



Khawaja Yunus Ali University Journal

ISSN: 2791-3759 (Online) | 2521-3121 (Print)

Research Article

Understanding Psychological Barriers to Public English Speaking Among Bangladeshi Students: The Effects of Self-Efficacy, English Proficiency, and Language Lab Use

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ABSTRACT

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Received: 15 February 2026

Revised: 02 May 2026

Accepted: 28 May 2026

Published: 30 June 2026

Cite as:

Hosen, M.D., Khatun, M.T.,
Hossain, M.M., Kabir, M.S.,
(2026). Understanding
Psychological Barriers to
Public English Speaking
Among Bangladeshi
Students: The Effects of
Self-Efficacy, English
Proficiency, and Language
Lab Use. KYAU. Journal.
9(1):39-52. DOI:
<https://doi.org/10.61921/kyauj.v09i01.004>

This research explores the psychological factors that prevent Bangladeshi students from speaking English in public with reference to the interrelationships between Foreign Language Anxiety, self-efficacy, and perceptions of the utility of language labs. A quantitative research design was applied with a sample size of 382 students to analyze the data using Partial Least Squares Structural Equation Modeling. The findings suggest that psychological barriers significantly influence self-efficacy ($\beta = 0.261$, $p = 0.029$) and are a major force behind students using language labs as a coping strategy ($\beta = 0.502$, $p = 0.000$). The level of English proficiency was found to be a determining factor of self-efficacy ($\beta = 0.417$) and mediate foreign language anxiety. It is interesting to note that the direct correlation between the use of language labs and self-efficacy did not have any significant value ($\beta = 0.008$, $p = 0.902$), which indicates that technological resources cannot be effective without a well-organized pedagogical approach. The model explained 61.1% of the variance in self-efficacy. These findings point out the importance of incorporating affective variables alongside linguistic proficiency and propose the strategic utilization of technology-enhanced classroom environments to facilitate low-stakes practice and enhance communicative competence.

Keywords: EFL Learners; English Speaking Skills; Foreign Language Anxiety; Language Lab; Psychological Barriers; and Self-Efficacy

1. Introduction

Being proficient in English is one of the keys to success in the academic and professional world of a global society. It is not just for the university students of Bangladesh and other non-native English-speaking countries to speak English fluently; It is also a crucial skill for communicating with the world (Islam &

Stapa, 2021). But there is a common problem: these students - regardless of their grammar and vocabulary knowledge - face a barrier in speaking English in public as they are afraid of being judged and criticized for making a mistake (Indahyanti et al., 2023; Kulsum et al., 2025; Tran, 2022). This is not always related to their knowledge of the language but is associated with

their psychological problems, which has been extensively researched and discussed in the term Foreign Language Anxiety (FLA) (Dewaele and MacIntyre, 2022; Horwitz et al., 1986). FLA is built on the foundation of the fear of negative evaluation (fear of criticism), communication apprehension, and test anxiety. The students generally talk about their difficulties including nervousness, lack of confidence, shyness and the excessive fear of making mistakes or being laughed at by their peers (Liu & Jackson, 2008). Teimouri et al. (2019) states that psychological barriers can form a vicious cycle by delaying speaking practice due to worry and subsequently, delay fluency development. It also affects self-efficacy negatively by reinforcing the problem. Self-efficacy which refers to one's belief in one's abilities to perform certain tasks is a key to breaking through these barriers, and its interaction with anxiety is an area of current interest (Khajavy et al., 2017).

While this topic is researched in particular in the global context, it is rarely discussed in recent local research. While English is taught from primary to tertiary education, the emphasis is not always placed on improving their speaking ability, despite the fact that it is a compulsory subject. As a result, while students come to university with a theoretical understanding, they may not have the same level of confidence in speaking, which may result in poor academic performance, classroom participation and career prospects (Mobarak, 2020). While research worldwide on foreign language anxiety (FLA) has well established the existence of psychological obstacles, China-based studies have been mainly descriptive; most of them concentrate on exploring the causes of anxiety (Wu et al., 2022). There is a significant gap in the quantitative exploration of the complex interactions between important psychological factors such as anxiety, self-efficacy and motivation, as well as in the empirical evaluation of the perceived effectiveness of specific coping strategies, such as the language lab. To design targeted and empirically reliable research in line with the digital era, it is crucial to understand these dynamics.

The current research aims at systematically examining the psychological barriers that do not allow Bangladeshi students of any proficiency levels to talk English in public. The particular goals include measuring the strength of the relationship between these barriers and the self-efficacy of students,

outlining proficiency-level differences in those, and evaluating the usefulness of language lab as an enabling resource. The gained knowledge will be used to affect well-performed strategies to increase student confidence, communicative capabilities and alleviate language anxiety.

2. Literature Review

2.1 Foreign language anxiety

The Foreign Language Anxiety remains a developing research topic and is described as a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language acquisition that is a product of the distinctive nature of the learning process (Horwitz et al., 1986). Through meta-analyses and systematic reviews, (Teimouri et al., 2019) established its specificity to the context of second language acquisition and its frequency across global settings. Some empirical research continues to investigate the detrimental impact of FLA on the performance of oral communication. Students reduce their participation and avoid engaging in different communicative situations, and they face cognitive blocks due to their high levels of anxiety (MacIntyre & Gardner, 1994). High FLA has expanded this understanding to include reduced willingness to communicate (WTC) even on online learning platforms (Solhi, 2024). Recent research has found a significant cause of anxiety to be the learner's internal psychological experiences such as perfectionism and self-comparison (Khajavy et al., 2017).

2.2 Psychological barriers in Bangladeshi context

There is a unique milieu for examining FLA in the Bangladeshi education system. Recent studies provide updated insights to contextualize this milieu. In Bangladesh, English is recognized as an essential tool from the beginning of a student's schooling and is mandated as a compulsory subject from primary to higher secondary education (Chowdhury & Kabir, 2014). However, it is predominantly taught through traditional grammar-translation methods that prioritize grammatical accuracy over fluency (Rahman et al., 2024). This pedagogical approach, along with large class sizes and stressful examinations, creates an environment conducive to the development of psychological barriers in China (Hu et al., 2021). Additionally, recent research conducted in Bangladesh

confirms that the fear of negative feedback from peers and teachers, peer criticism, and perceived low proficiency in speaking are the main reasons of anxiety (Mobarak, 2020). The social context is also an important aspect in preventing students from improving their speech fluency. "Saving face" is a strong cultural construct which can make students reluctant to speak out in class, even when they have sufficient English language proficiency, because they fear being judged by their peers or teachers, which can have a negative impact on their motivation to practice and hence improve their speaking skills.

2.3 The role of self-efficacy

The core notion of Bandura's (1997) social cognitive theory, is connected to successful language learning. It has also been recently highlighted as a strong predictor of motivation, learning strategies and achievement (Mills, 2014). The current study explores the association between FLA and self-efficacy. High self-efficacy helps reduce anxiety in difficult situations ("Self-efficacy: The exercise of control", 1997). In turn, anxiety undermines self-efficacy and creates a downward spiral of skill development and avoidance (Teimouri et al., 2019). A longitudinal study presented the protective role of confidence by showing that initial levels of self-efficacy were a vital predictor of change in anxiety over a semester (Shirvan et al., 2018). Furthermore, studies are increasingly connecting these constructs to the L2 Motivational Self System Theory. These studies suggest that a strong sense of self-efficacy, buttressed by a vivid 'ideal L2 self' can buffer against anxiety (Roshandel et al., 2017).

2.4 Proficiency as a moderating variable

Studies have supported the inverse relationship between language proficiency and FLA (Liu, 2006). This connection is now viewed as dynamic and reciprocal; the less proficiency, the more communication failures, therefore, the more anxiety, whereas the more anxiety, the fewer the cognitive processes that allow one to acquire higher proficiency (MacIntyre & Gardner, 1994). Anxiety is not a predetermined trait of individuals; it can be changed and adjusted to the attainment of skills (Teimouri et al., 2019). The more learners achieve proficiency due to effective communicative experiences, the more confidence they have and the less anxiety they feel

(Islam & Stapa, 2021). This trend is critical in understanding the stage-related interventions, especially in assisting novice and intermediate learners who are most susceptible to the adverse effects of FLA.

2.5 Coping mechanisms and supportive environments

The investigation of effective interventions against FLA is still developing. Scholars actively encourage the development of low-anxiety classrooms (Young, 1991; Gregersen, 2020). In addition to overall pedagogical changes, institutional interventions, especially those based on technology, have become more notable (Tabasi et al., 2024; Nurmala et al., 2023). These studies focus on using technology-enhanced language learning environments, including advanced language labs, virtual reality (VR), and mobile-assisted learning (Shadiev et al., 2020). Such settings may alleviate anxiety by offering the chance to practice privately and at a self-paced speed without the immediate fear of being judged (Kaplan-Rakowski & Gruber, 2023; Stupar-Rutenfrans et al., 2017). It has recently been demonstrated that organized training in VR simulations can considerably decrease FLA (Kaplan-Rakowski & Gruber, 2023) and enhance WTC (Ebadi & Ebadijalal, 2020). However, while researches have been conducted on the relationship between FLA and student self-efficacy globally, empirical studies measuring the perceived effectiveness and correlation of standard language labs with self-efficacy development and anxiety reduction in the Bangladeshi context remain scarce. The study has focused on particular national contexts, such as China, rather than on a coping mechanism (such as a language lab) or on the Bangladeshi context specifically (Wu et al., 2022).

This study initially aims to fill this research gap. This research uses a quantitative research methodology to provide solid and data-driven insights relevant to the Bangladeshi educational setting, which is reshaping its education system with the integration of technological tools. The results will help educators and policymakers develop evidence-based strategies, allowing them to address the psychological factors of language learning.

3. Conceptual framework

We developed the following conceptual framework [Figure:1] based on an extensive literature review, representing how external factors, psychological barriers, proficiency level, and the language lab significantly affect self-efficacy in speaking English.

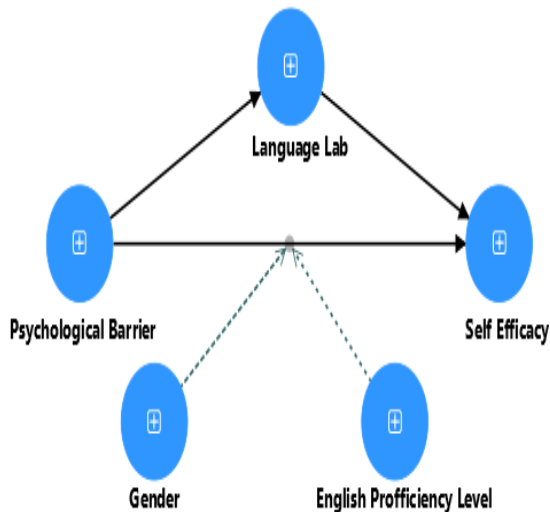


Figure 1 Conceptual Framework

- H1. Psychological barriers (Foreign Language Anxiety-FLA) have a significant negative effect on learners' self-efficacy in speaking English.
- H2. Psychological barriers (FLA) significantly influence students' use of the language lab as a coping mechanism for improving English speaking skills.
- H3. The use of the language lab positively influences students' self-efficacy in speaking English.
- H4. The language lab significantly mediates the relationship between psychological barriers (FLA) and students' self-efficacy in speaking English.
- H5. English proficiency level moderates the relationship between psychological barriers and self-efficacy, such that the impact of psychological barriers on self-efficacy varies across different proficiency levels.
- H6. Gender significantly influences the level of psychological barriers experienced by students when speaking English.

- H7. Gender indirectly affects self-efficacy in speaking English through psychological barriers.

4. Methodology

4.1 Research Design

This study employed a quantitative research design, aiming to examine psychological hindrances to public English speaking and the coping strategies students use, particularly those involving language labs. The quantitative approach was deemed suitable since it enables the gathering of numerical data of a sufficiently large sample and facilitates the statistical analysis of the connections between the main variables. Furthermore, quantitative research helps to test a hypothesis and apply the results to a specific population ((W. & David, 2017)).

4.2 Sample Size and Sampling Method

The respondents were carefully selected through a non-probability convenience sampling method aimed at including individuals with diverse academic backgrounds. The sample population consisted of school and college students, encompassing both undergraduate and graduate individuals, who reported difficulties in speaking English before an audience. There were 382 valid responses gathered and used in the final analysis. This is deemed an appropriate sample size for structural equation modeling analysis and sufficient to fulfill the minimum sample requirements of Partial Least Squares Structural Equation Modeling (PLS-SEM) (Hair et al., 2014; Jhantasana, 2023). The Results section (Table 1) displays the demographic information of the participants.

4.3 Development of Instrument and Questionnaire

A structured questionnaire was used to collect the data and to measure the constructs of interest. The instrument contained the items concerning three main constructs:

1. Psychological Barriers (PB) - the measurement of fear of negative assessment, anxiety, and lack of confidence in public English speaking.

2. Self-Efficacy in Speaking English (SE) - a measure of the confidence, perceived ability, and perceived comfort of the learners in communicating in English.
3. Language Lab Usage (LL) - assesses students' perception of using language laboratories as a coping strategy for improved speaking.

The measures of psychological barriers used were based on the Foreign Language Classroom Anxiety framework (Horwitz et al., 1986). All items were measured on a five-point Likert scale, 1–5 (Strongly Disagree to Strongly Agree). Demographic factors (gender and level of English proficiency) were also present in the questionnaire. The reliability and convergent validity of the measurement scales were subsequently evaluated using Cronbach's alpha, composite reliability, and average variance extracted.

4.4 Data Collection Procedure

Online and offline surveys were used to collect data. In the case of university students, questionnaires were electronically administered by the researchers via online platforms. In the case of school and college students, researchers distributed printed questionnaires in person. All respondents were clearly informed about the purpose of the study before participation, and informed consent was obtained. The respondents were well informed of the study and their consent was sought. The respondents were guaranteed that their answers would be kept anonymous and confidential, which helped to encourage them to answer truthfully and without prejudice about their experiences and views of public English speaking.

4.5 Data Analysis

The researchers imported the data into Microsoft Excel and then carefully screened it to check for missing or inaccurate data. Then the data was cleaned and statistical analyses were performed in SPSS 25 and SmartPLS. The researchers first calculated descriptive statistics (means, standard deviations and

frequencies) to show the demographic characteristics of the respondents and the core study variables. Next, the relationships between the constructs were analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The analysis was done in two steps:

i) Measurement Model Assessment

This involved tests for internal consistency reliability and convergent validity (Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE) tests) and tests for discriminant validity (using the HTMT ratio and Fornell-Larcker criterion).

ii) Structural Model Assessment

This model tested the proposed relationships between the constructs using path coefficients, p-values (significance levels), and R^2 (coefficient of determination).

These methods allowed for a full assessment of the proposed research model, and its relationships between psychological barriers, English language laboratories use, English proficiency level, gender and self-efficacy.

4.6 Measurement Items and Construct Operationalization

The constructs employed in this study were measured through various assessment items derived from previously validated scales in the literature. Psychological barriers were assessed using items from the Foreign Language Classroom Anxiety framework (Horwitz et al., 1986). Self-efficacy items were created to measure how confident and capable learners feel about speaking English. Language lab items evaluated students' attitudes towards the use and educational atmosphere of language laboratories as facilitators for enhancing speaking proficiency (Table 1). We used a five-point Likert scale to rate everything, with 1 being "Strongly Disagree" and 5 being "Strongly Agree".

Table 1 Measurement Items

Construct	Description	Number of Items	Source
Psychological Barriers (PB)	Measures anxiety, fear of mistakes, and lack of confidence in public English speaking	9	Adapted from (Horwitz, HORWITZ, & Cope, Foreign Language Classroom Anxiety, 1986)
Self-Efficacy (SE)	Measures students' confidence and perceived ability to communicate effectively in English	11	Adapted from (Self-efficacy: the exercise of control, 1997)
Language Lab (LL)	Measures perceptions of language lab usefulness and supportive learning environment	10	Self
English Proficiency Level (EPL)	Self-reported proficiency level in English	1	Demographic
Gender (G)	Participant gender	1	Demographic

Source: Authors' Calculation

5. Ethical Considerations

The study maintained high standards of research ethics. The respondents were fully informed about the objectives of the study and they participated and responded voluntarily. All the participants were informed and gave their consent prior to data collection. Privacy was ensured by not collecting any

personally identifiable information and by analyzing aggregated responses. The participants were assured that their information would be used solely for academic research. The study was conducted following the current standards of research ethics in social science, thus safeguarding the privacy and rights of all participants.

6. Results

The following section summarizes the empirical results of the statistical analyses, beginning with descriptive statistics, followed by the two evaluation

models - the measurement and structural models (Nyamekye et al., 2025).

Table 2 Demographic characteristics of participants (N=382)

Characteristic	Category	n	%
Age (Mean $\pm$ SD)		22.4 $\pm$ 6.2	
Gender	Male	106	27.7%
	Female	276	72.3%
Educational Level	School/College	42	11.0%
	Undergraduate	260	68.1%
	Graduate	80	20.9%
English Proficiency	Beginner	108	28.3%
	Intermediate	222	58.1%
	Advanced	52	13.6%
Academic Discipline	Arts/Humanities	159	41.6%
	Sciences	91	23.8%
	Business Studies	73	19.1%
	Engineering/Technology	37	9.7%
	Biomedical Science	15	3.9%
	Other	7	1.8%

Source: Authors' Calculation

A total of N=382 participants participated and completed the questionnaire distributed among them. Our sample population was mostly young adults, with an average age of 22.4 years (SD = 6.2). Most of the sample were female (72.3%) and undergraduate

students (68.1%). The most common self-reported level of English proficiency was "Intermediate" (58.1%) and the majority of the sample were from the Arts/Humanities field (41.6%). See Table 2 for details of the sample.

A. Measurement model assessment:

Table 3 Construct Reliability and Validity

Constructs	Composite Reliability	Cronbach's Alpha	AVE
English Proficiency Level (EPL)	0.933	0.930	0.747
Language Lab (LL)	0.930	0.877	0.665
Psychological Barrier (PB)	0.945	0.944	0.856
Gender (G)	0.831	0.830	0.855
Self-Efficacy (SE)	0.940	0.938	0.800

Source: Authors' Calculation

The CR, Cronbach's Alpha, and AVE have been used to assess the convergent validity and reliability of the constructs (Table 3). The constructs exhibit good reliability as the CR and Cronbach's Alpha values are above the suggested level of 0.70. Additionally, the AVE values for EPL (0.747), LL (0.665), PB (0.856),

G (0.855), and SE (0.800) are above the acceptable level of 0.50, indicating good convergent validity. Thus, the measurement model demonstrates satisfactory reliability and convergent validity, with all constructs exceeding the recommended thresholds of 0.70 for reliability and 0.50 for AVE.

Table 4 Discriminant Validity (HTMT Ratio)

Constructs	EPL	G	LL	PB	SE	EPL x PB	G x PB
EPL							
G	0.475						
LL	0.454	0.685					
PB	0.454	0.674	0.637				
SE	0.513	0.539	0.553	0.460			
EPL x PB	0.389	0.754	0.692	0.655	0.610		
G x PB	0.450	0.771	0.661	0.785	0.498	0.693	

Source: Authors' Calculation

The table 4 presents the correlations among the study constructs. The results show that all variables have positive relationships with each other. Gender (0.475), Language Lab (0.454), Psychological Barrier (0.454), and Self-Efficiency (0.513) have moderate correlations with English Proficiency Level (EPL). Language Lab (LL) has a very close relationship with Gender (0.685), a moderate relationship with

Psychological Barrier (0.637) and Self-efficiency (0.553). There are also moderate relations between Psychological Barrier (PB) and other constructs. The interaction terms EPL x PB and G x PB show a relatively better correlation with some more variables, especially, Gender (0.754 and 0.771), and Psychological Barrier (0.655 and 0.785).

Table 5 Discriminant Validity (Fornell-Larcker criterion)

Constructs	EPL	G	LL	PB	SE
EPL	0.864				
G	0.701	0.925			
LL	0.449	0.498	0.816		
PB	0.545	0.520	0.502	0.925	
SE	0.709	0.525	0.395	0.574	0.895

Source: Authors' Calculation

The table 5 shows Fornell-Larcker criterion, which is applied to determine the discriminant validity among the constructs. The diagonal values indicate the square root of the Average Variance Extracted (AVE) of each construct, which are EPL (0.864), G (0.925), LL (0.816), PB (0.925), and SE (0.895). These values are positive and greater than their respective inter-

construct correlations signifying sufficient discriminant validity. For example, the square root of AVE for EPL (0.864) is greater than its correlations with G (0.701), LL (0.449), PB (0.545), and SE (0.709). The results confirm that each construct is distinct and the measurement model satisfies the requirement of discriminant validity.

B. Structural Model Assessment

Table 6 Coefficient of Determination (R-squared)

	R-square	Adjusted R-square
Self-Efficacy	0.611	0.585

Source: Authors' Calculation

The table 6 above displays the adjusted R-squared and the coefficient of determination (R-squared) for the dependent construct, Self-Efficacy. An R-squared value of 0.611 indicates that the predictor variables in the model explain approximately 61.1% of the variance in Self-Efficacy. This indicates strong explanatory power for the model. The adjusted R-

squared value of 0.585, which takes into account the number of predictors and the size of the sample, remains close to the R-squared value. This indicates that the model is not over fitted and the predictors included in it are helpful to explain self-efficacy in public speaking English.

C. Hypothesis Testing

Table 7 Hypothesis Testing

Relationship	Path Coefficient	P-value	Decision
EPL > SE	0.417	0.000	Significant
EPL > PB > SE	0.324	0.000	Significant
G > SE	0.136	0.188	Not Significant
G > PB > SE	0.229	0.010	Significant
LL > SE	0.008	0.902	Not Significant
PB > LL	0.502	0.000	Significant
PB > SE	0.261	0.029	Significant

Source: Authors' Calculation

The table 7 indicates the findings of the structural model analysis that indicates the relations of the

constructs. The results show that the effect of English Proficiency Level (EPL) on Self-Efficacy (SE) is

significant ($\beta = 0.417$, $p = 0.000$). Moreover, the mediating role of PB is also important since the indirect correlation between EPL and Psychological Barrier (PB) is also significant ($\beta = 0.324$, $p = 0.000$). However, Gender (G) does not directly affect SE ($\beta = 0.136$, $p = 0.188$). Conversely, G PB SE (indirect) ($\beta = 0.229$, $p = 0.010$) is important, indicating that PB mediates this relationship. The direct interaction between Language Lab (LL) and SE does not have a significant relationship ($\beta = 0.008$, $p = 0.902$). Furthermore, Psychological Barrier (PB) affects Language Lab (LL) significantly ($\beta = 0.502$, $p = 0.000$) and has a significant positive impact on SE ($\beta = 0.261$, $p = 0.029$). The results of the study indicate that EPL and PB are significant in determining self-efficacy of students and that not all direct effect like those of Gender and Language Lab have significant effects on SE.

7. Discussion

The present paper explored the relationship between psychological barriers (PB), English proficiency level (EPL), language lab (LL), gender (G), and self-efficacy (SE) of EFL learners. The results are a priceless experience of how psychological and contextual variables interact to find out the level of confidence of learners to speak English. The results emphasize the leading importance of the psychological barriers and language knowledge in developing self-efficacy and show a less obvious role of language labs and gender.

7.1 Psychological Barriers and Self-Efficacy in Speaking English (H_1)

The results suggest that the effect of psychological barriers is significant on the self-efficacy of students in speaking English ($\beta = 0.261$, $p = 0.029$). This finding supports the H_1 and confirms that emotional and psychological factors such as anxiety, fear of errors and fear of communication are significant predictors of the confidence of the learners to use the language. This observation is in line with recent research that has focused on the effects of Foreign Language Anxiety (FLA) on the confidence and performance of learners. As an example, anxiety is closely linked to decreased self-confidence and diminished classroom engagement. More recent studies by Botes, Dewaele,

and Greiff (2022) also affirm that psychological barriers play a significant role in influencing self-beliefs and readiness of learners to use a foreign language (Botes et al., 2022). Equally, research has discovered that language anxiety has a negative impact on speaking self-efficacy and results in avoidance behaviors in EFL classrooms (Chew & Chen, 2021; Maher & King, 2023; Okyar, 2023). In light of social cognitive theory, emotional states and perceived competence determine self-efficacy ("Self-Efficacy: The Exercise of Control," 1997). A learner develops a fear of negative judgment or evaluation, which lowers their belief in their competence in their communication. Hence, the present results support the perception that psychological barriers are a severe impediment to communicative competence in EFL situations.

7.2 Psychological Barriers and Language Lab Usage (H_2)

The findings indicate that psychological barriers have a strong effect on students' use of language labs ($\beta = 0.502$, $p = 0.000$). This indicates that learners who have greater anxiety or communication anxiety are more likely to resort to technology tools like language labs as a coping strategy to enhance their speaking experience. This finding aligns with the growing body of research on technology-mediated language learning environments. Research in recent years suggests that online learning tools have the potential to create a more secure and less threatening environment, where language can be practiced. In particular, Shadiev and Yang (2020) emphasized that technology-assisted language learning environments enable learners to practice speaking without the immediate pressure of classroom assessment. Similarly, Huang & Li (2024) found that students with speaking anxiety tend to favor technology-based learning platforms due to their higher levels of autonomy and reduced pressure. The close connection between psychological barriers and language lab usage in the current study indicates that learners feel that language labs are effective learning tools. Nevertheless, the success of these tools might be related to the manner in which they are incorporated into pedagogical practices.

7.3 Language Lab Usage and Self-Efficacy (H_3)

However, contrary to expectations, the study revealed that the direct effect of language lab use on students' self-efficacy was not significant ($\beta = 0.008$, $p = 0.902$). This finding suggests that though students can use language labs as a form of coping, the fact that technological facilities are available or used does not necessarily mean that students will gain confidence in speaking English. This observation proves the thesis that technology is not sufficient to ensure a better learning outcome. Recent research has focused on the notion that instructional design and pedagogical integration are critical to the effectiveness of technological tools. Liu (2018) suggests that technology-based language learning classrooms enhance speaking skill performance. On the same note, Tai & Chen (2022) established that digital learning tools can improve speaking confidence. Consequently, the insignificant correlation in the present study implies that language laboratories might need better-organized pedagogical models that can be effective in promoting self-efficacy in learners.

7.4 Mediating Role of Language Labs (H_4)

The fourth hypothesis was that language labs mediate the correlation between psychological barriers and self-efficacy. The results, however, are not in support of this mediation effect since the path between the language lab usage and self-efficacy is not significant. This observation implies that although higher-anxiety learners might make better use of language labs, the lab setting does not have a significant impact on their confidence in speaking English. That is, language labs serve as a coping tool and not a transformative tool in the development of self-efficacy. This interpretation is supported by recent research. In particular, empirical evidence indicates that digital environments are mostly auxiliary technologies that help to navigate the environment but are not a transformative framework that systematically changes internal beliefs or students' self-competence (Liao, 2025). Devoid of such pedagogical design, the technological tools can be helpful in the acquisition of skills but will not have any significant impact on learners' affective aspects, including confidence or anxiety.

7.5 Moderating Role of English Proficiency Level (H_5)

The findings demonstrate that the level of English proficiency directly affects self-efficacy ($\beta = 0.417$, $p = 0.000$) and indirectly affects self-efficacy via psychological barriers ($\beta = 0.324$, $p = 0.000$). These results affirm that language proficiency is a major factor in determining the confidence and the psychological preparedness of learners to communicate in English. Recent research indicates the close interrelation between proficiency and self-efficacy. As an illustration Alamer & Almulhim (2021) discovered that anxiety and lack of confidence in communication were lower among individuals with high language proficiency. The greater the level of linguistic competence they achieve, the more prepared learners are to handle the intrinsic language acquisition difficulties, and the stronger their sense of self-efficacy (Al-Khresheh & Alkursheh, 2024). Moreover, individuals with high self-efficacy are in a better place to control their learning emotions, which helps to avoid avoidance and enhance their psychological strength in tackling complicated linguistic problems (Xu & Ying, 2025). The current results indicate that enhancing the linguistic competence of learners can also help to decrease the barriers of a psychological nature and boost their self-efficacy. Therefore, the development of proficiency seems to be a major aspect of breaking the loop of anxiety and low confidence among EFL learners.

7.6 Gender Differences in Psychological Barriers (H_6 & H_7)

The analysis revealed that gender has no significant direct influence on self-efficacy ($\beta = 0.136$, $p = 0.188$). Nevertheless, Gender $\rightarrow$ PB $\rightarrow$ SE is a significant indirect relationship ($\beta = 0.229$, $p = 0.010$), which indicates gender can affect self-efficacy via psychological barriers. This result is in line with the recent literature that indicates that gender disparities in language learning results are usually conditioned by psychological or contextual factors. Jin et al. (2021) claimed that gender differences in language anxiety tend to be minor and uneven across contexts. Similarly, meta-analytic data show that demographic factors (e.g., gender) do not have a significant effect on the relationship between language anxiety and

academic performance (Piniel & Zólyomi, 2022). Thus, the findings show that gender is not a determinant variable for learners' speaking confidence, but it can have an indirect influence on psychological experiences in language learning.

7.7 Implications for Language Teaching

The results of this research have a few implications for pedagogy. To begin with, teachers must focus on strategies that overcome psychological obstacles to learning a language, including a favorable classroom atmosphere, cooperative learning tasks, and positive feedback. Second, to strengthen self-efficacy and decrease speaking anxiety, it is critical to improve learners' English proficiency. Third, language laboratories need to be incorporated into the curriculum through incorporating structured speaking tasks, interactive activities, and feedback to maximize their potential benefits. The mere availability of technological means and lack of pedagogical support might not make any significant change in learners' English-speaking confidence.

7.8 Future Research Directions

Future studies should investigate the potential of technology-enhanced interventions such as virtual reality games, AI-powered speaking applications, and interactive role-playing simulations to alleviate psychological barriers and bolster self-efficacy among language learners. Longitudinal designs may provide more information on how psychological barriers and self-efficacy will develop during the process of language acquisition. In addition, it would be crucial to investigate socio-cultural factors as well as the different learning environments to determine the strength of the observed relationships between proficiency, anxiety, and self-efficacy in a diverse learner population. Also, a more detailed view of the subjective aspects that may lie behind these psychological barriers would be provided by the use of the qualitative approach, such as semi-structured interviews or longitudinal narrative inquiries.

Acknowledgement

The researchers would like to acknowledge the students who participated in this research. The teachers of the institutions are also given the

8. Conclusion

Overall, the current research offers strong empirical data proving that foreign language anxiety and psychological barriers have a considerable negative direct impact on speaking self-efficacy in English as a Foreign language students, thus highlighting the fact that the process of language acquisition is still burdened with psychological issues. It is interesting to note that a level of English proficiency becomes a crucial moderator that lowers the negative effect of PB on SE, whereas the use of language labs does not have a significant mediation or moderation effect and they only have a strong impact on the outcome when incorporated into systematic pedagogical systems. Moreover, the impact of gender on SE is indirect via PB, which is consistent with the literature on the topic, which stresses the mediating role of affective factors instead of demographic variables. These results contribute to developing theoretical frameworks of SE in EFL settings as they shed light on the protective role played by linguistic expertise and the constraints of independent technological applications in promoting radical shifts in the affective facets of learners.

This study expands on the social cognitive theory by shedding light on the interplay of the cognitive, emotional and proficiency-related factors and offers a more nuanced interpretation of SE development in anxiety-provoking situations. Pragmatically, teachers should consider holistic strategies, such as anxiety-mitigation approaches (e.g., mindfulness-based techniques and positive reinforcement), curriculum based on proficiency with scaffolded communicative exercises, and teacher-enhanced use of language lab with interactive feedback systems. These methods could build communicative proficiency and allow students to overcome psychological obstacles in English contexts. This research will offer a step-by-step guide that stakeholders can follow to address deeply entrenched challenges, and ultimately increase equitable language education.

appreciation of letting go of their students to collect data by the researchers.

Author Contributions

Md. Sozib Hosen: Conceptualization, Methodology, Original Draft preparation, Thematic synthesis, Discussion, Manuscript Finalization; **Mst. Tanna Khatun:** Data Analysis and interpretation, writing–Review & Editing; **Md. Motahar Hossain:** Methodology, Validation, writing–Review & Editing, Online support, Manuscript preparation; **Md. Shahjahan Kabir:** Conceptualization, Methodology, Writing – Review & Editing, Overall Supervision

Funding: This research received no external funding.

Institutional Review Board Statement: Not relevant.

Informed Consent Statement: Not applicable.

Conflicts of Interest: The authors declare no conflicts of interest.

References

- Alamer, A. A., & Almulhim, F. N. (2021). Foreign Language Speaking Anxiety and Its Relationship with Self-Efficacy among Saudi EFL Students. *International Journal of English Language and Linguistics Research*, 9(1), 1.
- Al-Khresheh, H., & Alkursheh, M. (2024). The impact of English language proficiency on students' self-efficacy and communication apprehension in EFL contexts. *Journal of Second Language Teaching & Research*, 1(1).
- Botes, E., Dewaele, J., & Greiff, S. (2022). Taking stock: A meta-analysis of the effects of foreign language enjoyment. *Studies in Second Language Learning and Teaching*, 12(2), 205. <https://doi.org/10.14746/ssllt.2022.12.2.3>
- Chew, E., & Chen, G. (2021). Foreign Language Speaking Anxiety and Self-Efficacy: A Systematic Review. *Frontiers in Psychology*, 12(680327).
- Chowdhury, R., & Kabir, A. H. (2014). Language wars: English education policy and practice in Bangladesh. *Multilingual Education*, 4(1). <https://doi.org/10.1186/s13616-014-0021-2>
- Ebadi, S., & Ebadijalal, M. (2020). The effect of virtual reality on EFL learners' foreign language anxiety and willingness to communicate. *Teaching English Language*, 14(2), 273.
- Gregersen, T. (2020). Laughter and the language classroom: Effects on anxiety, motivation, and learning. *System*, 90, 102213.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). In *Digital Commons - Kennesaw State University (Kennesaw State University)*. Kennesaw State University. <https://digitalcommons.kennesaw.edu/facbooks2014/39>
- Horwitz, E. K., HORWITZ, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *Modern Language Journal*, 70(2), 125. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- Hu, X., Zhang, X., & McGeown, S. (2021). Foreign language anxiety and achievement: A study of primary school students learning English in China. *Language Teaching Research*, 28(4), 1594. <https://doi.org/10.1177/13621688211032332>
- Huang, Y., & Li, M. (2024). Exploring the relationship between foreign language speaking anxiety and willingness to communicate in a technology-enhanced learning environment. *Computer Assisted Language Learning*.
- Indahyanti, R., Asrida, A., & Sumarsih, S. (2023). Psychological Barriers in Speaking English: A Case Study of Indonesian EFL Students. *Journal of English Language Teaching*, 12(1), 163.
- Islam, M. S., & Stapa, M. (2021). Students' low proficiency in spoken English in private universities in Bangladesh: reasons and remedies. *Language Testing in Asia*, 11(1). <https://doi.org/10.1186/s40468-021-00139-0>
- Jhantanasana, C. (2023). Should A Rule of Thumb be used to Calculate PLS-SEM Sample Size. *Asia*

- Social Issues*, 16(5).
<https://doi.org/10.48048/asi.2023.254658>
- Jin, Y., Dewaele, J.-M., & MacIntyre, P. D. (2021). The dynamic interplay between foreign language anxiety, foreign language enjoyment and willingness to communicate: A daily diary study. *Language Teaching Research*, 25(5), 724.
- Kaplan-Rakowski, R., & Gruber, A. (2023). The impact of high-immersion virtual reality on foreign language anxiety. *Smart Learning Environments*, 10(1).
<https://doi.org/10.1186/s40561-023-00263-9>
- Khajavy, G. H., Ghonsooly, B., & Fatemi, A. H. (2017). The relationship between Iranian EFL learners' motivational self-system and foreign language anxiety. *Journal of Language and Linguistic Studies*, 13(1), 133.
- Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2017). ROLE OF THE EMOTIONS AND CLASSROOM ENVIRONMENT IN WILLINGNESS TO COMMUNICATE. *Studies in Second Language Acquisition*, 40(3), 605.
<https://doi.org/10.1017/s0272263117000304>
- Kulsum, R., Ningsih, E. W., & Ambarini, I. (2025). The Psychological Barriers in Speaking English Faced by Students at an English Education Study Program. *Journal of English Language Teaching and Learning*, 6(1).
- Liao, H. C. (2025). The role of virtual reality in reducing foreign language anxiety and enhancing speaking performance: A meta-analysis. *Computer Assisted Language Learning*, 38(1), 1.
- Liu, m. (2006). Anxiety in efl classrooms: causes and consequences. *Tesl Reporter*, 39(20), 20.
- Liu, M., & Jackson, J. (2008). An Exploration of Chinese EFL Learners' Unwillingness to Communicate and Foreign Language Anxiety. *Modern Language Journal*, 92(1), 71.
<https://doi.org/10.1111/j.1540-4781.2008.00687.x>
- Liu, Y. (2018). The effect of mobile-assisted language learning on EFL learners' speaking proficiency and foreign language anxiety. *Journal of Educational Technology Development and Exchange*, 11(1), 1.
- MacIntyre, P. D., & Gardner, R. C. (1994). The Subtle Effects of Language Anxiety on Cognitive Processing in the Second Language. *Language Learning*, 44(2), 283.
<https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- Maher, A., & King, J. (2023). Foreign language speaking anxiety and self-efficacy among Saudi female EFL students. *English Language Teaching*, 16(1), 1.
- Mills, N. (2014). Self-Efficacy in Second Language Acquisition. In *Channel View Publications eBooks* (p. 6).
<https://doi.org/10.2307/jj.26932053.5>
- Mobarak, k. (2020). Reasons for english language speaking anxiety among students in private universities of bangladesh. *Journal of Education and Social Science*, 16, 35.
- Nurmala, R., Marzukie, F. M., & Sari, N. (2023). The Effectiveness of Mobile-Assisted Language Learning (MALL) in Reducing Foreign Language Speaking Anxiety. *Journal of English Language and Literature*, 8(1), 54.
- Nyamekye, E., Mutawakil, A.-R., & Slippe, D. P. (2025). The predictive impact of linguistic anxiety and 'fear of lecturers' on students' willingness to communicate in class. *Discover Psychology*, 5(1).
<https://doi.org/10.1007/s44202-025-00348-1>
- Okyar, H. (2023). Exploring the relationship between foreign language speaking anxiety and willingness to communicate among Turkish EFL learners. *Journal of Language and Linguistic Studies*, 19(1), 1.
- Piniel, K., & Zólyomi, A. (2022). Revisiting the relationship between foreign language anxiety and academic performance: A meta-analysis. *Studies in Second Language Acquisition*, 44(1), 1.
- Rahman, Md. M., Jamila, M., & Yeasmin, F. (2024). Exploring English Teaching Materials and Methods at the HSC Level: An Empirical Study. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 16(2).
<https://doi.org/10.21659/rupkatha.v16n2.10g>

- Roshandel, J., Ghonsooly, B., & Ghanizadeh, A. (2017). L2 Motivational Self-System and Self-Efficacy: A Quantitative Survey-Based Study. *International Journal of Instruction*, 11(1), 329. <https://doi.org/10.12973/iji.2018.11123a>
- Self-efficacy: the exercise of control. (1997). *Choice Reviews Online*, 35(3), 35. <https://doi.org/10.5860/choice.35-1826>
- Shadiev, R., Sun, A., & Huang, Y. (2020). Examining the effect of virtual reality on foreign language anxiety and willingness to communicate in English as a foreign language learning. *Computer Assisted Language Learning*, 37(1), 22.
- Shirvan, M. E., Maftoon, P., & Papi, M. (2018). Self-efficacy, anxiety, and willingness to communicate in a second language: A longitudinal study. *Language Teaching Research*, 22(4), 488.
- Solhi, M. (2024). The Impact of EFL Learners' Negative Emotional Orientations on (Un)Willingness to Communicate in In-person and Online L2 Learning Contexts. *Journal of Psycholinguistic Research*, 53(2), 26. <https://doi.org/10.1007/s10936-024-10071-y>
- Stupar-Rutenfrans, S., Kaplan-Rakowski, R., & Gruber, A. (2017). Using virtual reality to reduce public speaking anxiety. *Journal of Medical Internet Research*, 19(5).
- Tabasi, V., Askarzadeh, E., & Birjandi, P. (2024). The impact of digital storytelling on EFL learners' foreign language anxiety and speaking self-efficacy. *Computer Assisted Language Learning*, 37(2), 350.
- Tai, H., & Chen, Y. (2022). The impact of digital storytelling on EFL learners' speaking proficiency and foreign language anxiety. *Computer Assisted Language Learning*, 35, 164.
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019a). Foreign language anxiety and second language acquisition: A meta-analysis. *Studies in Second Language Acquisition*, 41(3), 519.
- Teimouri, Y., Goetze, J., & Plonsky, L. (2019b). SECOND LANGUAGE ANXIETY AND ACHIEVEMENT. *Studies in Second Language Acquisition*, 41(2), 363. <https://doi.org/10.1017/s0272263118000311>
- Tran, T. T. T. (2022). Exploring factors affecting speaking anxiety among Vietnamese EFL students. *Journal of English Language Teaching and Linguistics*, 7(1), 1.
- W., C., John, & David, C., J. (2017). Research design: Qualitative, quantitative, and mixed methods approaches (fifth edition). In *Zenodo (CERN European Organization for Nuclear Research)*. European Organization for Nuclear Research. <https://doi.org/10.5281/zenodo.15338836>
- Wu, X., Yang, H., Liu, J., & Liu, Z. (2022). English use anxiety, motivation, self-efficacy, and their predictive effects on Chinese top university students' English achievements. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.953600>
- Xu, Y., & Ying, Y. (2025). The interplay between foreign language anxiety, self-efficacy, and speaking performance in EFL contexts: A qualitative study. *Journal of Language Teaching and Research*, 16(1), 1.
- Young, D. J. (1991). An investigation of students' speaking anxiety in a second language classroom. *Modern Language Journal*, 75(4), 539.