

Language Anxiety across the Four Language Skills among Non-Native English Speakers at Thai Universities

Saiwaroon Chumpavan¹ & Aleksei Nekhaev² & Sirawich Tampanich³

ABSTRACT

This study examines language anxiety patterns across four skills (listening, speaking, reading, and writing) among 109 university students (79 Thai, 29 Chinese) at Thai universities. The Anxiety in English Language Learning Questionnaire results demonstrated that writing anxiety was highest ($M = 3.45$), followed by speaking ($M = 2.90$), listening ($M = 2.76$), and reading ($M = 2.65$). Chinese students reported higher anxiety than Thai students across every skill, particularly in reading (difference = 0.99) and listening (difference = 0.79). Female students had higher anxiety in writing, with the highest mean for essay correction ($M = 3.99$), followed by participating in discussions. Students employed various coping strategies, including preparation, deep breathing, and AI tools (ChatGPT, Grammarly). The findings reveal the need for targeted, skill-specific interventions that account for nationality and gender differences in the language learning context.

Keywords: Foreign language anxiety; Writing anxiety; Gender differences

INTRODUCTION

Foreign language anxiety (FLA) is one of the most significant affective factors affecting performance and second language acquisition (Horwitz, Horwitz, & Cope, 1986; MacIntyre & Gardner, 1994). FLA can be defined as a complex of beliefs, emotions, self-perceptions, and behaviours related to classroom language learning (Horwitz et al., 1986). FLA manifests differently across contexts and language skills, influencing willingness to communicate, performance on various tasks, and overall success in language learning.

The theoretical foundations of FLA originated in the work of Horwitz and colleagues, who developed the Foreign Language Classroom Anxiety Scale (FLCAS) in 1986. This instrument caused a paradigm shift in anxiety research, enabling what MacIntyre (2017) distinguished as a shift from the “Confounded Approach” to a “Specialised Approach,” whereby a standardised measure allowed meaningful comparisons across studies.

Early FLA research focused on general classroom anxiety, while more recent studies have revealed that anxiety can be skill-specific, manifesting at different levels across listening, speaking, reading, and writing tasks (Cheng, Horwitz, & Schallert, 1999;

Cheng, 2004; Saito, Garza, & Horwitz, 1999; Elkhafaifi, 2005). This distinction is crucial as it allows for more precise identification of the sources of anxiety and the development of targeted interventions. Cheng et al. (1999) demonstrated that second language writing anxiety was distinct from general classroom anxiety, which typically involved a spoken component.

English language learning in Thailand presents many challenges. In the English as a Foreign Language (EFL) context, English use is largely limited to the classroom. Thai learners face proficiency obstacles across all language skills. Moreover, Thai universities enrol increasing numbers of Chinese international students, whose anxiety profiles reflect their particular cultural orientations and linguistic backgrounds. Comparative research on anxiety levels across different nationalities within the same educational setting has been limited, particularly in Southeast Asia (Tanielian, 2014).

Research on gender differences in language anxiety has yielded inconsistent findings. Some studies report higher anxiety levels among females (Öztürk & Gürbüz, 2013), while others find no significant differences (Campbell & Shaw, 1994; Bekleyen, 2009), and still others find higher anxiety among

¹ Assistant Professor, Srinakharinwirot University, Bangkok, Thailand.  0009-0006-3924-9980
 saiwaroon@gmail.com

² Instructor, Shinawatra University, Thailand.  0000-0002-5830-8783  aleksei.n@siu.ac.th

³ Instructor, Srinakharinwirot University, Bangkok, Thailand.  0009-0004-9546-0583  sirawich@g.swu.ac.th

males (Elkhafaifi, 2005). A recent meta-analysis by Piniel and Zólyomi (2022) found that females exhibited slightly higher FLA, but the difference was not statistically significant.

The relationship between anxiety and language proficiency is complex. Although higher proficiency generally reduces anxiety, anxiety can persist even among highly proficient students (Horwitz, 2001). At the intermediate level, increased awareness of one's limitations may temporarily heighten anxiety. Understanding the interaction between anxiety and proficiency is essential for designing appropriate support mechanisms in language learning.

This study addresses several gaps in the literature. First, while FLA research in Asia is growing, comparative studies examining anxiety among students of different nationalities within the same educational setting remain scarce, particularly involving Thai and Chinese learners. Second, most studies focus either on general FLA or on a single skill; very few have examined all four skills simultaneously to provide a comprehensive picture of language anxiety. Third, research investigating FLA specifically in Thai universities is limited, despite the importance of context-specific factors.

This study addresses these gaps by examining language anxiety among Thai and Chinese university students, investigating how nationality, gender, and proficiency relate to anxiety profiles, and identifying specific situations in language learning that provoke the most anxiety. It also examines the coping strategies students employ and the role of AI tools in anxiety management.

LITERATURE REVIEW

Foreign Language Anxiety: Theoretical Framework

Foreign language anxiety emerged as a distinct psychological construct through the work of Horwitz, Horwitz, and Cope (1986), who differentiated it from general or trait anxiety. Their Foreign Language Classroom Anxiety Scale (FLCAS) was grounded in three components: communication apprehension, the inability to express thoughts adequately; fear of negative social evaluation, arising from the need to make a good impression; and test anxiety, connected to academic evaluation.

The distinctiveness of FLA from general anxiety has been demonstrated empirically across many studies. MacIntyre and Gardner (1991) found that FLA and general anxiety were only weakly related,

and that FLA was more closely associated with language learning variables than with general anxiety measures. More recently, factor analyses have confirmed the multidimensional nature of the construct, even though the specific components identified vary across studies (Park, 2014; Aida, 1994).

Teimouri, Goetze, and Plonsky (2019) conducted a comprehensive meta-analysis of 97 studies and found a consistent negative relationship between FLA and academic achievement, with an average correlation of $r = -.32$. This pattern held across different target languages, educational contexts, and measurement instruments, providing robust evidence of the detrimental effects of anxiety on language learning. However, Botes et al. (2020) noted heterogeneity in effect sizes across studies, suggesting that variables such as context, educational level, and specific learning situations play an important moderating role.

Cross-Cultural and Nationality Differences in Language Anxiety

Cultural factors shape the language learning experience and contribute to anxiety among students. Horwitz (2016) argued that FLA has culturally specific causes and called for greater attention to learners' attitudes toward the target culture and their language proficiency. Research has consistently shown that students from different backgrounds experience different levels and sources of anxiety.

High levels of FLA have been reported among EFL learners in numerous studies. Jiang and Dewaele (2019) found that Chinese university students exhibited high FLA, identifying the classroom environment and teacher behaviour as significant contributing factors. Yang (2017) reported that Chinese international students struggled with limited vocabulary and difficulty following conversations or understanding accents, and they were often reluctant to speak.

Research on Chinese students in Thailand has revealed unique challenges. Manorom, Hunsapun, and Chansanam (2024) found that Chinese postgraduate students in Thai universities struggled with sentence organisation and limited vocabulary and worried about making errors. Their elevated anxiety was attributed to the linguistic distance between Chinese and English, cultural differences, and limited English proficiency. Thai EFL learners face similar challenges. Tanielian (2014) reported a weak negative correlation between classroom

anxiety and English performance ($r = -.16$) and suggested that cultural values emphasising *sanuk* (fun) and *sabai* (comfort) over academic achievement may shape the relationship between anxiety and performance. Research has also shown that Thai students tend to be reluctant to speak in class and lack confidence in their English abilities.

Comparative research involving multiple nationalities within the same educational context has been rare. Saito et al. (1999) examined reading anxiety across language groups and found that Japanese students reported higher anxiety than French or Russian students, suggesting that differences in writing systems affect reading anxiety. However, research directly comparing the anxiety levels of Thai and Chinese learners within the same educational setting remains an important gap in the literature.

Proficiency Level and Language Anxiety

The relationship between language anxiety and proficiency is not entirely linear. Although proficiency generally reduces anxiety, the relationship has yielded mixed results. Some studies show that low proficiency heightens anxiety (Liu & Jackson, 2008), while others find that anxiety persists or increases at intermediate levels as learners become more aware of their limitations (Saito & Samimy, 1996).

Cheng (1998) found that Taiwanese students at different proficiency levels had different sources of anxiety. Lower-proficiency students focused on basic communication, whereas more proficient but still anxious students worried about nuanced aspects of language use and performance standards. Even higher-proficiency students were not free from anxiety, though the nature of their anxiety differed.

Alamer (2021) used structural equation modelling to demonstrate that proficiency directly and indirectly affects anxiety through motivational variables. Specifically, higher proficiency fostered greater self-efficacy and, in turn, reduced anxiety. However, some high-proficiency students continued to experience apprehension during active performance, suggesting that linguistic competence alone does not eliminate psychological pressure.

Coping Strategies and Interventions

Researchers have identified four broad categories of anxiety-coping strategies: cognitive strategies, such as positive self-talk and reframing anxiety as excitement; affective strategies, including

relaxation techniques and deep breathing; social strategies, such as seeking support from peers and teachers; and behavioural strategies, including preparation and practice. Alrabai (2015) found that positive reinforcement, a supportive classroom environment, and appropriate error correction significantly lowered learners' FLA. Student-centred approaches that emphasise collaborative learning and reduce competitive elements have also been shown to be effective (Young, 1991).

RESEARCH QUESTIONS

- **RQ1:** What patterns of anxiety exist across the four language skills (listening, speaking, reading, writing) among non-native English speakers at Thai universities?
- **RQ2:** How do anxiety levels differ between Thai and Chinese students across the four language skills?
- **RQ3:** What gender differences exist in language anxiety across the four skills?
- **RQ4:** How does self-reported English proficiency relate to anxiety levels across the four skills?
- **RQ5:** Which specific aspects and situations of English learning cause the most anxiety for students in each skill area?
- **RQ6:** What coping strategies do students currently use to manage their language anxiety, including the use of AI tools?

METHOD

Research Design

This study used a quantitative survey design to investigate language anxiety across the four language skills among university students in Thailand. The cross-sectional design enabled data collection from multiple participants simultaneously, allowing researchers to analyse patterns of anxiety and identify group differences.

Participants

The study surveyed 109 university students attending Thai universities, including 79 Thai students (72.5%) and 29 Chinese students (26.6%), with one participant not reporting a nationality. The sample comprised 53 female (48.6%) and 51 male students (46.8%), with the majority aged around 20 years. There were 63 first-year students (57.8%) and 32 third-year students (29.4%).

Participants self-reported their English proficiency using a 5-point scale ranging from beginner to advanced. The majority described themselves as intermediate ($n = 48, 44\%$), followed by elementary

($n = 23$, 21%), upper-intermediate ($n = 19$, 17%), beginner ($n = 12$, 11%), and advanced ($n = 7$, 6%). Most students had studied English for more than ten years, which is typical of English language education in Thailand, where English instruction begins in primary school.

The sampling approach initially targeted students from Thailand, China, Vietnam, and Myanmar. However, only Thai and Chinese students returned completed questionnaires. This limitation is acknowledged, but it does not diminish the value of the findings given that Thai and Chinese students represent the most significant student populations in Thai higher education.

Instrument

The primary instrument was the Anxiety in English Language Learning Questionnaire, a comprehensive survey measuring anxiety across the four language skills. The questionnaire used a 5-point Likert scale ranging from 1 (minimal anxiety) to 5 (extreme anxiety), allowing participants to indicate the degree of anxiety they experienced in various situations.

The questionnaire was organised into four sections corresponding to the four skills: listening, speaking, reading, and writing. Each section contained items addressing specific anxiety-provoking situations relevant to that skill. For instance, the writing section included items about anxiety related to essay writing, formal documents, and grammatical correctness. The speaking section assessed anxiety in class discussions, presentations, and spontaneous conversation. The listening section addressed anxiety about fast speech, distinguishing specific information, and comprehending lectures.

The instrument drew on established anxiety scales, including the Foreign Language Classroom Anxiety Scale (Horwitz et al., 1986), the Second Language Writing Anxiety Inventory (Cheng, 2004), the Foreign Language Reading Anxiety Scale (Saito et al., 1999), and the Foreign Language Listening Anxiety Scale (Elkhafaifi, 2005). Items were adapted to reflect situations commonly experienced by EFL learners in Thai universities. In addition to anxiety items, the questionnaire collected demographic information (nationality, gender, age, academic year), a self-assessment of English proficiency, and the length of time spent studying English. The survey also included open-ended questions on AI tool use and coping strategies, given students' increasing use of technology in both language learning and anxiety management.

Data Collection Procedures

Data were collected during the fall semester of the 2025 academic year. The questionnaire was distributed both online and in class. Participation was voluntary, and anonymity and confidentiality were assured. The questionnaire was administered in English, and all participants were enrolled in English-medium programs or courses. Before completing the questionnaire, participants received instructions explaining the purpose of the study and how to respond to each question. They were asked to reflect on their typical experiences studying English and to rate their anxiety honestly. The questionnaire took approximately 15–20 minutes to complete.

DATA ANALYSIS

The data analysis proceeded in several stages. First, descriptive statistics (means and standard deviations) were calculated for anxiety levels across the four skills for the entire sample and for subgroups defined by gender, nationality, and proficiency level. This provided an overview of anxiety patterns across the sample. Second, comparative analyses were conducted to examine group differences in anxiety. Mean anxiety scores were calculated and compared between Thai and Chinese students, between male and female students, and across self-reported proficiency levels (beginner, elementary, intermediate, upper-intermediate, and advanced). Mean differences were used as descriptive indicators of group variation. Third, mean anxiety scores were calculated for specific situations within each skill area to identify the language learning contexts that provoked the greatest anxiety. Fourth, qualitative data from the open-ended questions on AI tool use and coping strategies were analysed using content analysis. Responses were coded to identify common themes and patterns. Descriptive statistical analyses, including means, standard deviations, and mean differences, were computed to characterise anxiety patterns across groups and skills.

RESULTS

RQ1: Anxiety Patterns Across Four Language Skills

Analysis of anxiety levels across the four language skills revealed distinct patterns in the overall sample ($N = 109$). Writing produced the highest anxiety of all four skills, with a mean score of 3.45 ($SD = 0.89$) on a five-point scale, indicating

moderate to high anxiety. This was followed by speaking anxiety ($M = 2.90$, $SD = 0.85$), listening anxiety ($M = 2.76$, $SD = 0.92$), and reading anxiety ($M = 2.65$, $SD = 0.88$).

The ranking of skills by anxiety level was consistent, with writing clearly the most anxiety-provoking skill, scoring 0.55 points above speaking. Speaking anxiety in turn exceeded listening (by 0.14 points) and reading (by 0.25 points). Listening and reading showed the lowest anxiety levels, with a relatively small difference between them (0.11 points).

A clear hierarchy of anxiety exists across the four skills, with writing generating substantially more anxiety than the others. The pattern is: Writing (3.45) > Speaking (2.90) > Listening (2.76) > Reading (2.65). This confirms that productive skills, particularly writing, generate the most anxiety among students at Thai universities.

RQ2: Nationality Differences in Anxiety Levels

A comparison of anxiety levels between Thai ($n = 79$) and Chinese students ($n = 29$) revealed consistent differences across all four language skills, with Chinese students reporting higher anxiety throughout.

- **Reading Anxiety:** Chinese students reported considerably higher reading anxiety ($M = 3.37$, $SD = 0.82$) compared with Thai students ($M = 2.38$, $SD = 0.85$), a difference of 0.99 points — the largest across all four skills. This substantial gap suggests that reading English-language texts is considerably more anxiety-provoking for Chinese than for Thai students.
- **Listening Anxiety:** A similarly large difference emerged in listening anxiety, with Chinese students reporting $M = 3.34$ ($SD = 0.88$) compared with Thai students' $M = 2.55$ ($SD = 0.89$), a difference of 0.79 points. This indicates that comprehending spoken English is markedly more stressful for Chinese learners.
- **Speaking Anxiety:** Chinese students also reported higher speaking anxiety ($M = 3.12$, $SD = 0.79$) than Thai students ($M = 2.70$, $SD = 0.82$), with a difference of 0.42 points. Although still meaningful, this difference was smaller than those found for the receptive skills.
- **Writing Anxiety:** Writing anxiety was high in both groups and showed the smallest nationality difference, with Chinese students at $M = 3.54$ ($SD = 0.91$) and Thai students at $M = 3.37$ ($SD = 0.88$), a difference of only 0.17 points. This suggests that writing is comparably

anxiety-inducing for both nationalities, although Chinese students experienced slightly more anxiety.

Chinese students experienced higher anxiety than Thai students across all four language skills, with the largest differences in reading (0.99) and listening (0.79), a moderate difference in speaking (0.42), and the smallest difference in writing (0.17). This pattern suggests that Chinese international students face substantially higher language anxiety in Thai universities, especially in the receptive skills.

RQ3: Gender Differences in Language Anxiety

The analysis of gender differences revealed a consistent pattern in which female students ($n = 53$) reported higher anxiety than male students ($n = 51$) across most skills, although the magnitude of the differences varied.

- **Writing Anxiety:** The largest gender difference appeared in writing anxiety, with females reporting $M = 3.63$ ($SD = 0.87$) compared with males' $M = 3.31$ ($SD = 0.88$), a difference of 0.32 points. This suggests that female students experience more stress around writing tasks than their male peers.
- **Reading Anxiety:** Reading anxiety showed a moderate gender difference, with females reporting $M = 2.74$ ($SD = 0.87$) and males $M = 2.60$ ($SD = 0.89$), a difference of 0.14 points.
- **Speaking Anxiety:** Speaking anxiety showed a very small gender difference, with females at $M = 2.97$ ($SD = 0.84$) and males at $M = 2.89$ ($SD = 0.85$), a difference of 0.08 points. This minimal difference suggests that speaking anxiety affects both genders similarly.
- **Listening Anxiety:** Listening anxiety showed virtually no gender difference, with females and males reporting nearly identical means ($M = 2.77$, $SD = 0.91$ for females; $M = 2.80$, $SD = 0.93$ for males). Male participants had marginally higher listening anxiety, though the difference of 0.03 points is negligible.

Female students reported consistently higher anxiety than male students across three skills (writing, reading, speaking), with the largest difference in writing (0.32), a moderate difference in reading (0.14), and a minimal difference in speaking (0.08). Listening anxiety showed no meaningful gender difference. These results suggest that gender effects on language anxiety are most pronounced for writing and progressively less so for other skills.

RQ4: Proficiency Level and Anxiety

Analysis of anxiety levels across five self-reported proficiency levels (beginner, elementary, intermediate, upper-intermediate, advanced) revealed varying patterns by skill, with a generally inverse relationship overall.

■ **Writing Anxiety by Proficiency:** Writing anxiety decreased steadily as proficiency increased: Beginners ($M = 3.75$, $SD = 0.82$), Elementary ($M = 3.58$, $SD = 0.91$), Intermediate ($M = 3.42$, $SD = 0.85$), Upper-intermediate ($M = 3.21$, $SD = 0.94$), and Advanced ($M = 2.86$, $SD = 0.89$). The decline from beginner to advanced was 0.89 points, indicating that writing anxiety diminishes as proficiency increases.

■ **Speaking Anxiety by Proficiency:** Speaking anxiety also declined with proficiency, but with a less steep gradient: Beginners ($M = 3.08$), Elementary ($M = 2.98$), Intermediate ($M = 2.84$), Upper-intermediate ($M = 2.79$), Advanced ($M = 2.57$). The overall decline was 0.51 points. Even advanced students reported moderate speaking anxiety, suggesting that this skill remains psychologically demanding regardless of proficiency.

■ **Listening and Reading Anxiety by Proficiency:** These two skills showed a more complex pattern. Intermediate-level students reported anxiety levels comparable to those of elementary students, consistent with the hypothesis that increased awareness of linguistic complexity temporarily heightens anxiety. Nevertheless, upper-intermediate and

advanced students consistently reported lower anxiety than lower-proficiency groups. For listening, the range from beginner to advanced was approximately 0.65 points; for reading, approximately 0.58 points.

Self-reported proficiency showed an inverse relationship with anxiety across all four skills: higher proficiency was associated with lower anxiety. However, this relationship was not strictly linear, particularly for listening and reading, where intermediate-level students reported comparably high anxiety to elementary students. Writing showed the strongest inverse relationship with proficiency, speaking showed a moderate one, and speaking anxiety remained elevated even at the advanced level. These findings suggest that proficiency reduces anxiety but does not eliminate it across any skill.

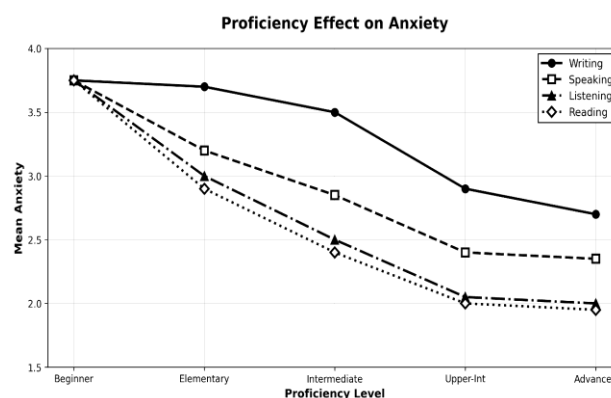


Figure 4 Relationship Between Self-Reported English Proficiency and Anxiety Levels Across Four Skills

Table 1 Most Anxiety-Inducing Situations by Language Skill

Language Skill	Anxiety-Inducing Situation	M	SD
Writing (Overall M = 3.45)	Correcting essays	3.99	0.78
	Writing formal documents	3.82	0.81
	Essay assignments	3.61	0.86
Speaking (Overall M = 2.90)	Participating in discussions/debates	3.45	0.89
	Giving presentations	3.11	0.92
	Speaking during lectures	3.03	0.88
Listening (Overall M = 2.76)	Fast speakers	3.52	0.94
	Distinguishing specific information	3.29	0.87
	Comprehending lectures	3.16	0.90
Reading (Overall M = 2.65)	Complex texts	3.16	0.89
	Academic papers	3.16	0.87
	Following instructions	2.78	0.85

RQ5: Most Anxiety-Inducing Situations by Skill

Analysis of situation-specific anxiety items identified the highest-anxiety situations within each

skill. These findings indicate which particular aspects of language learning provoke the greatest stress. The most anxiety-inducing situation across all skills was essay correction ($M = 3.99$). Skill-by-skill analysis shows that writing anxiety centres on

accuracy and formality; speaking anxiety peaks in public and interactive contexts; listening anxiety is tied to processing speed; and reading anxiety is driven by text complexity. These high-anxiety situations offer specific targets for pedagogical intervention.

RQ6: Coping Strategies and Use of AI Tools

Analysis of open-ended responses revealed a diverse range of coping strategies that varied by skill area, along with notable patterns in AI tool use.

- **Listening:** The most common techniques for managing listening anxiety included deep breathing and other relaxation strategies. Students also reported focusing on keywords and main ideas rather than attempting to understand every word, which helped reduce the pressure of perfect comprehension. Other strategies included requesting clarification or repetition from speakers and practising with varied accents and speech rates using online resources.
- **Speaking:** Students used both preparation and psychological strategies to manage speaking anxiety. Relaxation techniques were used to control physical symptoms of anxiety. Students built confidence by rehearsing common conversational topics in advance. Low-stakes practice opportunities allowed students to develop fluency without the fear of evaluation. Positive self-talk and cognitive reframing, perceiving anxiety as excitement rather than fear, were also commonly reported.
- **Reading:** Students reported strategies aimed at maintaining comprehension control, such as skimming for main ideas before detailed reading and taking breaks to reduce fatigue and maintain concentration. Using context clues to infer word meanings, rather than looking up every unknown word, helped maintain reading flow and minimise frustration.
- **Writing:** Students managing writing anxiety used organisational and process-oriented strategies, including breaking tasks into smaller, more manageable stages rather than attempting to complete everything at once. Creating outlines before writing, seeking feedback to improve their work, and revising in multiple stages with an initial focus on content development rather than correctness were all reported as helpful in reducing writing anxiety.

One notable finding was the widespread use of AI tools for anxiety management. Students reported

using AI tools to reduce anxiety in English learning; the three most commonly cited were ChatGPT, Google Translate, and Grammarly, all used primarily to support the writing process. Students described several ways these tools reduced anxiety: they provided immediate feedback without judgment from teachers or peers; they created a safe space for experimentation and practice; they offered improvement suggestions in a non-threatening environment; and they allowed students to learn from mistakes without embarrassment. Students also reported that checking their work with AI tools before submission reduced submission anxiety and increased confidence. The tools allowed unlimited practice at the student's own pace. Most students described AI tools as a "safety net" for checking their work before sharing it with others. However, some students expressed concern about over-reliance on these tools and uncertainty about whether AI assistance is appropriate in academic writing.

Students employed a range of coping strategies across all four skills, encompassing cognitive (keyword focus), affective (deep breathing), behavioural (preparation and practice), and social (peer practice) approaches. Most students reported using AI tools, particularly ChatGPT, Google Translate, and Grammarly, and described them as effective in reducing anxiety. The widespread adoption of AI tools represents a meaningful development in how learners manage language learning anxiety.

DISCUSSION

This section interprets the findings for each research question in relation to the existing literature and discusses theoretical and practical implications. The discussion follows the order of the research questions.

RQ1: Skill-Based Anxiety Patterns

The finding that writing produced the highest anxiety across all four skills ($M = 3.45$) is consistent with previous research (Cheng, 2004; Cheng et al., 1999) and carries both practical and theoretical implications. Several factors likely contribute to elevated writing anxiety. First, written products are highly visible and can be scrutinised for accuracy. Second, students have more time to reflect on their writing, which may amplify evaluative concerns.

The skill hierarchy (Writing > Speaking > Listening > Reading) reflects a productive-receptive divide, with productive skills generating more anxiety. The

notably large gap between writing anxiety (3.45) and speaking anxiety (2.90) suggests that writing poses particular psychological challenges above and beyond other productive skills.

The relatively lower anxiety associated with listening and reading (both below 3.0) likely reflects the greater control that receptive skills afford, since students can re-read or process material at their own pace. Even so, these skills still generated moderate anxiety (above the scale midpoint of 2.5), indicating that receptive tasks remain genuinely challenging for this population.

RQ2: Nationality Differences

The finding that Chinese students experienced higher anxiety across all four skills is among the most important results of this study. The particularly large differences in reading (0.99) and listening (0.79) warrant careful consideration and have direct implications for how institutions support international students. Several factors may explain these differences.

First, the linguistic distance between Chinese and English is considerable. While both Thai and Chinese differ significantly from English, the logographic Chinese writing system presents unique challenges for reading. Thai uses a non-Roman script, but it is phonetically based and therefore shares a key representational principle with English, somewhat reducing reading demands. The 0.99-point difference in reading anxiety between Chinese and Thai students may reflect these writing system differences, a finding consistent with Saito et al. (1999), who showed that reading anxiety increases when students must contend with an unfamiliar script system.

RQ3: Gender Differences

The finding of higher writing anxiety among female students contributes to the literature on gender and language anxiety. The pattern of female > male anxiety across three skills but not listening suggests that the gender effects on FLA are neither uniform nor universal and vary by skill and context.

The writing anxiety gender gap (0.32) is consistent with previous studies reporting higher female anxiety in writing (Cheng et al., 1999). This may be attributable to several factors, including greater sensitivity to evaluation, higher personal standards, or socialisation processes. However, the meta-analysis by Piniel and Zólyomi (2022) found that overall gender differences in FLA were not

statistically significant, underscoring the importance of moderating variables.

The absence of a meaningful gender difference in listening anxiety aligns with some prior findings (Bekleyen, 2009; Elkhafaifi, 2005). Listening is a private receptive skill that does not involve public performance or permanent, examinable products, and may therefore not activate the social-evaluative concerns that differentiate genders in productive skills. This suggests that the social-evaluative component of anxiety, rather than language anxiety in general, may be the primary driver of gender differences.

From a pedagogical perspective, these findings suggest that while gender differences exist, they should not lead to differential treatment or stereotyping. Educators should be aware that some female students may experience elevated writing anxiety and should ensure that classroom environments are encouraging and supportive for all students. Opportunities for low-stakes writing practice and constructive feedback are particularly important for anxious writers of any gender.

RQ4: Proficiency Effects

The inverse relationship between proficiency and anxiety was expected, but the nonlinear plateau observed at the intermediate level for listening and reading adds important nuance. These findings are consistent with research showing that the proficiency-anxiety relationship is complex rather than simply linear (Saito & Samimy, 1996; Cheng, 1998).

The intermediate plateau may reflect increased metalinguistic awareness. As students move beyond basic communication, they begin to appreciate the complexity and nuance of English. While this awareness is ultimately beneficial, it may temporarily heighten anxiety before students have developed sufficient competence to manage that complexity. The phenomenon suggests that anxiety may lag behind proficiency gains, rather than decreasing in lockstep.

The finding that writing had the strongest inverse relationship with proficiency, showing a steady decline from beginner (3.75) to advanced (2.86), suggests that writing skill development effectively reduces anxiety. As learners advance, their growing command of grammar, vocabulary, and text organisation provides tangible, visible evidence of competence. The ability to produce grammatically correct sentences, sophisticated vocabulary, and

well-organised ideas may reduce anxiety more concretely than gains in other skills. The persistence of moderate speaking anxiety even at the advanced level suggests that the social-evaluative component of speaking maintains anxiety even when linguistic competence is high.

These findings suggest that anxiety-reduction support should be developmentally appropriate. Beginners need strategies for managing anxiety in basic communication. At the intermediate level, discussing the complexity of language explicitly and setting realistic expectations may help reduce the anxiety spike associated with growing awareness. At the advanced level, support should address perfectionism and the pressures of sophisticated language use. A uniform approach to anxiety management is unlikely to be equally effective across proficiency levels.

RQ5: High-Anxiety Situations

The identification of specific high-anxiety situations provides actionable targets for pedagogical intervention. The finding that essay correction creates the highest anxiety across all situations ($M = 3.99$) is significant and suggests that fear of negative evaluation is a primary driver of anxiety, consistent with the theoretical framework of Horwitz et al. (1986).

The three highest-anxiety writing triggers (essay correction, formal documents, and essay assignments) all involve formal, evaluated writing that will be scrutinised. This suggests that reducing writing anxiety requires directly addressing evaluation anxiety and perfectionism. Process writing approaches that emphasise multiple drafts, provide supportive feedback, and de-emphasise correctness in early stages may be particularly effective in this regard.

The diversity of coping strategies that students reported indicates that students are not passive in the face of anxiety but are actively managing it. The strategies described align with previous research on anxiety management (Alrabai, 2015; Young, 1991) and span cognitive, affective, behavioural, and social dimensions, suggesting that students have some awareness of effective techniques even if application varies.

The most significant finding for Research Question 6 is the widespread use of AI tools and students' reports of their anxiety-reducing effects. Students reported using ChatGPT, Google Translate, and Grammarly and described them as effective in

reducing anxiety, consistent with research by Zhang et al. (2024) demonstrating positive effects of AI tools on anxiety and communication. This finding carries important implications for contemporary language learning.

AI tools provide private, non-judgmental feedback that reduces the social-evaluative anxiety associated with showing one's work to teachers or peers. Students can practice, make mistakes, receive corrections, and iterate, all without the risk of embarrassment. This may be especially valuable for highly anxious learners who avoid practice due to fear of negative judgment.

However, this finding also raises important questions. While AI tools can serve as useful scaffolds and confidence-builders, over-reliance may impede the development of independent skills. Students who check everything with AI before submission may not develop their own editing and self-monitoring abilities. The challenge for educators is to integrate these tools in ways that support learning rather than replace it.

Given the widespread adoption of AI tools, educators might consider several approaches: (a) explicit instruction on using AI tools as learning aids rather than production shortcuts; (b) open discussion of academic integrity guidelines around AI use; (c) scaffolded activities that develop skills alongside AI-supported tasks; (d) helping students understand the distinction between using AI for learning and using it to substitute for independent performance; and (e) acknowledging the anxiety-reducing potential of these tools while building student confidence to work independently.

The use of AI as an anxiety management tool represents a significant and underexplored shift in language learning. Future models of FLA may need to account for the role of technological mediation in anxiety and coping. The traditional focus on classroom interaction and formal assessment should expand to include digital practice spaces and AI-supported learning environments.

Theoretical Implications

This study makes several contributions to FLA theory. First, it provides further evidence for the skill-specific nature of language anxiety, demonstrating that anxiety varies systematically across different dimensions of language use (Cheng et al., 1999; Cheng, 2004; Saito et al., 1999). The differential patterns across skills support the continued development and use of skill-specific

anxiety measures rather than relying solely on general FLA scales.

Second, the findings demonstrate how individual difference variables interact with language anxiety. In particular, nationality differences highlight the importance of linguistic, cultural, and contextual factors in shaping anxiety. The consistent pattern of higher anxiety among Chinese students across all skills suggests that some learner groups may be at heightened risk and may require targeted support.

Practical Implications

■ **Addressing Writing Anxiety:** Given the high writing anxiety reported — particularly around essay correction ($M = 3.99$) — process writing approaches should be adopted, with an emphasis on multiple drafts, revision cycles, and supportive rather than punitive feedback. Providing clear models, rubrics, and organisational frameworks, alongside reducing the emphasis on correctness in early drafts, may lower anxiety while building confidence. Ample opportunities for low-stakes writing also help students develop fluency without fear of evaluation.

■ **Supporting Chinese International Students:** The elevated anxiety among Chinese students in reading ($M = 3.37$) and listening ($M = 3.34$) calls for targeted support. For reading, explicit instruction in comprehension strategies for academic texts is recommended. For listening, targeted practice with varied accents, speech rates, and explicit listening strategies may help reduce anxiety.

■ **Gender-Sensitive Instruction:** Although gender differences were modest, educators should create supportive classroom environments that reduce anxiety for all students, for example, by avoiding cold-calling, providing preparation time before speaking tasks, normalising errors, and monitoring participation patterns to ensure equitable encouragement without forcing unwanted exposure.

Contributions to the Field

This study makes several notable contributions. It provides comparative data on Thai and Chinese learners within the same educational context, addressing a gap in cross-cultural anxiety research in Southeast Asia. It examines all four language skills within the same population, enabling direct comparison of anxiety patterns. It documents the role of AI tools in anxiety management, providing

initial evidence of a contemporary development that prior FLA research has not addressed. Finally, its identification of specific high-anxiety situations offers concrete targets for pedagogical intervention.

Limitations

Several limitations of this study should be acknowledged. First, the sample was limited to Thai universities, and the findings may not generalise to other educational contexts. Efforts to include students from Myanmar and Vietnam were unsuccessful, restricting cross-national comparisons. Future studies should include students from a wider range of Southeast Asian countries, such as Vietnam, Myanmar, Laos, Cambodia, and Indonesia, to build a more comprehensive picture of language anxiety in the region.

Second, the study relied on self-reported measures of both anxiety and proficiency. Objective proficiency measures would have strengthened the findings. Importantly, this study did not examine the relationship between anxiety and actual academic achievement or performance. Future research should incorporate course grades, standardised test scores, or performance assessments to establish the relationship between anxiety and learning outcomes more rigorously.

Third, cross-sectional design prevents conclusions about causality or developmental change. Fourth, the use of AI tools was documented through self-report only; the effects of such tools were not experimentally tested. Finally, no observational or performance data were collected.

Future Research Directions

Several directions are recommended for future research. First, cross-national studies including students from a broader range of Southeast Asian countries (Vietnam, Myanmar, Laos, Cambodia, Indonesia, the Philippines, Malaysia, and Singapore) would provide a more comprehensive picture of language anxiety and help identify universal versus context-specific factors. Second, studies examining the relationship between anxiety levels and objective outcomes (course grades, performance assessments, standardised test scores) are needed to establish the impact of anxiety on learning in Thailand and other Southeast Asian contexts. Third, longitudinal research would shed light on how anxiety changes over time as students develop proficiency. Fourth, experimental studies testing anxiety-reduction interventions, particularly targeting the high-anxiety situations

identified in Research Question 5, would strengthen the evidence base. Fifth, a more systematic examination of AI tools, including experimental comparisons and investigation of potential negative effects, is warranted. Finally, qualitative research exploring students' lived experiences would complement these quantitative findings, and studies examining the relationship between anxiety and actual performance, rather than self-reported proficiency, would deepen understanding of the anxiety-achievement connection.

REFERENCES

- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, 78(2), 155–168.
- Akkakoson, S. (2016). Speaking anxiety in English conversation classrooms among Thai students. *Malaysian Journal of Learning and Instruction*, 13(1), 63–82.
- Alamer, A. (2021). Basic psychological needs, motivational orientations, effort, and vocabulary knowledge: A comprehensive model. *Studies in Second Language Acquisition*, 44(1), 164–184.
- Arabai, F. (2015). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, 9(2), 163–190.
- Bekleyen, N. (2009). Helping teachers become better English students: Causes, effects, and coping strategies for foreign language listening anxiety. *System*, 37(4), 664–675.
- Bensalem, E. (2020). Foreign language reading anxiety in the Saudi tertiary EFL context. *Reading in a Foreign Language*, 32(2), 65–82.
- Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The foreign language classroom anxiety scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *Journal for the Psychology of Language Learning*, 2(1), 26–56.
- Campbell, C. M., & Shaw, V. M. (1994). Language anxiety and gender differences in adult second language learners: Exploring the relationship. In C. A. Klee (Ed.), *Faces in a crowd: The individual learner in multisection courses* (pp. 215–242). Heinle & Heinle.
- Cheng, Y.-S. (1998). A qualitative inquiry of second language anxiety: Interviews with Taiwanese EFL students. In J. Katchen & Y. N. Leung (Eds.), *The Proceedings of the Seventh International Symposium on English Teaching* (pp. 309–320). Crane Publishing.
- Cheng, Y.-S. (2002). Factors associated with foreign language writing anxiety. *Foreign Language Annals*, 35(5), 647–656.
- Cheng, Y.-S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, 13(4), 313–335.
- Cheng, Y.-S., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning*, 49(3), 417–446.
- Dewaele, J.-M. (2013). The link between foreign language classroom anxiety and psychoticism, extraversion, and neuroticism among adult bi- and multilinguals. *The Modern Language Journal*, 97(3), 670–684.
- Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The Modern Language Journal*, 89(2), 206–220.
- Gerencheal, B. (2016). Gender differences in foreign language anxiety at an Ethiopian university: Mizan-Tepi University third year English major students in focus. *African Journal of Education and Practice*, 1(1), 1–16.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20(3), 559–562.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112–126.
- Horwitz, E. K. (2016). Factor structure of the Foreign Language Classroom Anxiety Scale: Comment on Park (2014). *Psychological Reports*, 119(1), 71–76.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132.
- Jiang, Y., & Dewaele, J.-M. (2019). How unique is the foreign language classroom enjoyment and anxiety of Chinese EFL learners? *System*, 82, 13–25.
- Kim, J. (2000). Foreign language listening anxiety: A study of Korean students learning English. University of Texas.
- Li, R. (2022). Understanding foreign language writing anxiety and its correlates. *Frontiers in Psychology*, 13, 1031514. <https://doi.org/10.3389/fpsyg.2022.1031514>
- Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal*, 92(1), 71–86.
- MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. In C. Gkonou, M. Daubney, & J.-M. Dewaele (Eds.), *New insights into language anxiety: Theory, research and educational implications* (pp. 11–30). Multilingual Matters.
- MacIntyre, P. D., & Gardner, R. C. (1991). Methods and results in the study of anxiety and language learning: A review of the literature. *Language Learning*, 41(1), 85–117.
- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283–305.
- Mak, B. (2011). An exploration of speaking-in-class anxiety with Chinese ESL learners. *System*, 39(2), 202–214.
- Manorom, P., Hunsapun, N., & Chansanam, W. (2024). An investigation of English-speaking problems of Chinese EFL students in Thailand. *International Journal of English Language and Literature Studies*, 13(2), 270–286.

- Matsuda, S., & Gobel, P. (2004). Anxiety and predictors of performance in the foreign language classroom. *System*, 32(1), 21–36.
- Öztürk, G., & Gürbüz, N. (2013). The impact of gender on foreign language speaking anxiety and motivation. *Procedia, Social and Behavioural Sciences*, 70, 654–665.
- Park, G.-P. (2014). Factor analysis of the Foreign Language Classroom Anxiety Scale in Korean learners of English as a foreign language. *Psychological Reports*, 115(1), 261–275.
- Phillips, E. M. (1992). The effects of language anxiety on students' oral test performance and attitudes. *The Modern Language Journal*, 76(1), 14–26.
- Piniel, K., & Zólyomi, A. (2022). Gender differences in foreign language classroom anxiety: Results of a meta-analysis. *Studies in Second Language Learning and Teaching*, 12(2), 173–203.
<https://doi.org/10.14746/ssl.2022.12.2.2>
- Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign language reading anxiety. *The Modern Language Journal*, 83(2), 202–218.
- Saito, Y., & Samimy, K. K. (1996). Foreign language anxiety and language performance: A study of learner anxiety in beginning, intermediate, and advanced-level college students of Japanese. *Foreign Language Annals*, 29(2), 239–249.
- Tanielian, A. R. (2014). Foreign language anxiety in a new English program in Thailand. *International Education Journal: Comparative Perspectives*, 13(1), 1–22.
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement: A meta-analysis. *Studies in Second Language Acquisition*, 41(2), 363–387.
- Vogely, A. J. (1998). Listening comprehension anxiety: Students' reported sources and solutions. *Foreign Language Annals*, 31(1), 67–80.
- Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELC Journal*, 37(3), 308–328.
- Yang, C. C. R. (2017). An investigation of the use of the 'flipped classroom' pedagogy in secondary English language classrooms. *Journal of Information Technology Education: Innovations in Practice*, 16, 1–20. <https://doi.org/10.28945/3635>
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75(4), 426–437.
- Zhang, C., Meng, Y., & Ma, X. (2024). Artificial intelligence in EFL speaking: Impact on enjoyment, anxiety, and willingness to communicate. *System*, 121, Article 103259.
- Zhang, X. (2013). Foreign language listening anxiety and listening performance: Conceptualizations and causal relationships. *System*, 41(1), 164–177.