. Each interview, which lasted 15-20 minutes, was conducted in Thai. Examples of the interview questions include the following:

1. How do you think the camera should be used for learning in an online classroom? If the camera is turned off, will you have less anxiety and learn better?
2. If the teacher asks a question in class, would you prefer to respond to the question anonymously?
3. How can teachers reduce anxiety in the online classroom?
4. What prevents you from speaking in an online classroom when the teacher asks a question?

In addition, questions investigating the degree of technology acceptance as described by the Technology Acceptance Model (TAM) (Alrajawy et al., 2018) were also included. This included asking how students felt using certain online tools and if there were any hindrances with learning online.

3.3 Data Collection

1. A questionnaire was given to three online sections of undergraduates at the same time in the first week of November 2021. Responses to the questionnaire were collected via Google Forms. Since the question order had been randomized, the collected data were then re-grouped back into the aforementioned categories measuring specific anxieties. Ten participants from University A were removed because they were fifth-year students (i.e., they were no longer undergraduate students) studying English for Dentistry before the researchers analyzed the total results. The study was capped at only undergraduate students.

2. After follow-up discussions with the two professors, students were selected randomly for semi-structured interviews without any prior established criteria. The students were selected from the same population initially sampled across three online sections of EAP classes. The interviews were conducted during the second week of November

2021 after regular class hours. The semi-structured interviews were held in the same online classroom on the Zoom application. The 21 interviews were conducted in Thai to overcome language barriers, and observation notes were made in five-minute portions.

3.4 Data Analysis

1. To analyze the quantitative data from the questionnaire, the following criteria for descriptive statistics (i.e., mean) were established. The same criteria were used by Akkakoson (2016a) who utilized the Foreign Language Classroom Anxiety Scale (FLACS) by Horwitz et al. (1986) to study FLA anxiety among 282 Thai EFL university students.

Table 1

Mean Scores and Anxiety Level Indication

Mean Scores	Indication of Anxiety Level
4.21-5.00	Highest level of anxiety
3.41-4.20	High-anxiety level
2.61-3.40	Medium-anxiety level
1.81-2.60	Low-anxiety level
1.00-1.80	Lowest level of anxiety

Source: Akkason (2016a)

The responses to the five-point Likert scale were tabulated into aggregate percentages.

2. A conventional approach to content analysis (Hsieh & Shannon, 2005) was used to analyze interview questions. The questions began as open-ended and were followed by specific probes. All interviews were transcribed from Thai to English.

   By undertaking content analysis to analyze the interview data, the authors read each of the note entries from beginning to end holistically. Each of the notes were read carefully, and words that appeared to describe a particular sentiment or recommendation were highlighted. As

the notes were worked through, the authors attempted to limit developing codes as much as possible.

Once all the transcripts were coded, the authors examined all data within a particular code. The two L1 Thai professors who taught the participants also reviewed the coding to establish intercoder reliability. Some codes were combined during this process, while others were split into subcategories. The final codes were examined to categorize them into a hierarchical structure if possible. In the final discussion, the sentiments and recommendations by students were described by using the identified codes and hierarchical structure.

4. Results/Findings

4.1 Quantitative Results

1. *What are the factors that cause speaking and writing anxieties in an online English language classroom since the COVID-19 pandemic among Thai undergraduate EFL students?*

To first understand the level of productive skills anxiety experienced by Thai undergraduates taking EAP courses online, descriptive statistics were analyzed with particular attention to mean scores.

Table 2

An Overview of Productive-Skills-in-Online-Class Anxiety

	n	**Mean**	**SD**	**Cronbach's Alpha**
Productive Skills Total Anxiety (38 items)	34	2.803	0.482	0.856
FLACS Speaking Anxiety	34	2.730	0.419	0.786
SLWAI (Writing Anxiety)	34	2.869	0.535	0.738

The overall results displayed in Table 2 reveal that the undergraduate Thai EFL learners in this study experienced a moderate level of productive skills anxiety. The average mean score for productive skills was found within the range of 2.61 and 3.40, which corresponded to a medium-anxiety level. Looking at specific skills anxiety, namely that of speaking and writing, it could be seen that they fell within the medium-anxiety range as well.

4.1.1 Moderate L2 Speaking FLACS Anxiety in an Online EAP Classroom

Table 3

An Overview of Speaking-Skills-in-Online Class Anxiety

FLACS Speaking Anxiety (18 items)	*n*	Mean	SD	Cronbach's Alpha
FLCA Speaking Anxiety	34	2.730	0.419	0.786
Communication Apprehension	34	2.741	0.465	0.778
Performance Anxiety	34	2.944	1.476	0.760
Fear of Negative Evaluation	34	2.685	0.403	0.751

By way of FLACS speaking anxiety, the total mean was in the range of 2.61 and 3.40, indicating a medium level of anxiety. The initial assumption was that because the students surveyed were new to taking college classes (especially on the part of first-year students), there would be high speaking anxiety in the online classroom. Nonetheless, the moderate speaking anxiety found in this study reflected the well-established attitudinal surveys from prior studies, which will later be discussed.

4.1.2 Moderate L2 Writing SLWAI Anxiety in an Online EAP Classroom

The overall results displayed in Table 3 show that the undergraduate Thai EFL learners in this study experienced a moderate level of writing skills anxiety. The average mean score for writing skills was found within the range of 2.61 and 3.40, which corresponded to a medium-anxiety level.

Table 4

An Overview of Writing-Skills-in-Online Class Anxiety

SLWAI Writing Anxiety (20 items)	*n*	Mean	SD	Cronbach's Alpha
SLWI Writing Anxiety (20 items)	34	2.869	0.535	0.738
Somatic Anxiety	34	2.544	0.643	0.721
Cognitive Anxiety	34	2.949	0.286	0.732
Avoidance Behavior	34	2.952	0.663	0.728

4.1.3 Overall Effectiveness and Factors that Cause Productive Skills Anxieties in an Online English Language Classroom

Majority of students agreed (67.7% agreed or strongly agreed; 5.9% disagreed; and 26.5% were neutral) to the statement "I am gaining knowledge when I learn in an online classroom," suggesting that learning virtually is a viable modality.

Table 5

Learning English in an Online Classroom

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am gaining knowledge when I learn in an online classroom	0%	5.9%	26.5%	35.3%	32.4%

As regards speaking anxieties, the construct of performance anxiety (anxiety stemming from a fear of failure) was highest at a 2.944 mean, suggesting that teachers may need to provide greater attention talking through evaluative outcomes. Factors such as rubrics, course speed, and priority-setting for tasks shaped how speaking was performed in class, which in turn influenced speaking anxieties. In terms of writing anxieties, the construct of avoidant behavior ranked highest at a mean of 2.952, suggesting that teachers may need to consider how they asked students to write in the class (e.g., via shared documents, private Google Docs, whiteboards, Zoom Chat, etc.) as well as how writing was shared within the online class. Some of these writing modalities were causing students to engage in avoidant behavior. Future studies are warranted to narrow down which ones cause which degree of anxiety.

In addition, it is worth noting that an overwhelming number of students in this study stated that they preferred to participate in class discussions anonymously. In fact, based on interview questions that asked about the effectiveness of online tools, most students preferred using various response tools such as Microsoft Forms or Google Forms, as shown below.

Figure 2

Preference for Anonymity during Class Participation

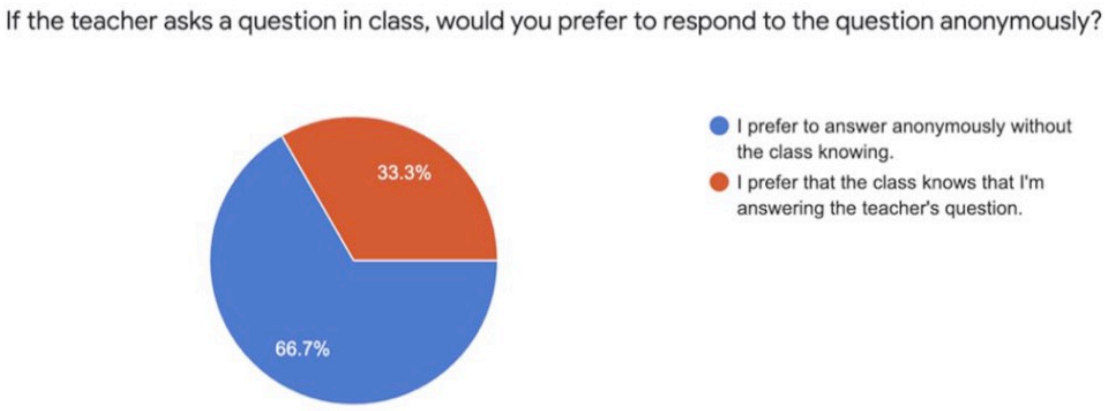
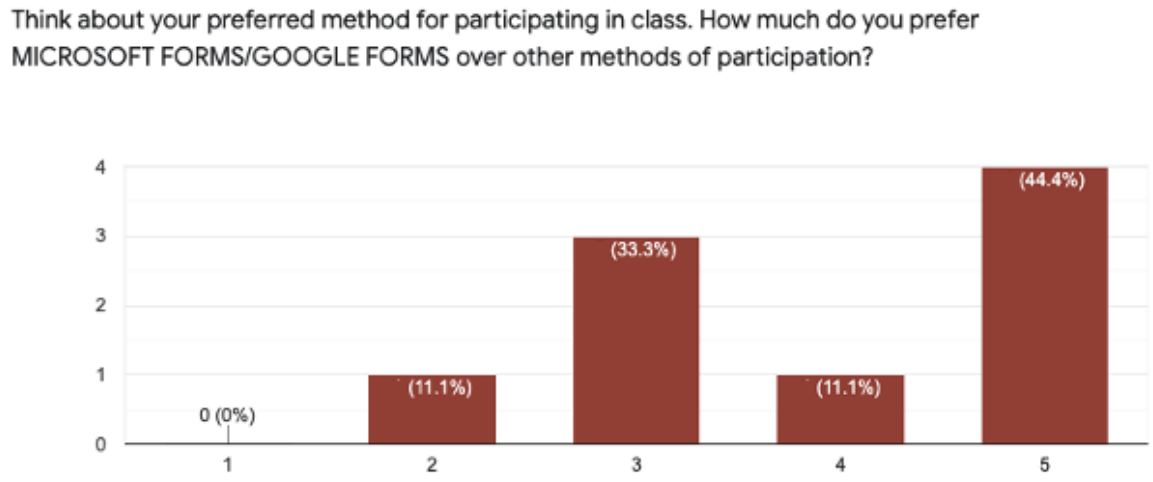


Figure 3

Preference for Anonymity during Class Participation



4.2 Qualitative Results

2. *What are anxiety-reducing strategies associated with speaking and writing anxieties that teachers can employ as they manage their class in the online apparatus?*

The developed codes point to different qualitative content according to reported sources of FLA in both speaking and writing aspects. The participants' comments for each of these themes are explained below. The qualitative findings represent responses from 21 students who were randomly sampled for extensive

interviews and coded M/F according to their gender with a randomized numeral (i.e., M6, F4) from both universities.

(1) Across the interviewed participants, students felt video cameras should be mandated majority of the teaching time, but with some breaks where cameras may be switched off.

Online classroom policy of whether to require students to switch on or off their video camera has been of extensive debate. From focus groups with two L1 Thai professors from University A, teachers often implemented video camera policies in absolutes. That is, some instructors gave lectures without the requirement that video cameras needed to be switched on, resulting in those lectures being ostensibly non-reciprocal and without a personalized audience. Other instructors required students to switch on their video cameras continuously and marked down class participation scores should students not be visually present. Some students complained that attending online classes at home may not be convenient insofar that while in shared (family) spaces, there may be visual interruptions in the background.

Many students recognized the position that teachers were in, and that not requiring students to turn on the video camera might be challenging for teaching.

> M4: I think the camera should be on in an online class to supervise my study. It would help me stay focused and strengthen my attention. If the camera is turned off, there will be less anxiety, but it could lead to desertion in the class. It would reduce the efficiency of classroom learning.

Students overall admitted that switching on the video camera brought educational benefits but said that they would prefer to have moments to recollect themselves privately to avoid 'Zoom-fatigue.' Perhaps teachers may allow students to switch off their cameras during some activities, asking them to switch the cameras back on again for other ones instead of mandating absolutes.

> M3: I think students should turn on cameras 80% of the time, because teachers can give timely feedback to students on their errors, and it can also improve students' self-discipline. This is because online learning cannot be the same as face-to-face learning.

Several students expressed that switching on the video camera was not related to their feelings of speaking anxiety.

> M13: I don't feel the difference between turning off or on my video camera. The only problem is that I use my telephone as the visual input since the Zoom application on my computer often crashes.

> M6: I think cameras are necessary in online classes. The presence of cameras improves our concentration to some extent. It can also help the professor observe our state and realize when we are confused on some points. Leaving the camera on doesn't cause much anxiety.

Many students also differentiated between student preference and teaching effectiveness when thinking about optimizing camera use. This indicates a concession to the benefits of switching on their video cameras.

> M14: I admit that I normally don't switch on the video camera. Overall, I just feel I lose focus considerably while learning online. I prefer being in my own private space. From the perspective of the teacher, however, I can see that teaching without seeing the students' faces would be equivalent to not getting any feedback to their teaching.

> F7: Switching on the video camera would make students more focused on what the teacher is saying. It also helps teachers track attendance. However, sometimes, this causes students to feel pressured and embarrassed when they are asked questions in class. Turning off the video camera would allow students to feel less stressed and pressured. Ultimately, it comes down to whether the student actually likes the subject they are taking.

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(2) Student perceptions of a teacher's demeanor in the virtual environment affects FLA among students.

Unsurprisingly, the way that teachers carried themselves and the way that they delivered content affected FLA felt in a classroom. Nonetheless, in an online classroom, teachers may need to find ways to lighten their overall tone. Participants noted that the austerity of a teacher's demeanor made them feel anxious.

F2: Maybe the teacher shouldn't be too serious.

F1: The atmosphere of online teaching is very messy. However, I think appropriate jokes can help students integrate into the classroom better.

M5: The teacher should not be too rigid but be more active in making the class more interesting.

In addition, students also commented on the formality of language and the flow of the class. These aspects are rudimentary considerations that all teachers must take into account in online or offline classrooms. In virtual spaces, teachers should make no exception to being cognizant about how they appear in front of students.

F3: Maybe the teacher can use easier language and have a more entertaining PowerPoint.

F7: If the teacher adopts a more casual style and introduces tasks that allow students to work together, then students might be more interested in the content.

(3) Students preferred speaking when they could plan their speech beforehand (rather than be asked to speak impromptu) as well as the opportunities to do group work with their classmates.

Contrary to the authors' assumption that students would not enjoy working in groups online due to the potential perceived difficulties in coordination as well as the necessity that a designated student would likely be tasked to screenshare and facilitate others in the shared space, many participants reported wanting to interact more with their classmates virtually.

> M3: Teachers should communicate more with students. Doing group work would reduce speaking anxiety.

> M4: I think teaching in an online classroom is a challenge for teachers. If there were more options for interaction in the classroom, students would participate more. This would allow teachers and students to have more communication. This can largely alleviate teachers' anxieties as well about the online classroom.

> F5: I think teachers should reduce unexpected questions in class and send class assignments some time in advance.

(4) Self-perception and beliefs about L2 proficiency affect writing and speaking anxieties in the online classroom.

Not surprisingly, students who reported lower L2 proficiency felt relatively more apprehensive when they were asked to produce language in an online classroom. As an alternative to impromptu speech, students suggested that teachers send in class questions beforehand, or that they provide extended time for students to think through the answers. Students responded overwhelmingly in support of tools such as Zoom Polls, Google Forms, and Microsoft Forms whereby students could input their answers (teachers could later collate and display individual responses aggregated as a class total).

> M1: I think the language barrier is the main issue. If you have good language skills, you won't be so anxious.

> M6: I think most of the anxiety in online classrooms comes from language anxiety. Sometimes when you can't express your ideas well in

> a foreign language and when you don't understand the teacher's questions, you will have anxiety. I think teachers can design some simple questions to check that all students are understanding the content. Teachers can then put forward the responses in an open review/consolidated format. Teachers should give students time to think and discuss the questions and get everyone involved.

Many students felt that they knew the answers but were unable to put together responses in their L2 English coherently, causing situational-specific anxiety.

> F6: I'm not able to arrange my thoughts into speech very well.

> M5: Because my English is not very good, I'm not sure how to formulate my answer.

> F5: Sometimes I don't know the starting point of the question. Sometimes my English level makes me not know how to answer the question.

Overall, teachers may consider four anxiety-reducing strategies. Firstly, switching on video cameras should not be absolutely tied to class participation scores. While students learn more effectively with their video cameras on, they should be allowed to switch their video cameras off during non-lecture or nongroup activities (e.g., when working independently on in-class assignments online). Secondly, teachers may reflect on the differences between their brick-and-mortar classroom instructional presentation with how they present themselves online. If there are any areas teachers are struggling pedagogically in online delivery, such may affect student anxiety levels. Thirdly, group work and activities involving planned speech (rather than impromptu) seem to be dominant feedback among Thai EFL undergraduate students as ways to ameliorate anxiety in online classes. Finally, teachers may need to be more cognizant of differing L2 abilities within their class. In the present study, weaker students seemed to be more apprehensive relative to their classmates who were more proficient, whereby instructors may consider grouping stronger students with weaker students in breakout group

speaking and writing activities to increase opportunities for inter-student scaffolding.

5. Discussion

5.1 Re-examining Anxiety Studies in the Thai Context

Although Thai university students generally hold positive beliefs about learning English (Chirdchoo & Wudthayagorn, 2001), and with many students reporting a moderate level of anxiety by way of the FLACS (1986) framework, questions still remain about the extent to which the scales measuring anxiety are culturally comprehensive within the Thai context. If students in this study reported a medium level of anxiety, we could expect more than a minority of students being eager to speak and write online.

The Thai students in this study seemed neutral or unphased by many situational characteristics in online classrooms such as that of fears of being judged by teachers and peers in virtual spaces as well as that of speaking or writing through videoconferencing technology (c.f. Tables 1-4). To derive potential measurement categories to investigate situation-specific anxieties in the Thai EFL context, we can turn to some existing literature and the results of this study to arrive at some possible dimensions. For example, when it comes to self-perception and beliefs, as previously discussed, we can observe different kinds of hesitation to speak, the dominant stemming from perceived language proficiency. However, there may be other sources of hesitation not yet socio-culturally explored within the Thai context.

Perceptions of what it means to competently communicate in Thailand is arguably different from that of non-Southeast Asian contexts. In a survey carried out by Sriussdaporn-Charoenngam and Jablin (1999), Thai businesspeople reported that four issues characterized competent communication, namely knowing how to avoid conflict with others; controlling emotions; displaying respect, tactfulness, modesty, and politeness; and using appropriate pronouns when addressing others. Like most Asian cultures, Thai people prefer not to appear assertive (Knutson et al., 2003). It would stand to reason that just because most Thai students were not embarrassed to volunteer answers in an online classroom (c.f. *interview* question 14) or were not self-conscious about speaking English in a

virtual class (c.f. *interview* question 17), such does not indicate an absence of FLA—apprehension that could arise from heretofore unidentified sources.

Thai students may experience apprehension under unexamined conditions. In fact, there are many characteristics of Thai culture that can be candidates for constructs of situation-specific anxieties. For example, among Thais, hesitancy is strategically performed in some instances to preserve social harmony and to garner recognition from others (Chaidaroon, 2003). Furthermore, not speaking up quickly or not asking for help directly are characteristics found in the Thai culture (Chaidaroon, 2003). As previously mentioned, hesitation may stem from perceived language deficiency as previously discussed, but other forms of hesitancy in the Thai socio-cultural context warrant further exploration. The attempt to measure such expressions would not be indicative of anxiety.

The following are suggestions of potential dimensions to measure situation-specific anxiety in the Thai EFL context.

(A) Perceived Disharmony

Unlike in Western classrooms that see activities that require debate or challenge as 'constructive' (Denman, 2003), Thai learners may feel the same situation as a source of situation-specific anxiety. Many (but certainly not all) Thai students may arguably be afraid of disagreeing publicly with the teacher, someone perceived as an authoritative figure, or with their classmates (Sessoms, 2018). If there are learning activities that require putting forth arguments and rebuttals, speaking in such situations may not be comfortable for Thai learners unlike potentially for their Western counterparts (Sessoms, 2018).

Additionally, if activities in the online classroom are highly personalized, this may potentially cause anxiety for Thai learners (Sessoms, 2018). That is, if students are asked to strongly defend their opinions or if there are case studies that rely on subjective remarking, this may cause anxieties for the Thai students. Online learning activities that require presenting or heavily spotlighting students' opinions may cause anxieties, even if students are comfortable presenting generally otherwise in front of their peers an online class (c.f. *interview* question

17). To this end, online activities or tools that might promote interactional disharmony could be a measurable source of situation-specific anxiety.

At the same time, the qualitative data from students in this study also showed that not having a chance to speak actually increased anxieties. Students in this research remarked that they were not afraid if their English teacher corrected every mistake they made (c.f. question 16) nor were they afraid if other students laughed at them when they spoke English (c.f. question 18). However, the situation of making a mistake was not congruent to that of disagreeing with the teacher or other classmates. It can be argued that unlike in Western classrooms, disagreeing with the teacher in a Thai context can be a great source of anxiety, unlike making grammar mistakes. This is because making a grammatical mistake only involves the student, whereas disagreeing with a teacher might represent questioning instructional authority, which some Thais may deem as too confrontational. It is therefore suggested that online classroom activities that engender perceived disharmony may elicit situation-specific anxieties among Thai EFL undergraduates.

(B) Perceived Unpredictability

If students were not worried about negative evaluation and accepted videoconferencing technologies, then why did the Thai students in the present study hesitate to speak? A possible explanation may lie in pedagogic methods in the online space as it relates to impromptu versus planned speech. In many Western classrooms, teachers spanning across disciplines of medicine to the humanities often employ the Socratic method of teaching (Stoddard & O'Dell, 2016). The Socratic method has been famous for layering a series of questions onto students to arrive at a 'core.' It may lead to uneasiness on the part of the students to be probed incessantly. However, many believe that such methods are effective for learners to see the *a priori* conditions of any argument. Scholars like Denman (2003) characterize the approach as being "productive discomfort," such that it allows for more varied answers and student-centered learning.

While Western classrooms may espouse such unpredictable classrooms, such may be anxiety-inducing in the Thai EFL context. In fact, many studies in the Southeast Asian EFL context like that of Nagahashi (2007) found that

communication apprehension was reduced when learners were given the chance to prepare their L2 speaking content in small groups before presenting. Methods involving preparation and cooperation may help to alleviate FLA.

From this study, students reported wanting to be in breakout rooms to plan their speaking activities with their classmates rather than doing so impromptu in front of their peers. From the collected data, lower proficiency students preferred prepared oral production and felt the most pressure when called impromptu during class online. Learners were least apprehensive about speaking if they were allowed to prepare for the content beforehand. They were more anxious about speaking if they were asked a question in front of their peers online on a topic that they had not prepared for prior. Students most preferred to speak to each other. It is important to keep in mind that Thai learners see the benefits to speaking as informed by their positive views about language learning and English (Akkakoson, 2016a; Chirdchoo & Wudthayagorn, 2001). Based on this study's results, it is suggested that future studies with Thai EFL undergraduates should focus on perceived unpredictability as a source of situation-specific anxiety.

(C) Exteriority of Emotional Life

Thai culture is often described as one that is high in context (Knutson et al., 2002). There are arguably many kinds of behaviors that indicate strategic attempts on the part of Thais to demonstrate respect towards one another. In addition, formal contexts such as that of the classroom are not spaces where many Thai students feel comfortable externalizing their feelings. If teachers ask students to speak and write on topics that require a presentation of their interiority, this may elicit anxiety, especially if they must do so independently in front of their peers. Many students in this study stated during interviews that breakout rooms and group work were a chance to break up the class session and to diffuse any tension hanging from the lecture. Group presentations and group work allowed students to not feel singled out and allowed a safer space to express thoughts and feelings through the modality of a group. A possible dimension for measuring situation-specific anxiety among Thai EFL undergraduates in the online space might involve instruments that seek to see if online activities, content, tools, or interactions lead to an over-externalization of emotional life—or at least more so than Thai learners are accustomed to.

5.2 The Role of Students as Scaffolders in Reducing Productive-Skills Anxiety

For groupwork, teachers must organize students in ways such that at least one individual can offer technological leadership, facilitation, and constructive interaction unique to the virtual space. Students in qualitative interviews expressed that although they preferred to discuss in breakout groups with their classmates, it would be less anxiety-inducing if the teacher grouped mixed-ability students together. This was informed by the fact that many learners felt that they were not able to arrange their thoughts into speech very well or know where to begin speaking (students coded F6; F5). Students reported that if stronger students could help clarify some pieces, they would be much more open to presenting in front of their peers. One student also said that teachers should design some simple understanding-checking questions to make sure that students understood the material in stages before doing activities (student coded M6). When probed deeper, the student (student coded M6) said that he felt that the teacher should be more in touch with those students who were really struggling. This suggests that whereas the traditional classroom might allow teachers to 'monitor the classroom' by simply walking and peering over students' work, instructors may need to find alternatives to monitor students' understanding in the online space.

In online classrooms, teachers are not the only scaffolders. Peer review and collaborative writing in online classrooms can benefit from emotional scaffolding. When students work in groups, other students, especially those of higher abilities can step into supportive roles. To illustrate the importance of creating safe, scaffolding zones in online spaces, we can extend Vygotsky's ZPD model to include the affective determinants of learning to see how students' productive-skills anxieties can be alleviated.

Perzhivanie is one of Vygotsky's lesser-known concepts, but Mahn and John-Steiner (2002) argue that there is a relationship between the ways in which learners process emotional aspects and the cognitive demands that are beyond the abilities of learners. Perzhivanie is the set of all past experiences of a learner and the way they process emotions during the co-construction of meaning with the scaffolder.

To create safety zones in virtual spaces, during collaborative peer reviews online, teachers should form groups of students where at least one person is able to offer technological leadership, facilitation, and constructive interaction (Chairinkam & Yawiloeng, 2021). Such scaffolding in the Thai context is effective as demonstrated by researchers at the University of Phayao, describing how both 'expert' and 'novice' learners were able to scaffold for each other in a writing classroom. Without so, collaborative writing online may engender site-specific anxieties from communication breakdown among learners. Teachers may need to closely monitor each student's awareness of their writing process and the metacognitive strategies necessary to achieve collaborating writing online. Without carefully considering students' perzhivanie and the ways that their ZPDs are influenced by their reactions to intercommunication in the online classroom, it will be challenging for instructors to provide the support that will promote their writing progress.

6. Conclusion

The results of this study have pointed towards a moderate level of productive-skills anxiety among Thai undergraduate students in a sample of online EAP classrooms. The FLA experienced is situation-specific and varies according to online classroom conditions related to video camera policy, teacher demeanor, the degree of impromptu speech, and self-perceptions of L2 proficiency. Although a moderate level of oral English anxiety was found generally, the students reflected positive attitudes towards speaking and writing English in the classroom.

In terms of pedagogical implications, it appears that videoconferencing technology and online tools within online classrooms are not sources of anxiety per se. Thai undergraduate students studying in online EAP courses in this study indicated technological acceptance. While there was medium level anxiety for online activities involving productive skills, this does not mean that there was a complete absence of FLA. By way of classroom management, teachers must consider how they present themselves online and the tone they set. Video camera fatigue is ubiquitous, and teachers may consider allowing students to switch off their video for some activities to prevent learners from feeling too much pressure. Additionally, between the potential for communication breakdowns and lower strategic competency among less proficient L2 learners, teachers may need to

consider online tools that would help balance out impromptu class questions to ameliorate speaking anxiety. Most importantly, teachers ought to rethink how they monitor students in class, since unlike physical classrooms where instructors can walk around to look at students' work, it may be more difficult for teachers to observe areas students are struggling with. If classes are large, teachers can mentally note the higher proficiency learners to be key scaffolders during group work (e.g., activities in Zoom breakout rooms).

While the FLACS and SLWAI research instruments show versatility and adaptability within the Thai EFL context, there is an opportunity to reconsider the scales that measure the manifestation of anxiety in this particular context. In reconsidering the scales, such potential FLA predictors should include that of perceived disharmony, perceived unpredictability, and exteriority of emotional life, all of which demand further validation.

7. About the Author

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