

Public Speaking Anxiety in Higher Education: A Comparative Analysis of English-Major
and Non-English-Major Undergraduates

Piyaporn Boonchuayrod

Faculty of Liberal Arts, Rajamangala University of Technology Tawan-Ok, Chakrabongse

Bhuvanarth, Bangkok, Thailand

Email: piyaporn_bo@rmutto.ac.th

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Abstract

Public speaking anxiety (PSA) remains a critical barrier to students' communicative competence and academic performance in higher education. This study investigated and compared the levels and characteristics of PSA among English-major ($n = 63$) and non-English-major ($n = 59$) undergraduates in Thailand using McCroskey's Personal Report of Public Speaking Apprehension (PRPSA). Descriptive and inferential statistical analyses revealed that while PSA was prevalent across both groups, English-major students tended to report lower anxiety levels, likely due to their greater exposure to oral communication practice and structured feedback. Independent-samples t-tests indicated no significant difference in total PSA scores ($p > .05$), yet item-level analyses demonstrated significant variations in specific anxiety dimensions, with small to moderate effect sizes. English-major students exhibited lower anxiety on performance-related items, whereas non-English-major students showed higher cognitive anxiety, particularly regarding unexpected questioning. These findings underscore the disciplinary influence on PSA and highlight the need for differentiated pedagogical interventions that build communicative confidence through targeted practice and feedback strategies across academic disciplines.

Keywords: Public speaking anxiety, English-Major and Non-English-Major Undergraduates, Higher education, Comparative analysis, Communication competence

Introduction

Communication competence is widely regarded as a core graduate attribute in higher education, with oral communication playing a central role in employability, career progression, and day-to-day workplace effectiveness (Clokier & Fourie, 2016; Chan & Tse, 2025). Employers consistently indicate that the capacity to express ideas clearly and confidently is among the most valued skills for new graduates (McCroskey, Teven, Minielli, & McCroskey, 2014). Students

who develop strong oral communication skills tend to perform better in interviews, build professional networks more effectively, and access competitive career pathways compared with peers who lack these abilities.

Public speaking stands out within oral communication as a uniquely challenging skill. It necessitates structured and sustained delivery to an audience while simultaneously burdening the speaker with cognitive, linguistic, and performance pressures (Verderber, Verderber, & Sellnow, 2008). Consequently, many undergraduates experience significant discomfort in these situations. Public speaking anxiety (PSA), frequently viewed as a type of social anxiety, involves feelings of worry, fear, and physiological arousal when a person is addressing a group (O'Hair, Rubenstein, & Stewart, 2007; Wallach, Safir, & Bar-Zvi, 2009). When PSA is elevated, it can seriously hinder the speaker's capacity to deliver effective presentations by compromising both message clarity and credibility. The persistent consequences of high PSA are well established. Individuals grappling with substantial communication apprehension are often perceived by others as less competent, tend to avoid verbal interactions, and face distinct disadvantages in both their academic and professional lives (Richmond & Martin, 1998). Furthermore, these individuals frequently report lower job satisfaction, occupy lower-status positions, and encounter reduced opportunities for career advancement (Bartoo & Sias, 2004). Since PSA is estimated to affect a majority of undergraduates to some degree (Dwyer & Davidson, 2012), addressing this issue remains a pressing concern for higher education.

Although public speaking anxiety (PSA) is a prevalent concern in higher education, research has seldom explored how its manifestation differs across various academic majors. Each discipline presents unique variations in the frequency of speaking practice and the availability of feedback opportunities. English-major programs typically incorporate presentation-rich coursework and explicit training in rhetorical delivery, which may foster higher speaking self-efficacy and greater tolerance of performance-related arousal. By contrast, many non-English majors encounter fewer structured speaking tasks, potentially limiting systematic rehearsal and formative feedback. These curricular contrasts, combined with variation in prior speaking experience and confidence, suggest that PSA may follow different patterns across majors. Addressing this gap, the present study offers a comparative analysis of PSA among English-major and non-English-major undergraduates in higher education to inform targeted pedagogical support and program design.

Significance of the Study

In today's globalized society, the ability to speak confidently in public is essential for academic success, professional advancement, and meaningful civic engagement (Chan & Tse, 2025; Clokie & Fourie, 2016). Within higher education, students are frequently expected to deliver oral presentations, participate in debates, and present research findings. For English-major students, public speaking is a central element of their academic training, reinforcing language proficiency, communicative competence, and preparing them for future teaching or professional roles (Jackson, 2014). Conversely, typically receive fewer structured opportunities for consistent public speaking practice. This variation in curricular exposure may profoundly influence the prevalence and intensity of public speaking anxiety (PSA) and subsequent avoidance behaviors among different cohorts (Bodie, 2010).

The significance of this investigation rests upon its contributions to pedagogical theory and practice, articulated across three dimensions. First, it addresses PSA, identified as a persistent psychological barrier to effective communication (Daly & Vangelisti, 1989), by conducting a direct comparative analysis between two student cohorts with fundamentally different speaking requirements. Second, the study aims to clarify the extent to which disciplinary orientation—specifically, the formal emphasis on communication in English-major curricula—influences students' confidence and anxiety levels. This offers crucial insights for optimizing curricular design in higher education. Finally, by generating data on the differential impact of PSA, the findings will inform the development of targeted pedagogical interventions designed to foster oral communication resilience, which directly supports graduate employability and overall student psychological well-being (Osmani et al., 2019).

Research Gap

Despite extensive literature on communication competence and employability skills, a critical gap remains in the comparative understanding of how PSA manifests across academic majors that provide substantially different levels of speaking practice and feedback. Previous research has largely focused on generalized undergraduate populations (Bodie, 2010; Daly & Vangelisti, 1989) or specialized second-language acquisition contexts (Jackson, 2014). However, a direct, empirical comparison between English-major and non-English-major students concerning both the intensity of PSA and their coping mechanisms is currently lacking. This deficiency limits the capacity of higher education institutions to design context-specific, evidence-based strategies that account for the unique communication challenges encountered by students within their respective disciplinary cultures.

Objectives of Research

To bridge this research gap in the area of English public speaking anxiety, this study pursues the following objectives:

1. To investigate the levels of public speaking anxiety (PSA) among English-major and non-English-major undergraduate students.
2. To examine the differences in public speaking anxiety intensity and manifestation between English-major and non-English-major students.

The subsequent findings from these two objectives were expected to clarify the extent to which they provide recommendations for pedagogical strategies aimed at reducing public speaking anxiety and enhancing oral communication skills across diverse academic disciplines.

Review of Literature

The Concept and Prevalence of Public Speaking Anxiety (PSA)

Public Speaking Anxiety (PSA) is commonly referred to as a pervasive form of situational social anxiety. It is defined as the apprehension, fear, and worry experienced when a person is required to deliver a presentation or speech in front of an audience (Raja, 2017). PSA is a widespread phenomenon, often cited as one of the most common fears in the general population (Dwyer & Davidson, 2012). Public speaking anxiety (PSA) is reported by a substantial majority of the undergraduate student population, with prevalence estimates in some literature surpassing 80% during their academic careers (Raja, 2017). PSA is a multidimensional construct, manifesting through a combination of physiological, cognitive, and behavioral symptoms. High levels of anxiety negatively impact students' academic performance, reduce their willingness to participate in career-critical activities, and can lead to avoidance behaviors that hinder professional development (Raja, 2017).

Manifestation and Stages of Anxiety

Public speaking anxiety (PSA) is frequently segmented into distinct dimensions based on when the anxiety occurs: Anticipatory Anxiety, which encompasses the cognitive worry and physiological responses that emerge during the preparation phase, and Performance Anxiety, which represents the acute distress peaking immediately before and throughout the oral delivery. The intensity of PSA fluctuates significantly across the public speaking process, generally peaking during the minute immediately preceding the speech and during the initial moments of the presentation (Aftab et al., 2025). However, not all somatic symptoms are equally prevalent. For instance, the symptom related to chronic, long-term worry, such as

difficulty sleeping the night before a speech, is consistently reported as one of the lowest intensity anxiety manifestations across student populations (Halimah & Nuraida, 2025). This suggests that the anxiety experienced is primarily acute and situational rather than chronic.

Factors Influencing Public Speaking Anxiety

The factors contributing to a student's susceptibility to Public Speaking Anxiety (PSA) are generally dichotomized into two complex categories: learner factors (internal or psychological) and situational factors (external or environmental). Understanding this distinction is crucial for developing targeted interventions.

Learner Factors

Learner factors are intrinsically linked to an individual's psychological disposition, communicative history, and perceived ability. Among these, the most significant predictor is a student's self-efficacy and perceived competence (Lestari, 2021). Students who internalize a belief in their poor speaking skills or feel a critical lack of control over the speaking event are highly prone to experiencing elevated PSA.

Furthermore, demographic and experiential variables play a substantial role. Research consistently identifies gender and study level as significant predictors. Multiple studies, for instance, have indicated that women and non-binary individuals often report quantitatively higher PSA levels than men (Lintner & Belovecová, 2024). Conversely, anxiety levels tend to exhibit a progressive decrease as students advance in their academic careers (e.g., from Bachelor's to Master's level). This trend strongly suggests that repeated exposure and habituation acquired through experiential learning function as crucial, long-term coping mechanisms against PSA over time (Aftab et al., 2025; Lintner & Belovecová, 2024).

In the non-native English speaking (NNS) context, the internal factor of L2 proficiency is paramount (Yildiz, 2021). For these students, general PSA is frequently compounded by Foreign Language Anxiety (FLA), which is the specific apprehension associated with performing tasks in a non-native language. This linguistic duality makes the public speaking task considerably more daunting.

Situational Factors

Situational factors relate directly to the immediate speaking context, audience dynamics, and the perceived consequences of the performance. The most frequently cited external cause of PSA is the Fear of Negative Evaluation (FNE), which constitutes the overwhelming apprehension of being criticized, judged, or publicly ridiculed by peers or the instructor (Raja, 2017). Additionally, the perception of uncertainty regarding audience

interaction serves as a major trigger. The anticipation of an unforeseen event, such as being confronted with a question or challenge that the student feels unable to address, can generate significant anxiety before and during the performance (Thaicharoen, 2017).

Comparative Analysis of PSA Across Academic Disciplines

While early communication research often approached university students as a singular, homogeneous population, contemporary findings underscore the view that the academic discipline provides a distinct and influential environment that shapes students' communication experiences and their resultant PSA (Chan & Tse, 2025).

For Non-English-Major Students, whose curricula typically do not prioritize daily, extensive oral communication in English, PSA is often rooted in a combination of linguistic difficulties and the fear of content-specific scrutiny (Yildiz, 2021; Thaicharoen, 2017). Their anxiety profile is frequently characterized by high cognitive anxiety, particularly surrounding the defensibility of subject-matter knowledge in an L2 context, primarily due to limited practice in spontaneous interaction and academic defense.

In contrast, English-Major Students benefit from the compulsory and repetitive focus on oral communication and rhetorical practice within their disciplinary training. This curricular saturation fosters greater L2 self-efficacy and rhetorical skill development (Chan & Tse, 2025). Consequently, this cohort often reports lower anxiety levels concerning specific performance-related items—such as emotional control during delivery or the fear of forgetting content—compared to their non-English-major peers.

These comparative insights are critical: while the overall prevalence of public speaking apprehension may be widespread, the specific source, type, and manifestation of the anxiety differ meaningfully across academic majors. This differentiation necessitates discipline-specific research and the formulation of targeted pedagogical interventions to effectively enhance oral communication competence across diverse student populations.

Research Methodology

1. Research Design

This study employed a quantitative research design to investigate the levels of public speaking anxiety among undergraduate students and to compare differences in public speaking anxiety intensity between English-major and non-English-major students. A cross-sectional survey approach was adopted, as it enables the collection of data at a single point in time and is widely recognized as appropriate for examining psychological constructs such as anxiety

across specific populations. The objectives were to measure the degree of public speaking anxiety and to classify the different types of anxiety experienced by the students. Therefore, the cross-sectional design allowed for efficient comparison between groups while maintaining methodological rigor.

2. Population and samples

The target population for this quantitative study was defined as undergraduate students enrolled in three specific academic disciplines: English for Business, Entrepreneurship and Global Communication, Accountancy, and Information Systems. Due to the manageable size of the population and the necessity for comprehensive data representation, a total population sampling strategy was employed, resulting in a total study of 122 participants.

To ensure that all participants possessed sufficient exposure to formal university-level oral communication requirements, first-year students were systematically excluded. The final cohort, therefore, comprised students from the second year of study through the fourth year and beyond.

For comparative analysis central to the research objectives, the total cohort was stratified into two distinct analytical groups:

- 1) English-Major Group (n=63): Students majoring in English for Business Entrepreneurship and Global Communication.
- 2) Non-English-Major Group (n=59): Students majoring in Accountancy and Information Systems.

This deliberate inter-disciplinary stratification facilitates a direct and robust comparison of the intensity and manifestation of Public Speaking Anxiety (PSA) across student cohorts with fundamentally different disciplinary demands for oral communication.

3. Instrumentation

Data were collected using a structured questionnaire based on a five-point Likert scale. The instrument was adapted from McCroskey's (1970) Personal Report of Public Speaking Apprehension (PRPSA), which has been widely validated in communication research. To enhance contextual relevance, adjustments were made in accordance with the revised version developed by Halimah and Nuraida (2025). Providing a Thai translation of the questionnaire minimized potential language barriers and ensured clarity of responses, thereby improving the reliability of the data.

The questionnaire comprised 34 items designed to capture different aspects of public speaking anxiety. To avoid response bias and strengthen construct validity, 22 items were

positively worded while 12 were negatively worded. Participants indicated their level of agreement on a five-point scale ranging from Strongly Disagree to Strongly Agree. Scoring was applied according to item orientation: positively worded statements were rated from 1 (Strongly Disagree) to 5 (Strongly Agree), whereas negatively worded statements were reverse-scored from 5 to 1. This balanced scoring procedure allowed for a comprehensive and nuanced measurement of public speaking anxiety, offering insights into both its intensity and multidimensional characteristics.

4. Data Analysis

The questionnaire data were subjected to statistical analysis using descriptive measures, specifically means and standard deviations, to evaluate the extent of public speaking anxiety among the participants and to examine the distinct types of anxiety manifested by undergraduate students.

In this study, data were quantitatively analyzed following McCroskey's (1970) framework. The PRPSA scores were computed, and anxiety levels were classified according to the score ranges in Table 1.

Table 1 Score Ranges for Students' Public Speaking Anxiety Levels

No	Level	Score
1	High	>137
2	Moderate	101-137
3	Low	<101

In addition, inferential statistical analyses were conducted in order to examine differences between groups. Specifically, independent samples t-tests were used to compare the levels of public speaking anxiety between English-major and non-English-major students. This test was appropriate as it allowed for the assessment of mean differences between two independent groups.

Research Results

According to the first aim of the research, the results of 122 students were calculated in order to investigate public speaking anxiety. The demographic information of the participants by major and year of study is presented below.

1. The demographic Information

Table 2: Demographic Information of the Undergraduate Respondents

Demographic variable (Year of Study)	English-Major Students (n=63)	Non-English-Major Students (n=59)	Total Sample (N=122)
The 2 nd Year	21 (33.33%)	4 (6.78%)	25 (20.49%)
The 3 rd Year	39 (61.90%)	21 (35.59%)	60 (49.18%)
The 4 th Year and above	3 (4.77%)	34 (57.63%)	37 (30.33%)

A total of 122 undergraduate students participated in this study, consisting of 63 English-Major students (51.64%) and 59 Non-English-Major students (48.36%). Most participants were third-year students (49.18%), followed by those in the fourth year and above (30.33%).

2. The levels of speaking anxiety in a positive statement

Table 3: Levels of Public Speaking Anxiety (PRPSA) Among Undergraduate Students

Anxiety Level	PRPSA Score Range	English-Major Students (n=63)	Non-English-Major Students (n=59)	Total Sample (N=122)
High	>137	18 (28.6%)	5 (8.5%)	23 (18.9%)
Moderate	101–137	22 (34.9%)	37 (62.7%)	59 (48.4%)
Low	<101	23 (36.5%)	17 (28.8%)	40 (32.8%)
Total		63 (100.0%)	59 (100.0%)	122 (100.0%)

Table 3 presents the classification of students' overall public speaking anxiety levels based on McCroskey's PRPSA scoring ranges (>137 = High, 101–137 = Moderate, <101 = Low). As illustrated, 18.9% of the total participants experienced high anxiety, 48.4% reported moderate anxiety, and 32.8% demonstrated low anxiety. Most English-major students (36.5%) experienced low anxiety, while most non-English-major students (62.7%) exhibited moderate anxiety levels. These results suggest that while public speaking anxiety is a common phenomenon across academic disciplines, English-major students tend to experience lower levels of anxiety, possibly as a result of more extensive speaking experience and higher confidence in using English for communication.

The section of the questionnaire that centers on positive statements about public speaking types of anxiety contains 22 statements addressing both process anxiety and performance anxiety. Data is presented in Table 4.

Table 4: Levels of the positive statements in public speaking anxiety

No. of Questions	Statements	English-Major (XSD)	Non-English-Major (X ± SD)
Q1	I feel tense and nervous every time I have to prepare for a speech.	3.35 ± 1.32	3.41 ± 1.19
Q2	I get a sense of discomfort whenever I see the terms “speech” and “public speech” in a course syllabus.	3.40 ± 1.14	3.31 ± 1.18
Q3	My thoughts become confused and jumbled while I am giving a speech.	3.52 ± 1.41	3.36 ± 1.17
Q5	I get nervous thinking about an upcoming speech.	3.37 ± 1.43	3.39 ± 1.26
Q9	I start feeling tense whenever the lecturer announces a speaking assignment in class.	3.41 ± 1.33	3.34 ± 1.08
Q10	My hands shake while I am giving a speech.	2.98 ± 1.61	3.00 ± 1.36
Q13	I am constantly afraid of forgetting what I planned to say.	4.35 ± 0.77	4.00 ± 0.95
Q14	I worry that someone will ask me a question about my topic that I can’t answer.	3.75 ± 0.84	4.15 ± 0.89
Q19	I start sweating just before beginning a speech.	2.98 ± 1.31	2.75 ± 1.24
Q20	My heart races as I begin to speak.	3.60 ± 1.23	3.61 ± 1.23
Q21	I feel a lot of anxiety as I wait in the room before my speech begins.	3.21 ± 1.46	3.34 ± 1.23
Q22	Some parts of my body are stiff and tense while I am giving a speech.	2.79 ± 1.26	3.17 ± 1.43
Q23	I get very tense and anxious when I realize there's little time left in a speech.	3.56 ± 1.28	3.34 ± 1.11
Q25	I start breathing faster just before beginning a speech.	3.35 ± 1.15	3.19 ± 1.14

No. of Questions	Statements	English-Major (XSD)	Non-English-Major (X ± SD)
Q27	I'm not that good at speeches because I'm nervous.	4.10 ± 1.09	3.59 ± 1.16
Q28	I get worried when the lecturer announces the date of the speaking activity.	2.98 ± 0.92	3.25 ± 1.17
Q29	If I make a mistake in a speech, it's hard for me to focus on anything else.	3.19 ± 1.13	2.90 ± 1.20
Q30	I start to feel helpless during an important speech.	2.94 ± 1.40	2.63 ± 1.13
Q31	I have difficulty sleeping the night before a speech.	2.35 ± 1.30	2.46 ± 1.18
Q32	My heart beats very fast while I am giving a speech.	3.11 ± 1.22	3.20 ± 1.08
Q33	I feel anxious while waiting to give my speech.	3.22 ± 1.33	3.59 ± 1.18
Q34	I get so nervous during a speech that I forget things I know well.	3.73 ± 1.23	3.02 ± 1.09

Table 4 presents the mean and standard deviation scores for the 22 items measuring public speaking anxiety among English-major and non-English-major students. Overall, both groups displayed generally comparable mean scores across the majority of items, suggesting similar self-reported levels of public speaking anxiety.

Among English major students, the highest reported level of anxiety was associated with Q13 *"I am constantly afraid of forgetting what I planned to say."* (mean = 4.35, S.D. = 0.77), followed by Q27 *"I'm not that good at speeches because I'm nervous."* (mean = 4.10, S.D. = 1.09), and Q14 *"I worry if someone asks me a question about my topic that I can't answer."* (mean = 3.75, S.D. = 0.84). Conversely, the lowest self-reported level of anxiety was found in Q31 *"I have difficulty sleeping the night before a speech,"* with a mean score of 2.35 and a standard deviation of 1.30.

For non-English major students, the pattern of highest anxiety differed slightly, with the highest mean score corresponding to Q14 *"I worry if someone asks me a question about my topic that I can't answer."* (mean = 4.15, S.D. = 0.89), followed by Q13 *"I am constantly afraid of forgetting what I planned to say."* (mean = 4.00, S.D. = 0.95), and Q20 *"My heart*

paces as I begin to speak.” (mean = 3.61, S.D. = 1.23). Consistent with the English-major group, the lowest mean score for this group was also recorded for Q31 *“I have difficulty sleeping the night before a speech,”* with a mean score of 2.46 and a standard deviation of 1.18.

3. The levels of speaking anxiety in a negative statement

Table 5 presents the 12 negative statements related to process anxiety and performance anxiety.

Table 5: Levels of the negative statement in public speaking anxiety

No. of Questions	Statements	English-Major (X ± SD)	Non-English-Major (X ± SD)
Q4	After delivering a speech, I find the experience enjoyable.	2.03 ± 1.06	2.02 ± 1.06
Q6	I have no fear of giving a speech.	3.43 ± 1.16	3.61 ± 1.08
Q7	Even though I’m nervous before starting a speech, I calm down quickly once I start.	2.52 ± 1.22	2.51 ± 1.14
Q8	I look forward to delivering a speech.	3.51 ± 0.95	3.78 ± 0.98
Q11	I feel relaxed while I am giving a speech.	3.67 ± 0.97	3.53 ± 0.94
Q12	I enjoy preparing for a speech.	3.21 ± 0.83	3.08 ± 0.99
Q15	I go into the speech with confidence.	3.30 ± 1.17	3.10 ± 0.96
Q16	I feel completely in control when I speak.	3.14 ± 1.18	3.22 ± 0.83
Q17	My mind is clear while I am giving a speech.	3.51 ± 0.95	3.08 ± 1.00
Q18	I am not afraid of the opportunity to speak.	3.27 ± 1.14	3.47 ± 0.90
Q24	When I give a speech, I know I can control my stress and excitement.	3.27 ± 0.79	3.02 ± 0.90
Q26	An hour before speaking, I feel comfortable and relaxed.	3.54 ± 0.76	3.25 ± 1.12

Table 5 indicates the scores from the questionnaire on 12 negative statements associated with anxiety in public speaking classes. Among English-major students, the highest mean score, signifying the greatest level of reported comfort, was observed for Q11 *“I feel relaxed while I am giving a speech.”* (mean = 3.67, S.D. = 0.97), followed by Q26 *“An hour before speaking, I feel comfortable and relaxed.”* (mean = 3.54, S.D. = 0.76). Conversely, the

item with the lowest mean score, reflecting the lowest degree of positive experience, was Q4 “*After delivering a speech, I find the experience enjoyable,*” with a mean score of 2.03 and a standard deviation of 1.06.

For non-English major students, a slightly different pattern emerged regarding their highest reported comfort. The maximum mean score was found in Q8 “*I look forward to delivering a speech.*” (mean = 3.78, S.D. = 0.98), followed by Q6 “*I have no fear of giving a speech.*” (mean = 3.61, S.D. = 1.08). Importantly, consistent with the English-major students, the lowest mean score was also recorded for Q4 “*After delivering a speech, I find the experience enjoyable.*” (mean = 2.02, S.D. = 1.06), which highlights a common low degree of reported positive experience concerning post-speech enjoyment in both groups.

4. The differences in public speaking anxiety between English-major and non-English-major students.

Table 6 Public Speaking Anxiety (PSA) Total Score Comparison

Comparison	t-value	df	p-value (Sig.)	Statistical Interpretation
English-major vs Non-English-major	1.53	85	0.13	Not Significant ($p > .05$)

* Statistical significance level .05

Table 6 presents the results of the independent samples *t*-test comparing total public speaking anxiety (PSA) scores between English-major and Non-English-major undergraduate students. An independent samples *t*-test was conducted to compare the total Public Speaking Anxiety (PSA) scores between English-major and Non-English-major undergraduate students. The analysis utilized the equal variances assumed condition, as confirmed by Levene’s test. The results indicated no statistically significant difference in the total PSA scores between the two groups ($t\text{-value} = 1.53$, $p = .13$). This suggests that English-major and Non-English-major students experience comparable overall levels of public speaking anxiety. The finding emphasizes the need for anxiety-reduction strategies across all academic disciplines, not exclusively for language-related majors, as both groups face similar affective and physiological challenges during oral presentations.

Independent-samples *t*-tests using Welch’s correction for unequal variances were performed to examine specific differences in public speaking anxiety items between the English-major and Non-English-major students. Cohen’s *d* was reported as the measure of

effect size, interpreted as small ($d = 0.20$), medium ($d = 0.50$), or large ($d = 0.80$). Positive values of d indicate a higher mean for English-major students. The analysis revealed statistically significant differences in five specific anxiety items between the two groups. The results can be seen in Table 7.

Table 7 Public Speaking Anxiety Item-Level Comparison

Item	English Major M (SD)	Non- English Major M (SD)	t(df)	p	Cohen's d	Interpretation
Q13	4.35 (0.77)	4.00 (0.95)	2.23 (111.60)	0.028	0.41	Small
Q14	3.75 (0.84)	4.15 (0.89)	-2.59 (118.35)	0.011	-0.47	Small
Q17	3.51 (0.95)	3.08 (1.00)	2.39 (118.18)	0.018	0.43	Small
Q27	4.09 (1.09)	3.59 (1.16)	2.46 (117.98)	0.015	0.45	Small
Q34	3.73 (1.23)	3.02 (1.09)	3.39 (119.61)	0.001	0.61	Moderate

For four items (Q13, Q17, Q27, Q34), English-major students reported lower levels of public speaking anxiety compared to non-English-major students. These items are associated with emotional control and speech performance (e.g., self-confidence and anxiety during preparation/delivery). The effect sizes for these four items were categorized as small to moderate (d ranged from 0.41 to 0.61). Conversely, Non-English-major students showed a significantly higher mean for item Q14 (I worry if someone asks me a question about my topic that I can't answer), indicating a greater level of cognitive anxiety related to the possibility of unexpected interactions during presentations. The effect size for this difference was also small ($d = -0.47$). Overall, the effect sizes for these item-level differences, ranging from $d = 0.41$ to $d = 0.61$, suggest that academic discipline plays a meaningful role in shaping specific aspects of students' public speaking experiences and anxiety levels.

Discussion

1. Overview of Findings and General Anxiety

This study aimed to investigate and compare the levels of Public Speaking Anxiety (PSA) between English-major and Non-English-major undergraduate students. The results provide nuanced insights into how academic discipline shapes the public speaking experience.

The independent samples t-test revealed no statistically significant difference in the overall PSA total scores between English-major and non-English-major students ($t(120) = 1.53$, $p = .13$). This finding aligns with studies suggesting that PSA is a widespread phenomenon in higher education that often transcends specific academic fields (Dwyer & Davidson, 2012; Raja, 2017). The overall comparable anxiety levels indicate that, regardless of their major, students face similar affective and physiological challenges when confronted with academic oral presentations.

Further examination of the descriptive statistics across all PSA items provides further insight into the symptom patterns of the student cohort. The lowest self-reported anxiety level was associated with Item Q31: “I have difficulty sleeping the night before a speech.” This item, which reflects pre-performance somatic anxiety and prolonged worry, received the lowest mean score among all items. This suggests that for the students in this study, symptoms of public speaking anxiety were more likely to occur acutely—emerging immediately before or during speech delivery—rather than as persistent, anticipatory distress affecting sleep or extended preparation periods. This finding. This pattern aligns with the findings of Halimah and Nuraida (2025), who similarly found that anticipation-related symptoms, such as sleep disturbance, were the least common or least intense manifestation of public speaking anxiety among their university student sample.

2. Differences in Performance and Emotional Anxiety

Although no significant difference was observed in the overall PSA scores, the item-level analysis revealed statistically significant yet modest variations in the specific dimensions of anxiety experienced by the two groups, confirming the need to address the specific research gap identified (Chan & Tse, 2025). The results showed that English-major students reported significantly lower anxiety levels on four performance-related items (Q13, Q17, Q27, and Q34), with small to moderate effect sizes ($d = 0.41$ to 0.61). These items are primarily related to self-confidence, emotional control during speech delivery, and the fear of forgetting prepared material.

The results also showed that English-major students may demonstrate a higher level of perceived communicative competence (Lestari, 2021) than their non-English-major peers. Probably, the intensive and frequent oral communication requirements inherent in English-major curricula provide more practice opportunities, resulting in greater self-efficacy and a reduced fear of performance failure (Chan & Tse, 2025). As students advance through such language-intensive curricula, repeated exposure to public speaking tasks in their second language (L2) can help normalize the experience and strengthen their coping strategies, thereby reducing anxiety during speech performance.

Conversely, the Non-English-major students reported significantly higher levels of anxiety for item Q14, which relates to the worry of being asked an unanswerable question about their topic ($d = -0.47$). This specific fear highlights a shift from performance anxiety to cognitive anxiety related to content mastery and spontaneous L2 interaction. This finding strongly aligns with research on non-English-major individuals who often struggle with the linguistic demands and technical knowledge required for public speaking in English (Thaicharoen, 2017; Yildiz, 2021). For these students, the source of anxiety may not be the act of speaking itself, but rather the fear of negative evaluation stemming from a perceived lack of technical expertise in English, particularly when a question demands a rapid, complex language response (Thaicharoen, 2017). This specific worry can be classified as a form of foreign language anxiety (FLA), which is closely intertwined with general PSA, especially when the presentation is delivered in a non-native language. It suggests that while English-major students are more confident in their ability to deliver the speech, Non-English-major students are more anxious about their ability to defend the content and language spontaneously.

Although demographic factors were not the main focus of this comparative study, the broader literature provides important context. The study supported by Aftab et al. (2025) showed that PSA tends to decrease as students advance in their study level, implying that cumulative exposure and experience over time are effective desensitizing mechanisms for both majors.

Conclusion and Implications

In conclusion, public speaking anxiety represents a significant barrier to student success and potential fulfillment in higher education and beyond. This research aims to transform our understanding of how this anxiety can be effectively addressed, moving beyond theoretical recognition of the problem to practical, evidence-based solutions that can be implemented

across diverse institutional contexts. By identifying which interventions most effectively help students transform speaking anxiety into confidence, this study establishes that while the overall intensity of public speaking anxiety is similar across academic disciplines, the source and specific manifestation of anxiety differ meaningfully. English-major students show greater confidence in managing the emotional and performance aspects of speaking, likely due to consistent practice. In contrast, Non-English-major students are predominantly troubled by the cognitive and linguistic challenges associated with unforeseen questioning and the defense of their topic in an L2 context.

The practical implication of these findings is that pedagogical interventions must be differentiated. For Non-English-major students, strategies should focus on enhancing topical knowledge mastery and practicing spontaneous Q&A sessions (Thaicharoen, 2017), perhaps utilizing tools like Virtual Reality (Raja, 2017) to simulate realistic Q&A pressure. For English-major students, interventions can focus on refining advanced delivery techniques, as their core anxiety levels are already mitigated by their higher baseline self-efficacy.

Recommendation

1. This study utilized a cross-sectional design, which limits the ability to infer causality or track the natural development of PSA over a student's academic career. Future research should employ a longitudinal design to measure changes in PSA and coping strategies from the first year to the final year.

2. A mixed-methods approach incorporating qualitative interviews should be employed for further studies. It could provide a deeper understanding of the specific cognitive appraisals or the fear of negative evaluation that contribute to the distinct anxiety profiles observed in Q14.

3. Given the increasing reliance on digital tools, future studies should investigate the role of Generative AI in mitigating PSA, particularly how it affects Non-English-major students' confidence in generating and defending complex technical content.

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