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Gender-based interaction and English speaking anxiety: A mixed-methods study of polytechnic students' expectations of lecturer support

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Abstract:

English-speaking anxiety may limit participation in English as a Foreign Language (EFL) classes, yet evidence combining sex-based differences, cross-gender speaking experiences, and lecturer support expectations in Indonesian polytechnics remains limited. This study examined anxiety differences between male and female students, associations with group composition preferences and cross-gender discomfort, and reported sources of anxiety and support needs. Using a convergent mixed-methods design, 101 students at one Indonesian polytechnic completed an online questionnaire adapted from the Foreign Language Classroom Anxiety Scale, along with open-ended questions. Quantitative data were analyzed using Welch's t-test, chi-square test, and Pearson correlation, while qualitative responses were analyzed thematically and integrated through a joint display. Female students reported higher mean anxiety than male students (3.10 vs. 2.79; $p = 0.047$; Hedges' $g = 0.40$). Sex was not significantly associated with group composition preferences ($p = 0.452$), whereas cross-gender speaking discomfort correlated moderately with the remaining ten anxiety items ($r = 0.535$; $p < 0.001$). Linguistic difficulties were the most frequently reported anxiety source in both groups; female students more often mentioned fear of mistakes, ridicule, and negative evaluation. Students expected vocabulary support, preparation time, constructive feedback, supportive classrooms, and gradual participation. These findings distinguish sex differences, group preferences, and cross-gender discomfort without assuming a shared mechanism. Such responses highlight the value of addressing linguistic and social-evaluative concerns without stereotyping students. Polytechnic programs could incorporate flexible grouping and individualized speaking support into lecturer development policies, although the effectiveness of these approaches requires evaluation.

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INTRODUCTION

Speaking anxiety in English as a Foreign Language (EFL) is an important issue in higher education because it is associated with students' participation in oral communication. Anxiety may manifest as nervousness, fear of negative evaluation, and reluctance to communicate, accompanied by linguistic difficulties (Mukminin et al., 2015; Alazeer & Ahmed, 2023). Previous studies have linked language anxiety to willingness to communicate, learning experiences, and language skill achievement (Aida, 1994; Botes et al., 2020; Cheng et al., 1999; MacIntyre & Gregersen, 2022; Teimouri et al., 2019). In polytechnic education, difficulties with grammar and the fluency of translated output have been identified in English for Specific Purposes (ESP) instruction (Romadloni & Sari, 2025). These findings illustrate the linguistic challenges faced by polytechnic students, although they do not directly explain speaking anxiety. In a different context, anxiety during presentations at international conferences has also been reported among EFL postgraduate students (Wei, 2022). These circumstances highlight the importance of examining speaking anxiety among polytechnic students by considering linguistic difficulties, social evaluation situations, and interactional experiences during learning.

Previous research on speaking anxiety in English as a Foreign Language (EFL) learning can be classified into three main strands. First, studies have examined language anxiety as a multidimensional experience associated with linguistic competence, perceived competence, motivation, classroom conditions, and social interaction (Kitano, 2001; Liu & Huang, 2011; Matsuda & Gobel, 2004; Sun et al., 2025; Hussain et al., 2025). Second, studies on gender differences in language anxiety have yielded mixed findings, with some reporting higher anxiety levels among female students and others finding no statistically significant overall gender differences (Park & French, 2013; Rahman Hz, 2022; Piniel & Zólyomi, 2022). Third, studies have investigated the roles of the classroom emotional environment, lecturers, corrective feedback, and instructional strategies in relation to foreign language anxiety (Dewaele et al., 2018; Dewaele & Dewaele, 2020; Rassaei, 2015; Toyama & Yamazaki, 2021). Although these three strands of research have provided insights into individual factors, gender differences, and pedagogical aspects of language anxiety, the reviewed literature has not sufficiently integrated gender differences in speaking anxiety, group composition preferences, discomfort when speaking in front of the opposite sex, and expectations of lecturer support, particularly in the context of EFL learning at polytechnics. This gap highlights the need for research that brings together between-group differences, interactional experiences, and expectations of learning support to provide a more comprehensive understanding of students' speaking anxiety.

Based on this research gap, this study aims to examine differences in EFL speaking anxiety between male and female polytechnic students, their group composition preferences and discomfort when speaking in front of the opposite sex, as well as their reported sources of anxiety and expectations of lecturer support. The study addresses three research questions: (1) Is there a statistically significant difference in mean speaking anxiety between male and female students? (2) Is sex associated with group composition preferences, and how is discomfort when speaking in front of the opposite sex correlated with other aspects of speaking anxiety? (3) What sources of speaking anxiety do students report, and what forms of lecturer support do they expect? Using a convergent mixed-methods design, this study integrates quantitative analysis with thematic analysis of open-ended responses. This study contributes to the literature on EFL speaking anxiety by distinguishing sex-based differences in anxiety from group composition preferences and discomfort in cross-gender speaking

situations, while incorporating students' reported experiences and expectations of lecturer support in the context of polytechnic education.

This study distinguishes sex-based differences in speaking anxiety from students' experiences of classroom interaction. From a gender perspective, discomfort in cross-gender interactions may be associated with social expectations, although the study does not directly examine gender norms or power relations. Therefore, group composition preferences and discomfort in cross-gender speaking situations are treated as distinct aspects of classroom interaction rather than interchangeable indicators of speaking anxiety. This perspective allows the findings to be interpreted without assuming causal relationships or the effectiveness of untested pedagogical strategies.

METHOD

Research Approach

This study employed a convergent mixed-methods design to quantitatively identify patterns of speaking anxiety and qualitatively understand students' experiences of interaction in English language learning (Dinour et al., 2018). This design was selected over sequential explanatory or exploratory approaches because quantitative and qualitative data were collected simultaneously through a single online questionnaire and subsequently analyzed using different procedures. The results of both analyses were then integrated to generate meta-inferences regarding gender differences in anxiety, group composition preferences, discomfort when speaking in front of the opposite sex, and the forms of lecturer support expected by students. This integration aimed to bring together statistical patterns and students' reported experiences, rather than to establish causal relationships or to evaluate the effectiveness of instructional interventions.

Participants and Sampling

Participants were recruited through voluntary convenience sampling among students enrolled in English courses across eight study programs at Politeknik Negeri Cilacap (Hossan et al., 2023; Hiratsuka, 2025). The final sample comprised 101 students, including 52 male and 49 female respondents, who completed the online questionnaire. Responses were checked for completeness across demographic information, Likert-scale items, and open-ended questions before inclusion in the analysis. This sampling approach enabled the inclusion of students with direct experience of EFL learning in a polytechnic setting. Nevertheless, voluntary participation and limited information on the total eligible student population and response rate limited the sample's representativeness and the generalizability of the findings beyond the study context.

Data Collection

Data were collected via a structured online questionnaire that included demographic information, 12 Likert-scale items, and open-ended questions. Demographic data included sex, study program, and lecturer identity. The instrument was adapted from the Foreign Language Classroom Anxiety Scale (FLCAS; Horwitz et al., 1986) to assess speaking anxiety in EFL learning at a polytechnic. The items addressed nervousness, fear of mistakes, reluctance to participate, discomfort when speaking in front of the opposite sex, and presentation anxiety. Eleven anxiety-oriented items formed a composite score, with higher scores indicating greater anxiety, while one self-confidence item was analyzed separately.

The 11-item scale demonstrated high internal consistency (Cronbach's $\alpha = 0.876$). The Kaiser–Meyer–Olkin (KMO) value was 0.872, and Bartlett's test of sphericity was significant, $\chi^2(55) = 415.71$, $p < 0.001$, indicating suitability for factor analysis without establishing factorial

validity. Open-ended questions explored sources of anxiety, group composition preferences, classroom interactions, and expected lecturer support, providing qualitative data to complement the quantitative findings.

Quantitative Data Analysis

Speaking anxiety scores were calculated as the mean of 11 anxiety-oriented Likert-scale items, excluding the self-confidence item, with higher scores indicating greater anxiety. Descriptive statistics were reported by sex. Mean differences were examined using Welch's independent-samples t-test, supplemented by Levene's test, 95% confidence intervals, and Hedges' *g*. The order of subtraction was specified to clarify the direction of the mean differences. Associations between sex and group composition preferences were assessed using the chi-square test of independence. Open-ended responses were classified into same-sex, mixed or neutral, and other categories, with the mixed or neutral category combining mixed-group preferences and no preference. Frequencies, percentages, expected cell frequencies, and Cramer's *V* were reported.

Pearson correlation was used to examine the relationship between discomfort when speaking in front of the opposite sex and other aspects of speaking anxiety. The primary analysis correlated the discomfort item with the mean of the remaining 10 anxiety items to avoid part–whole correlation, while the full 11-item composite was examined for comparison. Statistical significance was set at $p < 0.05$, with interpretation considering effect sizes, confidence intervals, and measurement limitations. Nonsignificant results were not interpreted as evidence of equivalence, and correlations were not considered evidence of causality.

Qualitative Data Analysis

Open-ended responses were analyzed using Braun and Clarke's (2006) six phases of thematic analysis: familiarization, initial coding, searching for themes, reviewing themes, defining and naming themes, and reporting. Guided by the research focus, inductive coding identified experiences related to linguistic difficulties, fear of mistakes and ridicule, insufficient preparation, interactional pressure, and positive reinforcement. Related codes were organized into two domains sources of speaking anxiety and expected lecturer support comprising ten coding categories.

Category frequencies and percentages were compared descriptively by sex. Each student was counted once per category but could be assigned multiple codes, with percentages based on the respective sex-group totals. These frequencies reflected reported experiences rather than anxiety intensity or statistically significant sex-based differences. Group composition preferences were coded separately for the chi-square analysis. Trustworthiness was supported through repeated reading, a coding audit trail, peer debriefing, and verification of coding decisions against the original responses. The absence of follow-up clarification limited deeper exploration of students' experiences. Accordingly, qualitative findings were used to contextualize quantitative patterns rather than explain their underlying causal mechanisms.

Integration of Quantitative and Qualitative Data

Quantitative and qualitative findings were integrated through a joint display, focusing on sex-based differences in speaking anxiety, associations between sex and group composition preferences, and correlations between cross-gender speaking discomfort and the remaining ten anxiety items. These results were compared with qualitative categories related to linguistic difficulties, fear of negative evaluation, speaking readiness, and expected lecturer support. Group preferences derived from open-ended responses were not treated as

independent qualitative evidence, and relationships between thematic categories and individual anxiety scores were not directly examined.

Meta-inferences were developed by examining how qualitative findings complemented quantitative patterns while identifying aspects of the statistical relationships that could not be explained by the available qualitative data. The joint display summarized quantitative results, qualitative information, meta-inferences, and pedagogical relevance. Foreign Language Classroom Anxiety (Horwitz et al., 1986) and Doing Gender (West & Zimmerman, 1987) served as interpretive frameworks rather than coding guides or evidence of causal mechanisms. Accordingly, statistical associations were interpreted as noncausal, while pedagogical recommendations reflected students' expected support rather than evidence of the effectiveness of instructional strategies.

RESULTS AND DISCUSSION

Results

Gender analysis, group preferences, and discomfort in cross-gender interactions

Quantitative analysis was conducted on 101 polytechnic students to examine sex-based differences in English speaking anxiety and its associations with interactional aspects of learning. Speaking anxiety scores were calculated as the mean of 11 anxiety-oriented Likert-scale items. Among the 52 male and 49 female students, female students reported higher mean speaking anxiety (M = 3.10, SD = 0.80) than male students (M = 2.79, SD = 0.74). The distribution of speaking anxiety scores by sex is presented in Table 1.

Table 1

Mean Speaking Anxiety Scores of Students by Sex

Sex	N	Mean	SD
Male	52	2.79	0.74
Female	49	3.10	0.80

Note. Scores represent the mean of 11 anxiety-oriented items on a five-point scale. Higher scores indicate greater speaking anxiety.

Source: Processed by the researchers (2026).

Welch's independent-samples t-test revealed a statistically significant difference in mean speaking anxiety between male and female students, $t(97.05) = -2.01$, $p = 0.047$. Levene's test indicated no statistically significant difference in variances ($F = 0.62$, $p = 0.434$). Female students scored an average of 0.31 points higher than male students, with a 95% confidence interval of [0.00, 0.62] for the female-minus-male difference. Hedges' $g = 0.40$ indicated a modest effect size. The negative t-value reflects the order of subtraction (male minus female). These findings indicate a statistically significant difference in speaking anxiety between the two groups, although the magnitude of the difference was relatively modest and did not establish a causal relationship.

The subsequent analysis examined the association between sex and students' preferences regarding learning group composition. Responses to the open-ended question were classified into three categories: same-sex groups, mixed or neutral groups, and other responses. As shown in Table 2, the mixed or neutral category accounted for the largest proportion of responses among both male (55.8%) and female (55.1%) students. Meanwhile, preferences for same-sex groups were reported by 28.8% of male students and 36.7% of female students. The mixed or neutral category included both preferences for mixed-sex groups and responses indicating no particular preference; therefore, this category should not be interpreted as an exclusive preference for mixed-sex interaction.

Table 2
Students' Group Composition Preferences by Sex

Group preference	Male (n = 52)	Female (n = 49)	Total
Same-sex groups	15 (28.8%)	18 (36.7%)	33
Mixed or neutral	29 (55.8%)	27 (55.1%)	56
Other	8 (15.4%)	4 (8.2%)	12
Total	**52 (100%)**	**49 (100%)**	**101**

Note. Percentages are based on sex-group totals. Mixed or neutral includes mixed-group preferences and no preference, while other includes unclassified responses.
Source: Processed by the researchers (2026).

The chi-square test of independence revealed no statistically significant association between sex and group composition preferences, $\chi^2(2, N = 101) = 1.59$, $p = 0.452$. All expected cell frequencies met the test requirements, with a minimum expected frequency of 5.82. Cramer's V = 0.13 indicated a small association. Although a higher proportion of female students (36.7%) than male students (28.8%) preferred same-sex groups, the overall association between sex and group composition preferences was not statistically significant. These findings suggest that the observed variations in group composition preferences were not sufficiently associated with students' sex to establish a statistically significant relationship in the present sample.

To further examine gender-based interaction, Pearson correlation analysis was conducted to assess the relationship between discomfort when speaking in front of the opposite sex and other aspects of speaking anxiety. Discomfort was measured using a single questionnaire item, whereas the anxiety composite was calculated from the remaining 10 anxiety-oriented items. The discomfort item was excluded from the primary composite to avoid part–whole correlation. For comparison, an additional correlation was calculated using the full 11-item anxiety composite. The results are presented in Table 3.

Table 3
Correlation Between Discomfort in Cross-Gender Speaking Situations and Speaking Anxiety

Anxiety measure	N	Pearson's r	p-value
Anxiety composite excluding the discomfort item (10 items)	101	0.535	<0.001
Full anxiety composite including the discomfort item (11 items)	101	0.623	<0.001

Note. The 10-item composite excludes the discomfort item to avoid part–whole correlation; the 11-item composite is included for comparison only.
Source: Processed by the researchers (2026).

As shown in Table 3, discomfort when speaking in front of the opposite sex was positively correlated with the anxiety composite derived from the remaining 10 items ($r = 0.535$, $p < 0.001$), indicating a moderate association. The correlation with the full 11-item composite was higher ($r = 0.623$, $p < 0.001$). However, the 10-item composite was retained as the primary measure because it avoided direct item overlap between the correlated variables. These findings indicate that students who reported greater discomfort when speaking in front of the opposite sex also tended to report higher levels of anxiety across other speaking-related situations. Nevertheless, the observed correlation does not establish the direction of influence or explain the psychological and social mechanisms underlying this relationship.

Overall, the quantitative findings revealed three main patterns. First, female students reported significantly higher mean speaking anxiety than male students, although the effect size was modest. Second, sex was not significantly associated with group composition preferences, indicating that preferences for learning group arrangements should not be assumed to differ systematically between male and female students. Third, discomfort when speaking in front of the opposite sex was moderately and positively correlated with other aspects of speaking anxiety. Taken together, these findings highlight the importance of distinguishing sex-based differences in anxiety, group composition preferences, and discomfort in cross-gender speaking situations as related but conceptually distinct aspects of students' learning experiences. The subsequent qualitative analysis explores students' reported sources of speaking anxiety and expectations of lecturer support in EFL learning at polytechnics.

Sources of speaking anxiety and forms of lecturer support expected by students

The thematic analysis of open-ended questionnaire responses identified two main domains: sources of speaking anxiety and forms of lecturer support expected by students. These domains comprised ten coding categories related to linguistic difficulties, social evaluation pressure, speaking readiness, and expected learning support. Responses could be assigned multiple codes when they contained more than one relevant idea. The distribution of category mentions by sex is presented in Table 4, supported by participant quotations illustrating their experiences.

Table 4

Sources of Speaking Anxiety and Forms of Lecturer Support Expected by Students

Coding Categories	Male, n (%)	Female, n (%)
A. Sources of Speaking Anxiety		
Linguistic difficulties	27 (51.9)	27 (55.1)
Fear of making mistakes, ridicule, and negative evaluation	9 (17.3)	19 (38.8)
Lack of preparation and topic knowledge	9 (17.3)	11 (22.4)
Pressure when speaking in front of others	10 (19.2)	9 (18.4)
Pressure in interactions with lecturers	4 (7.7)	2 (4.1)
B. Forms of Lecturer Support Expected by Students		
Supportive learning environment and positive reinforcement	13 (25.0)	20 (40.8)
Scaffolded linguistic support and code-switching	15 (28.8)	21 (42.9)
Preparation time and task guidance	16 (30.8)	10 (20.4)
Non-punitive feedback	4 (7.7)	7 (14.3)
Opportunities for voluntary and gradual participation	11 (21.2)	3 (6.1)

Note. Percentages are based on sex-group totals (52 males, 49 females). Multiple coding was allowed; frequencies reflect mentions, not anxiety intensity or significant sex differences.
Source: Coding results of open-ended questionnaire responses (2026).

Sources of speaking anxiety

Linguistic difficulties were the most frequently reported source of anxiety among both male (51.9%) and female students (55.1%). These difficulties included limited vocabulary,

uncertainty about grammar, and problems constructing sentences in English. One respondent stated, "My English vocabulary is still limited, so I feel confused when I want to say something." This response illustrates how limited linguistic resources may contribute to hesitation during oral communication.

Fear of making mistakes, ridicule, and negative evaluation was mentioned more frequently by female students (38.8%) than male students (17.3%). One respondent explained, "I usually feel nervous speaking English in class because I am afraid of making mistakes, especially in pronunciation or grammar. I also worry that my classmates or teachers will judge me if I speak incorrectly." This response highlights concerns about social evaluation during speaking activities. Other reported sources included insufficient preparation, pressure when speaking before others, and interactions with lecturers. Overall, linguistic difficulties and fear of negative evaluation emerged as important dimensions of students' speaking anxiety, although the frequencies of these experiences varied between sex groups.

Forms of lecturer support expected by students

Students identified several forms of lecturer support that could help them prepare for speaking activities and feel more comfortable in class. Scaffolded linguistic support and code-switching were mentioned by 28.8% of male students and 42.9% of female students, while supportive learning environments and positive reinforcement were reported by 25.0% and 40.8%, respectively. A respondent who expressed concern about negative evaluation suggested, "Lecturers can help reduce my anxiety by creating a more relaxed and supportive classroom atmosphere, for example by responding positively to students' efforts even when there are still mistakes." This response reflects students' expectations for supportive communication and encouragement during speaking activities.

Preparation time and task guidance were mentioned more frequently by male students (30.8%) than female students (20.4%). One respondent stated, "Before a presentation, the lecturer can inform us well in advance about the material to be presented, rather than giving it unexpectedly." This expectation emphasizes the importance of preparation opportunities before speaking activities. Students also mentioned non-punitive feedback and opportunities for voluntary and gradual participation. Overall, the expected support encompassed linguistic assistance, task preparation, positive reinforcement, and supportive classroom interactions.

Synthesis of qualitative findings

The qualitative findings highlight connections between students' reported sources of speaking anxiety and their expectations of lecturer support. Linguistic difficulties emerged alongside expectations for scaffolded language assistance, while concerns about negative evaluation were accompanied by expectations for positive reinforcement and constructive feedback. Differences in category frequencies between male and female students reflected variations in reported experiences rather than differences in anxiety intensity or causal relationships. Although the responses provided insights into linguistic and social evaluation concerns, the quotations presented did not establish the mechanisms linking discomfort in cross-gender interactions to other aspects of speaking anxiety. Thus, the qualitative findings contextualize the quantitative patterns while highlighting the need for further investigation into students' interactional experiences.

Gender-based interaction, speaking anxiety, and expected lecturer support in EFL

The integration of quantitative and qualitative data brought together findings on sex-based differences in speaking anxiety, gender-based interaction, and students' expectations

of lecturer support. Quantitative results showed that female students had higher mean speaking anxiety than male students ($p = 0.047$; Hedges' $g = 0.40$). Qualitative responses revealed that linguistic difficulties were the most frequently reported source of anxiety in both groups, while fear of making mistakes, ridicule, and negative evaluation were mentioned more frequently by female students. These findings provided complementary insights into students' speaking anxiety. However, because the relationships between qualitative categories and individual anxiety scores were not analyzed, the qualitative findings could not explain the causes of differences in mean anxiety between groups.

Regarding gender-based interaction, no significant association was found between sex and group composition preferences ($\chi^2(2, N = 101) = 1.59$, $p = 0.452$). In contrast, discomfort when speaking in front of the opposite sex was positively correlated with the anxiety composite derived from the remaining ten items ($r = 0.535$, $p < 0.001$). These findings highlight the importance of distinguishing group composition preferences from discomfort in cross-gender speaking situations, as their direct relationship was not examined. Furthermore, open-ended responses concerning fear of negative evaluation did not specifically explain experiences of cross-gender interaction. Therefore, the findings do not establish that the presence of the opposite sex caused students' speaking anxiety.

Regarding lecturer support, qualitative findings identified expectations for scaffolded linguistic assistance, preparation time, task guidance, supportive learning environments, constructive feedback, and gradual participation. Linguistic support and positive reinforcement were mentioned more frequently by female students, whereas preparation time and gradual participation were mentioned more frequently by male students. These variations reflect reported expectations rather than evidence that each group necessarily requires different instructional strategies. Thus, the findings identify potential forms of lecturer support, although their effectiveness in reducing speaking anxiety remains untested. The integration of quantitative and qualitative findings is presented in Table 5.

Table 5
Gender-Based Interaction, Speaking Anxiety, and Expectations of Lecturer Support in EFL

Quantitative Findings	Qualitative Information	Meta-Inferences	Relevance to Lecturer Support
Female students had higher mean anxiety ($p = 0.047$; Hedges' $g = 0.40$).	Linguistic difficulties were reported by both groups, while fear of negative evaluation was mentioned more frequently by female students. Links to individual anxiety scores were not tested.	Differences in mean anxiety occurred alongside variations in reported experiences, but their causes remain unknown.	Linguistic assistance and positive reinforcement may be considered based on individual needs rather than sex alone.
Sex was not significantly associated with group composition preferences ($p = 0.452$; Cramer's $V = 0.13$).	Preferences were coded from open-ended responses, but reasons for group selection were not analyzed thematically. These responses were not independent qualitative evidence.	Group preferences were not significantly associated with sex and cannot be assumed to indicate speaking comfort.	Flexible grouping may consider students' preferences and comfort.
Cross-gender speaking discomfort was positively correlated with other aspects of	Responses described concerns about negative evaluation and expected lecturer support but did	Cross-gender discomfort was associated with other aspects of	Gradual practice, preparation time, linguistic assistance, and constructive feedback may be

anxiety ($r = 0.535$; $p < 0.001$).	not specifically explain cross-gender speaking experiences.	anxiety, but the underlying mechanisms remain unknown.	considered for further evaluation.

Note. Meta-inferences integrate quantitative and qualitative findings. Category frequencies indicate mentions, while the effectiveness of expected lecturer support remains untested.
Source: Authors' synthesis of quantitative and qualitative analysis results (2026).

Overall, the integration of quantitative and qualitative findings highlights the importance of distinguishing sex-based differences in speaking anxiety, group composition preferences, and discomfort in cross-gender speaking situations. While quantitative results identified differences and associations, qualitative responses provided complementary insights into linguistic difficulties, concerns about negative evaluation, and expectations of lecturer support. These findings suggest that students' speaking anxiety should be understood through both individual and interactional experiences rather than sex-based categories alone. However, the mechanisms underlying these relationships and the effectiveness of expected lecturer support require further investigation.

Discussion

The study involving 101 polytechnic students identified three main patterns of EFL speaking anxiety. First, female students reported higher mean anxiety than male students (3.10 versus 2.79; $p = 0.047$), with a modest effect size (Hedges' $g = 0.40$). Second, sex was not significantly associated with group composition preferences ($p = 0.452$), whereas discomfort when speaking in front of the opposite sex was positively correlated with the remaining 10-item anxiety composite ($r = 0.535$; $p < 0.001$). Third, open-ended responses identified linguistic difficulties as the most frequently reported source of anxiety in both groups, while fear of making mistakes, ridicule, and negative evaluation was mentioned more frequently by female students. Students expected scaffolded linguistic assistance, preparation time, constructive feedback, supportive learning environments, and gradual participation. Overall, the integrated findings highlight the importance of distinguishing sex-based differences in anxiety, group composition preferences, and discomfort in cross-gender speaking situations. However, the findings do not explain the underlying mechanisms or demonstrate the effectiveness of expected lecturer support.

These findings have social relevance for equitable participation in vocational higher education, where opportunities to speak English may affect classroom engagement and preparation for professional communication. Female students reported higher anxiety and more frequent concerns about negative evaluation, yet the study cannot establish gender norms as the cause. Research on gender norms offers a broader perspective on social expectations (Moreau et al., 2021), while work on women's participation in Indonesia illustrates barriers in other public settings (Palimbunga, 2024). Studies of participation in marine science and academic leadership similarly highlight unequal opportunities to contribute, although their contexts differ from EFL classrooms (Ojwala et al., 2024; Ghundol & Muthanna, 2025). Scholarship on political communication and women's empowerment further underscores the importance of inclusive participation (Jandevi, 2019; Widiastuti et al., 2024). Accordingly, lecturers should consider students' individual speaking experiences in different classroom contexts without assuming that sex alone determines participation or support needs.

Theoretically, the findings locate EFL speaking anxiety at the intersection of linguistic demands and classroom interaction. The Foreign Language Classroom Anxiety framework

explains why limited linguistic resources, fear of mistakes, and anticipated evaluation can accompany reluctance to speak (Horwitz et al., 1986). MacIntyre (1999) further situates anxiety within language learning processes, although cognitive disruption was not measured here. The Doing Gender perspective emphasizes that gender acquires meaning through social interaction rather than sex categories alone (West & Zimmerman, 1987). In this study, sex was not significantly associated with group preferences, whereas cross-gender speaking discomfort correlated with other anxiety items. This contrast suggests that preferred group composition and situational discomfort are analytically distinct, not that specific gender norms have been demonstrated. Perspectives on identity and power provide additional interpretive possibilities (Darvin & Norton, 2023), but neither was examined directly. The theoretical contribution is therefore contextual differentiation of experiences, not causal explanation.

A central lesson from this study is that speaking anxiety should not be reduced to an individual weakness or a fixed attribute of male or female students. Linguistic difficulties and fears of evaluation appeared alongside reported anxiety, consistent with accounts of anxiety in EFL classrooms (Kasap & Power, 2019). Research on negative evaluation and classroom anxiety highlights the need to consider the emotional conditions of participation (Downing et al., 2020; Altamimi, 2023). Literature on dynamic assessment likewise points to the potential relevance of pedagogical conditions (Goodarzi & Namaziandost, 2025), while work on teaching and feedback highlights the importance of how corrections are communicated (Zarei et al., 2024; Dobson & Sojisirikul, 2023). These perspectives encourage educators and researchers to listen to students' reported experiences, avoid sex-based labeling, and distinguish support requested by learners from support whose effectiveness has been established through evaluation.

The higher mean anxiety reported by female students is consistent with findings by Rahman Hz (2022) and Park and French (2013), but should not be read as contradicting the nonsignificant overall gender difference reported in the meta-analysis by Piniel and Zólyomi (2022). The present result may reflect a context-specific pattern with a modest effect size. Concerns about mistakes and negative evaluation also resonate with Ch'ng (2025). Earlier studies have linked language anxiety to willingness to communicate, speaking experiences, or performance (Liu & Jackson, 2008; Wei, 2022; Woodrow, 2006; Saito et al., 2018), which are not directly assessed here. Research on classroom emotions, teacher influences, feedback, and instructional interventions provides relevant pedagogical context (Dewaele et al., 2018; Dewaele & Dewaele, 2020; Rassaei, 2015; Toyama & Yamazaki, 2021). This study adds an Indonesian polytechnic perspective by distinguishing sex-based anxiety differences, group preferences, cross-gender discomfort, and expected lecturer support within a single mixed-methods investigation.

The findings suggest five actions for EFL speaking instruction at polytechnics. First, lecturers may provide key vocabulary, sentence starters, and guided practice to address linguistic difficulties. Second, they may allow preparation time and clear task instructions before presentations to reduce uncertainty. Third, feedback should address errors constructively and establish classroom expectations against ridicule. Fourth, lecturers may use flexible pair or small-group arrangements that take individual preferences into account without automatically separating students by sex or assuming that mixed groups cause anxiety. Fifth, participation can progress gradually from guided responses to longer speaking tasks. Programs may provide professional development addressing linguistic scaffolding, supportive feedback, and sensitivity to interactional experiences. These recommendations arise from reported needs and observed associations, not intervention trials. Their effects

should therefore be evaluated through classroom observation, student feedback, and repeated measures of speaking anxiety before broader implementation is recommended.

CONCLUSION

The findings indicate that speaking anxiety reflects more than differences between male and female learners. Although female students reported higher mean anxiety, sex was not significantly associated with group composition preferences. By contrast, discomfort when speaking in front of the opposite sex was positively related to other aspects of speaking anxiety. Open-ended responses identified linguistic difficulties as the most frequently reported source of anxiety in both groups, while female students more often mentioned fear of mistakes, ridicule, and negative evaluation. Students also expected linguistic scaffolding, preparation time, constructive feedback, supportive classroom environments, and gradual opportunities to participate. Taken together, these patterns distinguish sex-based differences, group preferences, and situational discomfort as related but noninterchangeable dimensions of speaking anxiety. They also show that reported experiences and support expectations provide context without explaining the causes of statistical associations.

Theoretically, this study extends the contextual understanding of Foreign Language Classroom Anxiety by examining linguistic concerns and social evaluation alongside cross-gender speaking discomfort. The Doing Gender perspective provides an interpretive lens for recognizing that classroom experiences cannot be inferred from sex categories alone; however, the study does not establish specific gender norms or mechanisms. Its contribution is integrative rather than the development of a new theory. In practice, the findings suggest that lecturers consider vocabulary assistance, adequate preparation time, constructive feedback, flexible grouping, and gradual participation in line with individual student needs. Polytechnic programs may incorporate these considerations into lecturer development, although the effectiveness of these strategies remains to be empirically tested.

This study is limited by voluntary convenience sampling from a single polytechnic, which restricts representativeness and generalizability. Its reliance on self-reported questionnaire data also limits insight into actual classroom behavior, while discomfort when speaking before the opposite sex was measured using only one item. Open-ended answers did not adequately explain gender norms, peer relationships, or the processes underlying social evaluation, and the qualitative categories were not linked to individual anxiety scores. Future studies should therefore include multiple polytechnics, in-depth interviews, classroom observations, and repeated measurements to examine contextual and interactional processes more closely. Intervention research should also test whether the lecturer support strategies identified by students meaningfully reduce speaking anxiety.

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The authors declare no personal, financial, or professional conflicts of interest related to this research.

DECLARATION OF AI USE

The authors declare that AI was used to assist with translation and language editing. All data presentation and analysis were conducted by the authors, who take full responsibility for the accuracy and scientific content of the article.

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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). https://doi.org/10.1111/j.1540-4781.1994.tb02026.x

Alazeer, A. N. M., & Ahmed, Z. A. (2023). Students' speaking anxiety in EFL classroom. *International Journal of English Literature and Social Sciences, 8(2)*, 100–107. https://doi.org/10.22161/ijels.82.14

Altamimi, D. H. F. (2023). The correlation between language anxiety and foreign language achievement among undergraduate students at the University of Tabuk. *Migration Letters, 20(S11)*, 508–520. https://doi.org/10.59670/ml.v20iS11.5693

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). https://doi.org/10.52598/jpll/2/1/3

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Ch'ng, L. (2025). Exploring ESL public speaking anxiety among undergraduates. *Journal of Creative Practices in Language Learning and Teaching, 13*(1), 146–169. https://doi.org/10.24191/cplt.v13i1.4234

Cheng, Y. S., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning, 49*(3). https://doi.org/10.1111/0023-8333.00095

Darvin, R., & Norton, B. (2023). Investment and motivation in language learning: What's the difference? *Language Teaching, 56(1)*, 29–40. https://doi.org/10.1017/S0261444821000057

Dewaele, J. M., & Dewaele, L. (2020). Are foreign language learners' enjoyment and anxiety specific to the teacher? An investigation into the dynamics of learners' classroom emotions. *Studies in Second Language Learning and Teaching, 10*(1). https://doi.org/10.14746/ssllt.2020.10.1.3

Dewaele, J. M., Witney, J., Saito, K., & Dewaele, L. (2018). Foreign language enjoyment and anxiety: The effect of teacher and learner variables. *Language Teaching Research, 22*(6). https://doi.org/10.1177/1362168817692161

Dinour, L. M., Szaro, J., Blumberg, R., & Bose, M. (2018). A convergent mixed-methods exploration of the effects of community-engaged coursework on graduate student learning. *Journal of Nutrition Education and Behavior, 50(6)*, 598–609. https://doi.org/10.1016/j.jneb.2018.01.019

Dobson, J. A., & Sojisirikul, P. (2023). Teachers' voices when giving feedback: Causes of foreign language classroom anxiety and feedback strategies to reduce students' FLCA. *REFLections, 30(2)*, 526–547. https://doi.org/10.61508/refl.v30i2.267505

Downing, V. R., Cooper, K. M., Cala, J. M., Gin, L. E., & Brownell, S. E. (2020). Fear of negative evaluation and student anxiety in community college active-learning science courses. *CBE—Life Sciences Education, 19(2)*, Article ar20. https://doi.org/10.1187/cbe.19-09-0186

Ghundol, B., & Muthanna, A. (2025). Perceptions and experiences of female academics on barriers in obtaining and continuing leadership roles at higher education. *International Journal of Educational Research, 130*, Article 102534. https://doi.org/10.1016/j.ijer.2025.102534

Goodarzi, A., & Namaziandost, E. (2025). A mixed-methods study on the effects of online dynamic assessment on L2 learners' motivation and speaking anxiety: Beyond the classroom perspectives. *Computers in Human Behavior Reports, 17*, Article 100584. https://doi.org/10.1016/j.chbr.2024.100584

Hiratsuka, T. (2025). The volunteer participation paradox: Ethical tensions between self-selection and targeted sampling. *Research Methods in Applied Linguistics, 4(2)*, Article 100206. https://doi.org/10.1016/j.rmal.2025.100206

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal, 70*(2), 125–132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x

Hossan, D., Dato' Mansor, Z., & Jaharuddin, N. S. (2023). Research population and sampling in quantitative study. *International Journal of Business and Technopreneurship, 13(3)*, 209–222. https://doi.org/10.58915/ijbt.v13i3.263

Hussain, S. Q., Panhwar, F., & Ansari, S. (2025). The multifactorial nature of foreign language speaking anxiety: A comprehensive review of contributing factors in EFL. *Journal of Applied Linguistics and TESOL, 8(3)*. https://doi.org/10.63878/jalt1216

Jandevi, U. (2019). Communication strategy to improve women's political participation in Indonesia. *International Journal of Communication and Society, 1(2)*, 68–81. https://doi.org/10.31763/ijcs.v1i2.46

Kasap, S., & Power, K. M. (2019). Anxiety in the EFL speaking classrooms. *Journal of Language Teaching and Learning, 9(2)*, 23–36. https://doi.org/10.66887/jltl.v9i2.169

Kitano, K. (2001). Anxiety in the college Japanese language classroom. *The Modern Language Journal, 85*(4). https://doi.org/10.1111/0026-7902.00125

Liu, M., & Huang, W. (2011). An exploration of foreign language anxiety and English learning motivation. *Education Research International, 2011*. https://doi.org/10.1155/2011/493167

Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal, 92*(1). https://doi.org/10.1111/j.1540-4781.2008.00687.x

MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere* (pp. 24–45). McGraw-Hill.

MacIntyre, P. D., & Gregersen, T. (2022). The idiodynamic method: Willingness to communicate and anxiety processes interacting in real time. *IRAL - International Review of Applied Linguistics in Language Teaching, 60*(1), 67–84. https://doi.org/10.1515/iral-2021-0024

Matsuda, S., & Gobel, P. (2004). Anxiety and predictors of performance in the foreign language classroom. *System, 32*(1). https://doi.org/10.1016/j.system.2003.08.002

Moreau, C., Li, M., Ahmed, S., Zuo, X., & Cislaghi, B. (2021). Assessing the spectrum of gender norms perceptions in early adolescence: A cross-cultural analysis of the Global Early Adolescent Study. *Journal of Adolescent Health, 69(1 Suppl.)*, S16–S22. https://doi.org/10.1016/j.jadohealth.2021.03.010

Mukminin, A., Noprival, Masbirorotni, Sutarno, Arif, N., & Maimunah. (2015). EFL speaking anxiety among senior high school students and policy recommendations. *Journal of Education and Learning, 9(3)*, 217–225. https://doi.org/10.11591/edulearn.v9i3.1828

Ojwala, R. A., Buckingham, S., Neat, F., & Kitada, M. (2024). Understanding women's roles, experiences and barriers to participation in ocean science education in Kenya: Recommendations for better gender equality policy. *Marine Policy, 161*, Article 106000. https://doi.org/10.1016/j.marpol.2023.106000

Palimbunga, M. J. (2024). Patriarchy and stereotypes: The challenges of women's contribution in Indonesian politics. *Serat, 1(3)*, 72–79. https://doi.org/10.24198/serat.v1i3.54656

Park, G.-P., & French, B. F. (2013). Gender differences in the Foreign Language Classroom Anxiety Scale. *System, 41*(2), 462–471. https://doi.org/10.1016/j.system.2013.04.001

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/ssllt.2022.12.2.2

Rahman Hz, B. I. (2022). Exploring gender differences in public speaking anxiety. *Sawwa: Jurnal Studi Gender, 17(2)*, 247–266. https://doi.org/10.21580/sa.v17i2.14295

Rassaei, E. (2015). Oral corrective feedback, foreign language anxiety and L2 development. *System, 49*. https://doi.org/10.1016/j.system.2015.01.002

Romadloni, A., & Sari, L. (2025). An analysis of translation challenges in ESP programs: A rubric-based evaluation of polytechnic students' performance. *International Journal of Sustainable Social Culture, Science Technology, Management, and Law Humanities, 2*(1), 1–10. https://doi.org/10.71131/k28yv916

Saito, K., Dewaele, J. M., Abe, M., & In'nami, Y. (2018). Motivation, emotion, learning experience, and second language comprehensibility development in classroom settings: A cross-sectional and longitudinal study. *Language Learning, 68*(3). https://doi.org/10.1111/lang.12297

Sun, Q., Alhowail, A., & Beckmann, N. (2025). Is foreign language anxiety malleable? A systematic review of longitudinal observation studies. *System, 133*, Article 103782. https://doi.org/10.1016/j.system.2025.103782

Teimouri, Y., Goetze, J., & Plonsky, L. (2019). Second language anxiety and achievement: A meta-analysis—erratum. *Studies in Second Language Acquisition, 41*(2). https://doi.org/10.1017/s0272263119000445

Toyama, M., & Yamazaki, Y. (2021). Classroom interventions and foreign language anxiety: A systematic review with narrative approach. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.614184

Wei, L.-W. (2022). Analysis of Chinese EFL postgraduates' experiences with public speaking anxiety toward international conference presentation. *English Language Teaching, 15*(11), 52. https://doi.org/10.5539/elt.v15n11p52

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & Society, 1(2)*, 125–151. https://doi.org/10.1177/0891243287001002002

Widiastuti, T., Al-Shami, S. A., Mawardi, I., Zulaikha, S., Haron, R., Kasri, R. A., Al Mustofa, M. U., & Dewi, E. P. (2024). Capturing the barriers and strategic solutions for women empowerment: Delphi analytical network process. *Journal of Open Innovation: Technology, Market, and Complexity, 10(3)*, Article 100345. https://doi.org/10.1016/j.joitmc.2024.100345

Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELC Journal, 37*(3). https://doi.org/10.1177/0033688206071315

Zarei, M. A., Alibakhshi, G., & Nezakatgoo, B. (2024). Strategies employed by EFL teachers to cope with language learners' classroom anxiety. *TESOL Journal, 15*, Article e843. https://doi.org/10.1002/tesj.843