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Gender and Modality Effects on EFL Speaking Anxiety: A Study of Online and Traditional Classrooms at UIN Alauddin Makassar

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Abstract
This study aims to examine how gender and learning modality (traditional vs. online class) influence speaking anxiety among fourth-semester students of the English Language and Literature Department. A total of sixty students, comprising 30 males and 30 females, participated in the study by completing a modified Foreign Language Classroom Anxiety Scale (FLCAS). The data were analyzed using descriptive statistics and independent-samples t-tests. The results show that speaking anxiety was consistently higher in the traditional classroom than in the online class across all FLCAS subscales, with significant differences favouring lower anxiety in online classes ($p < .001$). Gender differences were descriptive but not statistically significant in the traditional class, indicating that the high-pressure nature of face-to-face communication elevated anxiety similarly for both groups. In contrast, a significant gender difference emerged in the online class for the Fear of Negative Evaluation subscale ($p = .033$), with female students reporting stronger evaluative concern. Overall, the findings indicate that speaking anxiety is shaped more by learning modality than by gender, and that online settings may reduce certain anxiety triggers for learners. However, the limited sample size calls for further studies with larger and more diverse populations to improve the generalizability of the findings.
Keywords: *EFL Students, Gender Dynamics, Speaking Anxiety, Online Classroom, Traditional Classroom*

1. Introduction

Speaking-related fear is a common affective obstacle in English as a Foreign Language (EFL) learning and poses a considerable challenge to students' spoken language development. This form of anxiety often diminishes learners' motivation to engage in oral communication, ultimately affecting their overall linguistic competence. According to Horwitz et al. (1986), foreign language anxiety is commonly driven by fear of negative evaluation, communication apprehension, and test-related anxiety, all of which may undermine students' self-confidence and impede their speaking performance.

Research has consistently shown that speaking anxiety interferes with cognitive processing and memory retention, leading to reduced participation in oral activities (Akkakoson, 2016; Oktavia, 2021). Gender differences have also been observed, with certain research suggesting that female students frequently encounter greater levels of speaking anxiety than their male counterparts(Cheng, 2002).

The swift move toward online learning, prompted by technological progress and global events, has altered the dynamics of language learning, with mixed implications for speaking anxiety. Online classrooms offer flexibility and convenience but may also contribute to new

forms of anxiety, such as those linked to reduced face-to-face interaction and an over-reliance on technology (Russell, 2020). The lack of non-verbal cues and direct social engagement in online settings can exacerbate communication apprehension, especially for students who are already prone to speaking anxiety.

Gender, in particular, has been identified as a potential factor influencing speaking anxiety. While numerous studies have explored speaking anxiety in EFL contexts, there is a notable lack of research comparing speaking anxiety levels between traditional and online classrooms, particularly concerning gender differences. For instance, (Quvanch et al., 2024)examined gender impacts on speaking anxiety but did not differentiate between learning modalities. Similarly, Piniel & Zólyomi (2022) examined gender differences in foreign language classroom anxiety without considering the potential influence of online learning environments. These studies do not address how learning modality might alter the experience of speaking anxiety, especially concerning gendered dynamics.

In the Indonesian context, studies like Muktiningrum et al. (2024) and Istiqomah (2024)have examined the connection between speaking performance and gender, but they have not compared the anxiety levels in traditional and online classroom environments. Almira & Rachmawati (2018) did a study on how EFL students in Indonesia feel when they have to speak, focusing on anxiety during English presentations. However, Almira's research did not directly compare speaking anxiety across face-to-face and online learning environments nor did it explore gender differences in these settings. Similarly, Muthmainnah (2016) examined speaking anxiety among students at the English and Literature Department of Alauddin State University, identifying common causes such as fear of negative evaluation and lack of preparation. However, Mutmainnah's work did not explore how different learning modalities (online vs. face-to-face) influence speaking anxiety levels or how gender factors into this dynamic.

Faisal (2022) provided significant insights into gender disparities in speaking anxiety within the English and Literature Department, indicating that female students have elevated anxiety levels stemming from concerns about judgement and communication apprehension. While this study sheds light on the role of gender in speaking anxiety, it does not consider how various learning environments (online vs. traditional classrooms) affect gender-specific anxiety levels. These research gaps underscore the need for comprehensive studies that examine how gender and learning environments interact to influence speaking anxiety among EFL learners.

Building on these previous studies, this study aims to examine the differences in speaking anxiety levels in speaking anxiety levels between traditional and online classrooms among the fourth-semester students of the English Language and Literature Department at UIN Alauddin Makassar during the 2023–2024 academic year. Specifically, the study investigates whether significant differences exist in students' speaking anxiety across these two learning modalities, whether gender-based differences in speaking anxiety are evident in both traditional and online classroom settings, and how the interaction between learning modality and gender influences students' speaking anxiety levels. Thus, this study intends to significantly contribute to the progress of more effective teaching strategies in managing speaking anxiety and improving the accomplishment of English language acquisition in different educational environments.

2. Related Literature

Recently, scholars have focused on speaking anxiety in English as a Foreign Language (EFL) classrooms and how it affects students' psychological and communicative

performance. Gender is a key element in oral language anxiety. The incorporation of online learning environments into regular classrooms has made it important to study how gender dynamics affect different instructional modes. This literature review covers theoretical and empirical research on EFL speaking anxiety, gender differences, and traditional versus online classrooms. This section synthesizes key studies to provide the conceptual and contextual framework for the study and identify research gaps.

2.1 Speaking Anxiety

Scovel (1999) characterizes anxiety as a condition marked by unease and a vague sense of fear that is not directly associated with a specific object. This definition emphasizes the broad and ambiguous nature of anxiety, which may arise without an identifiable cause yet still exert a profound influence on an individual's mental state. Building on this, Brown et al. (1994) posits that individuals tend to react anxiously when confronted with tasks perceived as complex, often harboring doubts about their own abilities to successfully complete them.

In 1986, Horwitz et al. conceptualized language anxiety as a distinct construct comprising individuals' self-perceptions, beliefs, emotional responses, and behavioral patterns that emerge specifically within the context of classroom language learning, due to the inherently unique demands of the language acquisition process. This explanation makes it clear that language anxiety is not just a fear of language tasks; it is a complex feeling that is connected to how someone sees their ability to learn a language. This form of anxiety negatively influences learners both indirectly—by heightening self-consciousness and internal doubt—and directly—by diminishing their active engagement in classroom interactions and erecting psychological barriers that hinder effective language use.

Research by Akkakoson (2016) supports the notion that language anxiety significantly impedes language learning processes. They found that anxious learners often struggle with language acquisition, retention, and production, thereby hindering their overall language proficiency development. Furthermore, studies have shown that language anxiety can lead to avoidance behaviors in language learning contexts, where learners may refrain from participating in speaking activities or engaging in communicative tasks due to fear of negative evaluation (Horwitz et al., 1986).

Anxiety emerges as a critical cognitive factor that detrimentally influences the language learning process. Specifically, language anxiety undermines learners' efficiency and proficiency development across various language learning domains. Understanding these dynamics is crucial for educators and practitioners to develop effective strategies to mitigate language anxiety and create supportive learning environments that foster linguistic confidence and engagement among learners.

2.2 Factors Affecting Speaking Anxiety

Speaking anxiety is a complex phenomenon that is influenced by a combination of cognitive, emotional, and social variables in the context of foreign language acquisition. Horwitz, Horwitz, and Cope (1986) introduced a highly influential framework that categorizes language anxiety into three core dimensions: apprehension about communication, anxiety related to testing situations, and the fear of receiving negative judgments from others. Learners may experience varying degrees of impact from these components, contingent upon a variety of situational and individual factors, such as classroom environment, learner personality, and task type ((Horwitz et al., 1986; MacIntyre & Gardner, 1994).

Recent research has expanded the understanding of speaking anxiety by exploring learners' prior experiences, affective states, and sociocultural contexts. Learners who have previously encountered failure, embarrassment, or harsh correction while speaking a foreign

language are more prone to heightened anxiety during subsequent speaking tasks (Gregersen & Horwitz, 2002). Additionally, self-confidence and perceived language competence are key determinants of anxiety levels. Students with low self-efficacy, particularly in oral tasks, often report higher speaking anxiety, especially during spontaneous communication or formal presentations (Woodrow, 2006).

The findings from Almira & Rachmawati (2018) reinforce the preceding observations regarding learners' heightened anxiety due to evaluative pressure and task demands, highlighting that English presentations, particularly in professional or semi-professional contexts like internships, evoke high levels of anxiety among EFL students. In their study conducted at the Business English Study Program of the State University of Makassar, students reported intense fear of negative evaluation and low confidence during their internship report presentations. The study emphasized that linguistic competence alone is insufficient to alleviate anxiety if students lack presentation skills and emotional readiness. They further explored this issue in a broader classroom setting and confirmed that English presentation tasks are consistently ranked as anxiety-inducing, with causes including fear of public exposure, limited vocabulary, and lack of practice. These studies affirm that task type (for example, formal presentation vs. informal dialogue) plays a major role in determining the intensity of speaking anxiety.

Furthermore, classroom climate and social support from peers and instructors significantly impact learners' anxiety levels. Dewaele & MacIntyre (2014) highlight the buffering effect of enjoyment and emotional support, where positive peer interactions and empathetic teachers reduce fear and promote risk-taking. Conversely, overly critical or highly evaluative environments tend to amplify anxiety and lead to avoidance behaviors (Young, 1991). This aligns Asnur (2013) suggestion that instructors should not only assess student performance but also help them manage their emotional responses through encouragement and guided practice.

Taken together, the preceeding empirical evidence suggest that speaking anxiety is not merely the result of internal psychological traits, but a complex outcome shaped by learners' experiences, self-perceptions, task types, and the surrounding social environment. Recognizing the full range of these contributing factors is essential for educators in designing interventions—such as preparatory training for public speaking, anxiety-reduction techniques, and constructive feedback—that holistically address both the linguistic and affective needs of EFL students.

2.3 Gender Differences in Speaking Anxiety

Based on the foundational theories of West & Zimmerman (2009) and Butler (2004), gender is conceptualized as a socially constructed identity shaped by repeated behaviors and cultural norms. It is not a biological given but a framework through which society interprets biological differences. Research has demonstrated that gender can influence experiences in language acquisition, with female students frequently exhibiting higher levels of language anxiety than male students (Öztürk & Gürbüz, 2013). Social and educational contexts contribute significantly to these differences, as societal expectations and gender stereotypes play a crucial role in shaping disparities in academic outcomes and career choices (Breda & Napp, 2019).

Educators and parents also have a substantial influence on students' identity formation and academic goals. According to Eccles & Wang (2016), female students who receive positive reinforcement and encouragement from teachers and parents are more likely to pursue male-dominated academic fields and exhibit stronger academic self-concept. Furthermore, gender dynamics within the classroom can affect student motivation and

performance; teachers who foster equitable learning environments and provide constructive feedback contribute to reducing gender disparities (Gunderson et al., 2012).

Cultural norms further mediate differences in learning approaches and academic success. Anggraini et al. (2019) found that in Indonesian educational contexts, female students often adopt more thorough and structured learning strategies than their male peers. However, such disparities can be addressed through gender-responsive interventions, including counseling and support programs that cater to the specific learning needs of each gender.

In 2019, Purwanti et al. employed the FLCAS instrument to explore gender-related variations in students' speaking anxiety at the high school level.Their research indicated that female students reported significantly greater levels of anxiety, primarily linked to communication apprehension. Nonetheless, the study was limited to conventional classroom settings and did not explore higher education contexts or alternative learning environments.

In a related study, Baran-Łucarz (2014) investigated the variance in foreign language speaking apprehension among Polish university students based on gender. The findings did not reveal any substantial differences within male and female students. However, the study was conducted in a cultural setting quite different from Indonesia and did not account for different learning modalities such as online versus in-person instruction.

The COVID-19 pandemic has resulted in a transition to online learning, which has introduced new variables into the experience of speaking anxiety. Studies by Jiang & Dewaele (2020) and Warschauer et al. (2023) show that online learning environments can influence anxiety differently than traditional classrooms. While some students benefited from the increased flexibility and reduced social pressure, others experienced greater anxiety due to limited interaction and technical challenges (Warschauer et al., 2023). A study by Faisal (2022) investigated gender differences in online public speaking anxiety and found no significant disparities between male and female students. Notably, students reported greater stress from tests than from speaking tasks. However, the study's limited sample size and scope, restricted to one online class, presented constraints, and no comparison was made with traditional learning environments.

2.4 EFL Learning in Traditional and Online Classroom Settings

English as a Foreign Language (EFL) learning in face-to-face classes has long been considered effective because it allows direct interaction between students and teachers and between students themselves. However, in the context of speaking anxiety, this format often exacerbates students' fear of performing. The pressure to speak spontaneously, the fear of being judged, and social tension can trigger high anxiety, especially for students who are not yet confident. Dewaele & MacIntyre (2014) noted that students in face-to-face classes were more likely to experience physical symptoms of anxiety such as trembling or increased heart rate. However, face-to-face learning still provides an authentic experience in communication that can accelerate language development if supported by a supportive environment.

In contrast, EFL learning in online classes brings a new dynamic to speaking anxiety. The online environment often reduces direct social pressure because interactions occur through a screen and students have more control over participation, such as choosing when to turn on the microphone or use the chat feature. This can reduce anxiety levels for some students, especially shy ones. However, online classes also have their own challenges: limited direct feedback, minimal body language, and technical issues such as unstable internet connections. Campos (2011) emphasize that students in online learning

environments often experience task-related intimidation and feel less confident in their communication effectiveness, which creates a different form of anxiety than that experienced in face-to-face classes.

Consequently, it is essential for educators to comprehend that speaking anxiety can manifest in both environments, albeit in distinct ways. Face-to-face classes emphasize more social pressure, while online classes introduce technology-based anxiety and isolation. Neither mode is completely free of challenges, so an inclusive and adaptive pedagogical approach is essential. Teachers can help reduce anxiety by creating clear expectations, providing constructive feedback, and offering variety in how students express themselves, both live and through recordings. Adapting teaching strategies to students' psychological needs is key to creating a safer and more empowering language learning experience.

3. Method

In order to investigate differences in speaking anxiety among male and female students in both traditional and online EFL classrooms, this study implements a comparative research design that employs a quantitative approach. The same cohort of students participated in both learning settings to ensure internal comparability and to reduce individual variability.

The population consisted of 110 fourth-semester students enrolled in the Department of English Language and Literature at UIN Alauddin Makassar during the 2023–2024 academic year, comprising 32 male and 78 female students. All fourth-semester students were eligible to participate. Due to the limited number of male students, all 32 active male students were invited to participate; 30 provided consent (93.7% response rate). From the 78 eligible female students, 30 were selected using a simple random sampling method to ensure balanced group comparison. A computer-generated random number list (Randomizer.org) was used to implement the randomization procedure. Thus, the final sample consisted of 60 students (30 males and 30 females). The overall response rate for the study was 60 of 62 invited participants (96.7%). The sample size reflects demographic constraints rather than an optimized statistical power calculation; this limitation is acknowledged, although the sample size remains comparable to that of similar EFL-anxiety studies in Indonesian university contexts.

The study received ethical approval from the Research and Community Service Unit of UIN Alauddin Makassar. All participants were informed about the objectives of the research, the voluntary nature of their participation, and the confidentiality of their responses, and they provided written informed consent prior to data collection.

To ensure comparability between the two learning modalities, the study was conducted within the same semester using a two-week interval between the traditional and online data collection sessions (March 10 and April 5, 2024). The speaking class met once per week for 150 minutes (3 SKS). Both the traditional and online sessions covered equivalent speaking materials, including descriptive speaking tasks, oral presentations, and interactive communication activities. This ensured that anxiety differences were not influenced by instructional content. The same cohort of students participated in both learning modalities (traditional and online classrooms), allowing for direct within-group comparison. The first phase, occurred after a traditional (face-to-face) speaking class, during which participants completed the FLCAS questionnaire immediately following the lesson. The second phase, took place two weeks later, after an online speaking class delivered via Zoom and Google Classroom, during which participants completed the same questionnaire. In the online class, all students were required to keep their cameras on during the entire session. This

requirement ensured that the interactional dynamics and evaluative pressure resembled those of the traditional classroom, allowing for a more accurate comparison of speaking anxiety across modalities.

The study utilized the 33-item Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. (1986). The original questionnaire was used without any modification to the item wording, ensuring full comparability across both learning modalities. The same version of the FLCAS was administered after the traditional classroom session and again after the online session. Any explanation provided to students (examples of online interaction, etc.) did not alter the wording, structure, or content of the questionnaire items.

For analytical purposes, the 33 FLCAS items were grouped into four speaking-related subscales frequently identified in factor-analytic studies of the instrument: (1) Communication Apprehension (CA), (2) Fear of Negative Evaluation (FNE), (3) Test Anxiety (TA), and (4) Comfort & Confidence (CC). Although the original theoretical framework of FLCAS conceptualizes anxiety into three components (Horwitz et al., 1986), subsequent empirical research focusing on speaking anxiety (Aida, 1994; Park, 2014; Tercan & Dikilitaş, 2015) consistently reports a fourth factor—Comfort & Confidence—emerging as a distinct dimension. Therefore, the present study adopted this four-subscale structure to align with empirical findings in speaking-focused FLCAS applications.

The FLCAS instrument underwent expert validation by two lecturers specializing in applied linguistics and educational psychology to ensure content validity. A pilot test was conducted with 20 students outside the main sample to assess reliability, yielding a Cronbach's alpha coefficient of 0.91, indicating excellent internal consistency.

The final questionnaire employed a five-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*) and was distributed via Google Forms to facilitate accessibility. The use of a five-point Likert scale followed the original structure of the FLCAS instrument, ensuring consistency with its established psychometric properties. Retaining a mid-point option allows respondents who genuinely feel neutral to respond accurately rather than being forced into agreement or disagreement, which can reduce response distortion. Five-point scales are also widely recommended for affective constructs such as language anxiety because they provide adequate variability and sensitivity for detecting differences among learners. After obtaining consent, the questionnaire link was sent to participants through WhatsApp to ensure timely responses.

The following table presents the range scores used to classify the participants' anxiety levels:

Table 1. Range Score of Anxiety level

Range Score	Anxiety Level
124 - 165	Very Anxious
108 - 123	Anxious
87 - 107	Moderate Anxious
66 - 86	Relaxed
33 - 65	Very Relaxed

Data analysis was conducted using SPSS software version 25. Descriptive statistics were used to determine the mean and standard deviation of speaking anxiety scores for both male and female students in each modality. Prior to inferential testing, the assumptions of the independent-samples t-test were verified. The Shapiro–Wilk test confirmed that the data were normally distributed ($p > .05$), and Levene's Test for Equality of Variances indicated homogeneity of variance ($p > .05$) across groups.

An independent-samples t-test was then performed to determine the significance of gender-based differences in speaking anxiety across both online and traditional classroom settings. The alpha level (α) for determining statistical significance was set at 0.05. Cohen's d was additionally calculated to assess the magnitude of gender differences, following recommended guidelines for effect-size reporting in psychological and educational research. All statistical coefficients (t, df, p, and effect sizes) were taken directly from the SPSS output to ensure accuracy and transparency in reporting.

To examine the interaction between gender and learning modality, a two-way analysis of variance (ANOVA) was performed using Total FLCAS scores as the dependent variable, with gender (male vs. female) and learning modality (traditional vs. online) as fixed factors. This analysis enabled the examination of the main effects of gender and modality, as well as their interaction effect on students' overall speaking anxiety. The assumptions of normality and homogeneity of variance were satisfied prior to conducting the ANOVA. The alpha level for determining statistical significance was set at 0.05.

The results of these analyses provided meaningful insights into the influence of learning modality and gender on EFL speaking anxiety as well as informed recommendations for pedagogical strategies to mitigate such anxiety in diverse classroom contexts.

4. Results

4.1. Findings

4.1.1. Differences in Speaking Anxiety between Traditional and Online Classrooms

To examine whether there are significant differences in students' speaking anxiety levels between traditional and online classrooms, a comparison of mean scores across the four FLCAS subscales was conducted. Before inferential analysis, assumption checks confirmed that the data met the requirements for parametric testing. The Shapiro–Wilk test indicated normal distribution for all subscales ($p > .05$), and Levene's Test showed homogeneity of variance ($p > .05$).

Table 2 presents a direct comparison between the online and traditional classes to identify how different learning environments influence anxiety levels.

Table 2. Traditional vs online class

Subscale	Online Mean (SD)	Traditional Mean (SD)	t(df)	p-value	Cohen's d
CA (Communication Apprehension)	2.88 (0.36)	3.43 (0.80)	-4.85 (90)	< .001	0.90
FNE (Fear of Negative Evaluation)	2.85 (0.38)	3.42 (0.78)	-5.13 (89)	< .001	0.95
TA (Test Anxiety)	3.04 (0.35)	3.43 (0.79)	-3.77 (88)	< .001	0.72
CC (Comfort & Confidence)	2.90 (0.35)	3.40 (0.81)	-4.60 (90)	< .001	0.85

Table 2 presents a direct comparison of the mean scores for each FLCAS subscale between the traditional and online classes. The results show a consistent pattern: students reported higher speaking anxiety in face-to-face learning than in online learning across all subscales. In this table, the mean (M) indicates the average level of anxiety reported by students, while the standard deviation (SD) reflects how widely students' anxiety levels varied within each group. Higher mean scores represent higher levels of anxiety.

For Communication Apprehension (CA), the traditional classroom mean was 3.43 (SD = 0.80), substantially higher than the online mean of 2.88 (SD = 0.36). This difference was

statistically significant, t(90) = –4.85, p < .001, where the t-test evaluates whether the observed difference in means is unlikely to have occurred by chance, and the p-value indicates strong statistical significance. The large effect size (Cohen's d = 0.90) demonstrates that the magnitude of this difference is substantial, meaning the learning modality had a considerable impact on students' anxiety levels.

A similar trend appears in the Fear of Negative Evaluation (FNE) subscale, where traditional learning produced a mean score of 3.42 (SD = 0.78) compared to 2.85 (SD = 0.38) for online classes, again showing a statistically meaningfull difference, t(89) = –5.13, p < .001, with a large effect size (*d* = 0.95). Test Anxiety (TA) followed the same pattern, with traditional scores (M = 3.43, SD = 0.79) exceeding online scores (M = 3.04, SD = 0.35), supported by t(88) = –3.77, p < .001, d = 0.72. Finally, Comfort & Confidence (CC) was also higher in traditional classes (M = 3.40, SD = 0.81) relative to online classes (M = 2.90, SD = 0.35), with t(90) = –4.60, p < .001, d = 0.85.

The consistent direction of the means and the large effect sizes across all subscales indicate that students feel significantly more anxious, less confident, and more evaluatively vulnerable in traditional classes than in online settings. These differences are not only statistically significant but also practically noticeable given the magnitude of the effect sizes.

4.1.2. Gender-Based Differences in Speaking Anxiety Levels in Both Traditional and Online Classroom Settings

To examine gender-based differences in speaking anxiety levels in both traditional and online classroom settings, the independent samples t-tests, assumption checks were conducted.

As much 30 male and 30 female from fourth semester of English and Literature Department at UIN Alauddin Makassar are involved in this project. The results of the FLCAS questionnaire of traditional classroom are displayed in the table 3.

Table 3. Result of Students' Anxiety Level in Speaking English in Traditional Class

Level of Anxiety	Male		Female	
	Frequency	Percentage	Frequency	Percentage
Very Anxious	3	11%	4	13%
Anxious	6	20%	14	47%
Moderate Anxious	13	43%	5	17%
Relaxed	7	23%	7	23%
Very Relaxed	1	3%	0	0%
Total	**30**	**100%**	**30**	**100%**

Based on Table 3, female students show higher proportions in both the very anxious (13%) and anxious (47%) categories compared to male students (11% and 20%, respectively). Meanwhile, male students appear more dominant in the moderate anxious category (43%) and also show presence in the very relaxed category (3%), whereas no female students reported being very relaxed. These descriptive patterns indicate observable differences in the distribution of anxiety levels between male and female learners in traditional settings.

The descriptive patterns observed in Table 2 can be more clearly visualized in the chart 1, which presents the percentage distribution of male and female students across the five speaking anxiety categories in the traditional class.

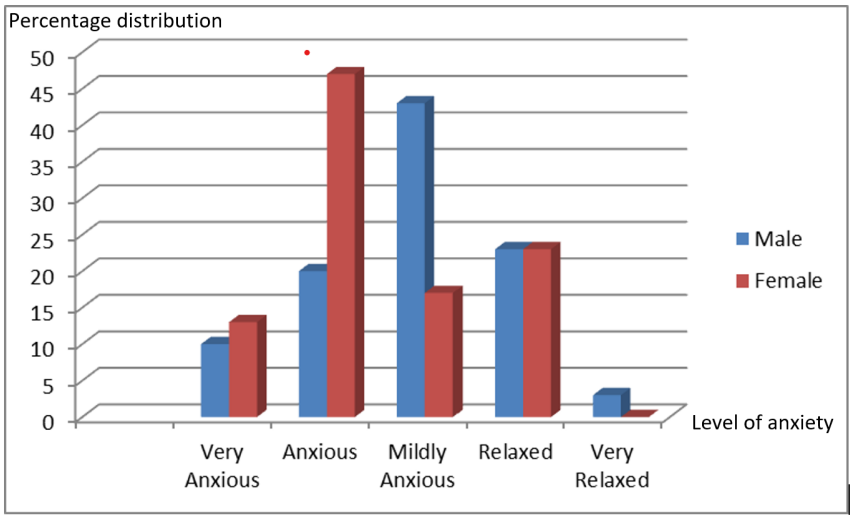

Figure 1. English Speaking Anxiety of Male and Female differences in traditional class

To verify whether these descriptive differences were statistically meaningful, a Welch independent samples t-test was conducted for each FLCAS subscale. The results demonstrated that none of the subscales indicated a significant gender differences, as all p-values exceeded the .05 threshold. For Communication Apprehension (CA), the test yielded $t(57.71) = -1.67$, $p = .101$, indicating that the difference between male and female students was not statistically significant. A similar pattern was found for Fear of Negative Evaluation (FNE) with $t(57.58) = -1.64$, $p = .107$, and for Test Anxiety (TA) with $t(57.78) = -1.54$, $p = .130$, both of which also indicated nonsignificant differences. Likewise, the Comfort & Confidence (CC) subscale also showed no significant gender difference with $t(57.99) = -1.71$, $p = .093$. The statistical results indicated that none of the differences between male and female students reached significance (all $p > .05$). This means that although female students showed slightly higher anxiety descriptively, the variations across subscales were not statistically different.

Taken together, the general result of the traditional class data shows that gender does not significantly influence overall speaking anxiety scores, as none of the subscales reached statistical significance and the direction of differences remained descriptive rather than inferential. This suggests that the intensity of traditional classroom situations—which involve direct interaction, real-time communication, peer observation, and immediate evaluation—likely contributes to elevating anxiety levels for both genders in a relatively similar manner. The high-pressure nature of face-to-face communication may therefore suppress or blur the typical gender patterns found in some earlier studies on language anxiety.

Building on the findings from the traditional classroom analysis, the next section of this study examines how male and female students experienced speaking anxiety in the online learning environment. This analysis aims to identify whether gender differences become more or less pronounced when communication is mediated through digital platforms rather than delivered through conventional in-person classroom systems. The distribution of anxiety levels in the online class is presented in Table 4.

Table 4. Result of Students' Anxiety Level in Speaking English in Online Class

Anxiety Level	Male		Female	
	Frequency	Percentage	Frequency	Percentage
Very Anxious	1	3%	2	7%
Anxious	4	13%	4	13%
Moderate Anxious	9	30%	11	37%
Relaxed	11	37%	9	30%
Very Relaxed	5	17%	4	13%
Total	**30**	**100%**	**30**	**100%**

Based on the table 4, there is a significant variation in the level of English speaking anxiety between male and female students. In the very anxious category, the percentage of female students who feel very anxious is higher, namely 7%, compared to only 3% of male students. In the anxious category, the percentage is the same for both groups, namely 13% each. The moderate anxious category indicates that more female students (37%) feel moderate anxious than male students (30%). Meanwhile, in the relaxed category, the percentage of male students who felt relaxed was slightly higher, namely 37%, compared to female students which was 30%. Furthermore, 17% of male students reported to be very relaxed, compared to 13% of female students .

Chart 2 visually illustrates the differences between both of the gender regarding to speaking anxiety level in online classroom:

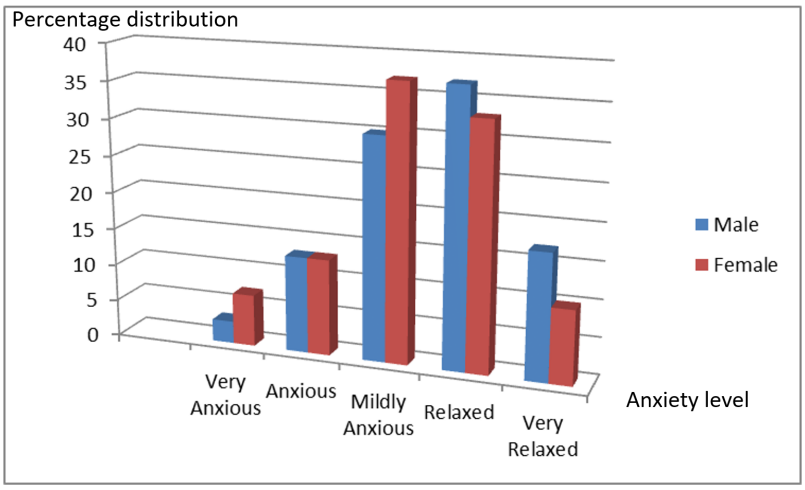

Figure 2. English Speaking Anxiety of Male and Female differences in online class

To determine whether the descriptive distinctions observed in the online class were statistically supported, an independent samples t-test was applied across all FLCAS subscales. The analysis revealed that only one dimension demonstrated a meaningful gender difference. For Communication Apprehension (CA), the statistical test resulted in $t(58) = -1.24$ with $p = .221$, indicating no significant disparity. Test Anxiety (TA) also showed no gender-based difference, $t(58) = -0.95$, $p = .347$. Similarly, Comfort & Confidence (CC) yielded $t(58) = 1.08$, $p = .284$, confirming the absence of significance. In contrast, the Fear of Negative Evaluation (FNE) subscale produced a significant result, $t(58) = -2.19$, $p = .033$, suggesting that female students displayed notably higher concern over being judged negatively during online speaking tasks compared to male students. Except for FNE, all other subscales failed to reach significance (all $p > .05$), indicating that most gender differences in the online class remain descriptive rather than statistically confirmed.

The findings for the online learning environment indicate that gender does not lead to substantial differences in general speaking anxiety, as only one component—Fear of Negative Evaluation—was statistically distinct. The remaining aspects of anxiety appeared similar across male and female students when examined through inferential testing. This pattern implies that certain features of online instruction—such as limited non-verbal cues, delayed responses, and increased ambiguity regarding peer and instructor reactions—may intensify evaluative sensitivity among female learners but do not markedly influence other facets of anxiety.

4.1.3. Interaction between Learning Modality (Traditional Vs. Online) and Gender which Influence Students' Speaking Anxiety Levels

To examine the interaction between gender and learning modality, a two-way ANOVA was conducted using Total FLCAS scores as the dependent variable. Gender (male vs. female) and learning modality (traditional vs. online) were treated as independent variables.

Table 5. Two-Way ANOVA Results

Effect	F	p-value	Interpretation
Gender	F(1,116) = 3.61	p = .060	Tidak signifikan
Modality	F(1,116) = 13.81	p = .0003	Signifikan
Gender × Modality	F(1,116) = 0.28	p = .601	Tidak signifikan

The results revealed a statistically significant main effect of learning modality, $F(1,116) = 13.81$, $p < .001$, indicating that speaking anxiety levels differed significantly between traditional and online classroom settings. However, the main effect of gender was not statistically significant, $F(1,116) = 3.61$, $p = .060$.

Importantly, the interaction effect between gender and learning modality was not significant, $F(1,116) = 0.28$, $p = .601$. This indicates that the impact of learning modality on speaking anxiety did not differ between male and female students.

4.2. Discussion

The findings of this study reveal important patterns regarding how the two learning environments (traditional and online classroom) shape students' speaking anxiety differently for male and female learners. The direct comparison between the two learning environments (traditional and online classes), based on the paired anxiety scores collected after each modality, showed that traditional classes consistently generated higher speaking anxiety across all FLCAS dimensions. Traditional classroom condition requires spontaneous responses, direct eye contact, and constant social exposure, all of which may heighten apprehension and reduce confidence. In contrast, online settings allow learners greater control over their visibility, more time to prepare before speaking, and opportunities to limit distracting social cues, resulting in lower anxiety levels in most dimensions. These results align with studies such as Faisal (2022), which note that online learning can influence speaking anxiety in complex ways depending on students' familiarity, comfort, and technological competence.

Consistent with earlier research, female students tended to report higher anxiety levels than males in both traditional and online settings, which aligns with studies showing that female learners often demonstrate greater emotional sensitivity and vulnerability to speaking-related pressure (MacIntyre & Gardner, 1994; Young, 1991; Purwanti et al., 2019). This supports the long-standing view that speaking anxiety can interfere with cognitive processing, reducing students' willingness to communicate and participate in oral tasks. However, when the statistical analyses were applied, a more nuanced pattern emerged. Although female students displayed higher anxiety descriptively in the traditional class, none of the subscales (Communication Apprehension, Fear of Negative Evaluation, Test Anxiety,

or Comfort & Confidence) showed statistically significant gender differences. This suggests that the nature of face-to-face interaction itself, which involves spontaneous performance, immediate evaluation, and strong social presence, may elevate anxiety levels for both genders to the point that typical gender differences become less detectable. This interpretation aligns with Cheng (2002), who noted that environments requiring real-time oral performance tend to amplify anxiety universally, regardless of gender.

By contrast, in the online class, gender revealed a selective effect. Although most subscales showed no significant differences, the Fear of Negative Evaluation (FNE) subscale demonstrated a statistically significant gender gap, with female students experiencing stronger evaluative anxiety. This finding is consistent with the argument that online learning, while reducing physical social pressure, introduces new forms of psychological uncertainty, such as the inability to read facial cues, delayed responses, and heightened awareness of being judged through digital platforms (Russell, 2020). Female learners, who tend to be more sensitive to evaluative feedback, may therefore experience increased FNE in online communication contexts.

Regarding to interaction between learning modality (traditional vs. online) and gender influencing students' speaking anxiety levels, the findings further indicate that the impact of learning modality on speaking anxiety operates similarly for both male and female students. Although descriptive gender differences were observed and selective gender effects emerged in specific subscales, the absence of statistically significant interaction effects suggests that classroom demands, whether online or traditional, remain the dominant factor shaping students' anxiety responses. In other words, while gender may influence how anxiety is experienced, it does not significantly alter how learning modality affects speaking anxiety overall.

The fact that male students tended to be more relaxed in both learning modalities (traditional and online speaking classes) may be associated with their greater willingness to take risks and lower sensitivity to evaluative pressure (Öztürk & Gürbüz, 2013). Nevertheless, the absence of significant gender differences in most subscales suggests that classroom demands (whether online or traditional) remain the dominant factor shaping students' anxiety responses. This emphasizes the importance of gender-responsive pedagogy, where instructors provide scaffolding, constructive feedback, and emotional support to reduce anxiety, particularly for female students who consistently show higher descriptive levels.

The findings of this study also highlight the pedagogical potential of blended learning. Since online environments appear to reduce, though not eliminate, anxiety triggers for many students, integrating online activities into face-to-face speaking courses may help learners build confidence gradually. This supports Young's (1991) view that lowering language anxiety requires multi-layered interventions, including task design, supportive classroom climate, and opportunities for positive speaking experiences.

Finally, this study lies in its comparative examination of gender differences across two learning modalities (traditional and online classes) as reflected in the paired anxiety score comparisons presented in Table 2. This dual-modality analysis provides insights into how gendered anxiety patterns shift when the mode of communication changes. Most previous studies have examined speaking anxiety within only one type of learning environment, either exclusively in traditional face-to-face classrooms or exclusively in online classes, rather than comparing both modalities within the same cohort as done in the present study; few have explored how gender differences shift when the mode of communication changes. The present findings suggest that speaking anxiety is a dynamic phenomenon shaped not only

by individual differences but also by the structural and social conditions of the learning environment. Future research could further explore interventions such as peer mentoring, task-based speaking activities, or digital storytelling to address these gendered patterns and support learners across modalities.

5. Conclusion

The result of this study indicates that speaking anxiety among fourth-semester EFL students is shaped primarily by classroom modality, with gender-related differences emerging selectively under certain learning conditions. This is evident from the consistent pattern in which face-to-face classes generated higher anxiety across all FLCAS subscales, whereas online classes provided a comparatively less pressuring environment, leading to reduced anxiety levels for most learners. Overall, female students reported higher levels of anxiety than male students in both traditional and online classes. However, statistically significant gender differences were found only in the Fear of Negative Evaluation subscale in the online classroom, suggesting that evaluative concerns may be more prominent for female learners in online environments. In the traditional classroom, gender differences were descriptive but not statistically significant, indicating that the spontaneous and high-pressure nature of face-to-face communication may elevate anxiety similarly for both genders.

In terms of modality, these results indicate that all FLCAS subscales (apprehension, fear of negative evaluation, test-related anxiety, and comfort & confidence) showed higher anxiety levels in traditional classes than in online classes. Online environments appeared to provide a comparatively less pressuring space, leading to reduced (though not fully eliminated) speaking-related anxiety. This overall pattern is consistent with earlier studies emphasizing the impact of classroom conditions on anxiety and highlights the potential of online or blended learning to support learners who are more sensitive to social pressure.

While these results contribute meaningful insights, they should be interpreted with caution due to the modest sample size (N = 60). The patterns observed here may not fully represent broader populations of EFL learners, and replication with larger and more diverse samples is recommended to strengthen the generalizability of the findings. Nevertheless, the study underscores the importance of adopting gender-responsive and modality-aware pedagogical strategies to help students manage speaking anxiety, such as scaffolding, supportive feedback, gradual exposure to speaking tasks, and blended learning approaches. Future research may also explore targeted interventions designed to reduce anxiety across different learning environments.

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