

An Empirical Study on the Relationships among Foreign Language Learning Anxiety, Learning Motivation, and Classroom Participation among College Students

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Abstract: With the continuous deepening of globalization, foreign language proficiency has emerged as one of the key indicators for assessing an individual's comprehensive competence and international competitiveness. As a core foreign language course, English directly influences college students' future career competitiveness, while foreign language anxiety constitutes a crucial factor affecting language learning outcomes. To explore the relationships among college students' classroom participation, foreign language learning anxiety, and learning motivation, this study sampled 303 students from Guilin University of Technology and proposed two research objectives: first, to examine the overall levels and characteristics of foreign language anxiety, learning motivation, and classroom participation; second, to analyze the interrelationships among these three variables. The study employed the Foreign Language Classroom Anxiety Scale (FLCAS), a learning motivation scale, and a classroom participation scale for measurement, and conducted data analysis using SPSS 26.0. The findings reveal that foreign language anxiety is significantly negatively correlated with both learning motivation and classroom participation, indicating that increased levels of foreign language anxiety suppress students' learning motivation and reduce classroom participation. A significant positive correlation exists between learning motivation and classroom participation, indicating that stronger learning motivation is associated with higher levels of classroom participation. Mediation analysis further reveals that foreign language anxiety plays a partial mediating role in the relationship between learning motivation and classroom participation, suggesting that learning motivation not only directly enhances classroom participation but also indirectly improves it by reducing students' levels of foreign language anxiety. Nevertheless, the practical application of these findings warrants further investigation. Future research may expand the sample to include diverse regions and cultural backgrounds and employ longitudinal or experimental designs to further explore the dynamic effects of various forms of social support and psychological variables on the development of foreign language competence.

Keywords: Foreign language teaching, Foreign language learning anxiety, Learning motivation, Classroom participation.

1. Introduction

As globalization deepens, foreign language proficiency has emerged as a critical indicator of an individual's comprehensive competence and international competitiveness. For college students, English, as a pivotal foreign language course, directly influences their future career competitiveness. However, long-term educational practices have revealed that most Chinese students encounter numerous challenges in the process of foreign language learning. Among these, foreign language anxiety stands out as a distinctive psychological state, manifesting as pressure, worry, and tension experienced when learning or using a foreign language. It represents a widely explored affective phenomenon in the field of language acquisition, exerting profound effects on both the process and outcomes of language learning. Foreign language learning anxiety may disrupt students' cognitive processes, reduce learning motivation and participation, and subsequently affect learning effectiveness. Against this backdrop, this study conducts an empirical investigation into Chinese college students' foreign language learning anxiety, classroom participation, and learning motivation, aiming to understand the current state of foreign language anxiety among college students and explore its influencing factors. Such an endeavor holds significant practical implications for enhancing college students' foreign language learning outcomes and improving the quality of

foreign language education.

2. Literature Review

Anxiety is a common emotional response characterized by worry and tension regarding potential threats or uncertainties. It represents a prevalent affective state that exerts a significant impact on language learning environments. Scovel [16], a foreign researcher, defined anxiety as "a state of apprehension, a vague fear." Based on findings from earlier scholars, anxiety can be broadly categorized into three types: classroom anxiety, learning anxiety, and foreign language-related anxiety. Due to the unique nature of foreign language learning, the psychological state encompassing self-awareness, attitudes, emotions, and behaviors associated with classroom language acquisition is termed "classroom anxiety." Since foreign language learning primarily occurs through instructional activities in authentic classroom settings, classroom anxiety constitutes a distinct type of anxiety that emerges exclusively within this specific context. When confronted with learning tasks, learning anxiety represents an emotional state characterized by a sense of vulnerability and urgency arising from attempts to achieve a learning goal without being able to reverse an adverse situation. In the field of second language acquisition, MacIntyre [11] defined foreign language anxiety as the study of negative emotions generated when learning or using a second language in authentic contexts. Researchers Wang Chuming and Wan Hua [22] proposed that anxiety is

defined as learners' loss of confidence due to concerns about failing to achieve learning goals or overcome academic obstacles, or as an increase in feelings of failure and guilt resulting from intense negative emotions. This study adopts the definition of foreign language anxiety proposed by Horwitz et al. [6] in the context of the foreign language classroom: tension, fear, and apprehension associated with foreign language classroom learning, encompassing three dimensions: communication apprehension, test anxiety, and fear of negative evaluation.

Motivation is defined in psychology as an internal psychological process or intrinsic drive that initiates, sustains, and regulates individuals' engagement in activities, guiding these activities toward specific goals. Learning motivation refers to the psychological tendency that initiates and sustains individual learning behaviors, directing them toward certain objectives. Learning motivation can be categorized into intrinsic motivation and extrinsic motivation. Amabile et al. [1] posited that intrinsic motivation is driven by an individual's interest in the learning task itself and the need for challenge, manifesting as a passion for exploration and proactive pursuit of difficult tasks. Extrinsic motivation, in contrast, is driven by factors such as external rewards, others' evaluations, or social comparison, manifesting as reliance on external recognition and a tendency to choose simple tasks to avoid failure. The definition of learning motivation adopted in this study aligns with the theory proposed by Amabile et al., which distinguishes between extrinsic and intrinsic motivation.

“Classroom participation” can be defined as a state variable encompassing “the amount of physical and psychological energy that students devote to activities related to academic learning in the classroom” [2]. According to modern teaching theories, the classroom teaching process constitutes a system of developmental activities in which teachers and students collaboratively explore new knowledge. This implies that students should not passively accept external influences during the instructional process; instead, they should actively engage in classroom learning, proactively selecting knowledge content that suits them to form and construct their own knowledge systems. Therefore, for students, active involvement in classroom activities demonstrates their positive attitudes toward classroom instructional activities. Skinner and Belmont [17] posited that classroom participation represents the sustained behavioral engagement and positive affective states students exhibit during the learning process, reflecting the quality of their interaction with the classroom environment. Fredricks et al. [5] proposed that classroom participation is a multidimensional construct encompassing behavioral engagement, emotional engagement, and cognitive engagement. Zhou Bin [27], through empirical research, defined classroom participation as “the behavioral initiative, depth of thinking, and emotional positivity students demonstrate in classroom learning activities,” emphasizing its susceptibility to instructional design and teacher feedback. This study adopts the definition of classroom participation proposed by Fredricks et al. [5], conceptualizing it across three dimensions: behavioral, cognitive, and emotional engagement.

Existing research indicates a connection between anxiety levels and classroom participation. An empirical study by Ma Yunxia [10] revealed that students' frequency of classroom participation varied according to anxiety levels: moderately anxious students exhibited the most active participation in

teacher-student interaction, peer interaction, and individual presentations, while highly anxious students generally demonstrated lower willingness to participate. Moderate anxiety may stimulate students' engagement behaviors, whereas excessive anxiety diminishes their enthusiasm for classroom participation. Tian Jing's [20] study further confirmed a significant negative correlation between classroom anxiety and participation. Existing research also demonstrates that learning motivation exerts a significant influence on classroom participation. Li Min [8], through an empirical study on non-English major freshmen, found a significant positive correlation between learning motivation and classroom participation behaviors, with highly motivated students displaying significantly higher levels of activity in question-and-answer sessions and discussions. Wu Hongfei [24] argued that motivation, as a comprehensive driver integrating cognition and emotion, prompts students to engage more proactively in learning activities through the combined effects of internal (e.g., interest, goals) and external (e.g., evaluation, rewards) mechanisms. Furthermore, existing research suggests a complex regulatory relationship between learning motivation and foreign language anxiety. A quantitative study by Tang Lingying and He Xiaoyu [19] demonstrated that highly motivated learners exhibited significantly lower anxiety levels than low-motivation learners, suggesting that motivation may alleviate anxiety by enhancing self-efficacy. Yuan Pinghua [25], through a study on college students learning two foreign languages, found a significant correlation between learning motivation and foreign language anxiety, with students exhibiting higher motivation levels reporting significantly lower anxiety when learning their first foreign language compared to their second. However, a study by Mohammed Aatif Mohammed Qaed [12] revealed the complexity of motivation's role: instrumental motivation (e.g., examination and employment needs) demonstrated a positive correlation with classroom anxiety, indicating that stronger motivation may paradoxically be associated with heightened anxiety levels. In summary, the relationship among foreign language anxiety, classroom participation, and learning motivation can be synthesized as follows: moderate anxiety may facilitate participation, whereas high anxiety exerts an inhibitory effect; learning motivation generally enhances participation and alleviates anxiety, though the specific effects vary depending on the type of motivation.

Based on this, this study aims to: through empirical investigation, deeply explore the interrelationships among foreign language anxiety, learning motivation, and classroom participation (across behavioral, emotional, and cognitive dimensions). More specifically, this study seeks to (1) examine the overall levels and characteristics of foreign language anxiety, learning motivation, and classroom participation, and (2) analyze the interrelationships among these three variables. The study employed the Foreign Language Classroom Anxiety Scale (FLCAS), a learning motivation scale, and a classroom participation scale for measurement, and conducted data analysis using descriptive statistics, correlation analysis, regression analysis, and the Bootstrap method for mediation effect testing. By clarifying the interaction pathways among these core psychological factors, this study hopes to provide more targeted theoretical basis and practical insights for foreign language teachers to enhance the quality of student classroom participation by intervening in anxiety and fostering effective motivation.

3. Research Design

3.1. Participants

This study employed a random sampling method, selecting undergraduate students from Guilin University of Technology as participants. Data was collected through a combination of online and offline approaches. All participants provided informed consent prior to participation. A total of 332 questionnaires were distributed, yielding 303 valid responses, representing a response rate of 91.27%. The sample comprised 147 male students (48.50%) and 156 female students (51.50%), with ages predominantly ranging from 18 to 25 years (Table 1).

Table 1. Descriptive statistics (N = 303)

Variable	Category	Count	Frequency (%)
Gender	Male	147	48.5%
	Female	156	51.5%
Academic Year	Freshman	52	17.20%
	Sophomore	88	29.0%
	Junior	103	34.0%
	Senior	60	19.80%
Major	Liberal Arts	76	25.15%
	Science	124	40.90%
	Engineering	57	18.80%
	Arts	35	11.60%
	Business	11	3.60%
Years of Formal English Learning	7-9 years	128	42.20%
	10-12 years	138	45.50%
	≥13years	37	12.20%
Self-Assessed Foreign Language Proficiency	A1	56	18.50%
	A2	80	26.40%
	B1	96	31.70%
	B2	45	14.90%
	C1	26	8.60%
Daily Frequency of Foreign Language Use	Almost Never (Only in Class)	111	36.60%
	Occasional Use (≥3 times/month)	143	47.20%
	Regular Use (≥1-2 times/week)	49	16.20%

3.2. Measurements

(1) Foreign Language Anxiety Scale. This study employed the Foreign Language Classroom Anxiety Scale (FLCAS), developed by Horwitz et al. [6] in 1986, to assess levels of foreign language learning anxiety. The scale comprises 33 items covering various anxiety experiences in the foreign language classroom, such as performance apprehension, interaction tension, and self-doubt. It represents a widely utilized instrument for investigating foreign language anxiety in the field of foreign language education. The scale's validity coefficient is 0.93.

(2) Classroom Participation Scale. The Classroom Participation Scale developed by Zhang Xu [26] was adopted to assess college students' self-perceived classroom participation. This scale is more suitable for use with Chinese students. Consisting of 17 items, it encompasses three dimensions: behavioral engagement, cognitive engagement, and emotional engagement. The questionnaire employs a 5-point Likert scale, with responses ranging from "completely consistent" (5) to "completely inconsistent" (1). Higher scores indicate higher levels of classroom participation. The Cronbach's α coefficient for this scale was 0.91,

demonstrating high internal consistency.

(3) Learning Motivation Scale. This study utilized the Learning Motivation Scale revised by Chi Liping and Xin Ziqiang [3], which is better suited for Chinese college students. They adapted the original scale for the Chinese college student population through localization adjustments. The scale comprises 30 items and employs a 5-point Likert scoring method. The internal consistency coefficients for the two subscales reached 0.79 and 0.78 respectively, indicating satisfactory reliability. The scale consists of two subscales: intrinsic motivation and extrinsic motivation.

(4) Data analysis was primarily conducted using SPSS 26.0. The analytical procedures were as follows: first, descriptive statistics were employed to ascertain the overall levels of college students' foreign language anxiety, learning motivation, and classroom participation. Second, independent samples t-tests and analysis of variance (ANOVA) were utilized to examine differences in these variables across students with varying characteristics. Finally, correlation analysis and mediation effect testing were conducted to further explore the relationships among foreign language anxiety, learning motivation, and classroom participation.

4. Results and Discussion

4.1. Overall Levels of College Students' Foreign Language Anxiety, Learning Motivation, and Classroom Participation

The results revealed that the mean score for foreign language anxiety among participants was 3.40, exceeding the theoretical midpoint, with a standard deviation of 0.46, indicating that the majority of participants experienced moderate levels of anxiety. Participants demonstrated a relatively high mean score for learning motivation, suggesting a generally strong willingness to learn, with a standard deviation of 0.85, indicating notable individual differences in the intensity of learning motivation within the sample. The mean score for classroom participation was 3.31, slightly above the theoretical midpoint, suggesting that participants exhibited relatively active classroom participation. The relatively small standard deviation for classroom participation indicates comparatively minor individual differences in participation levels among students (Table 2).

Table 2. Distribution of overall levels of college students' foreign language anxiety, learning motivation, and classroom participation

Variable	Classroom Participation	Learning Motivation	Foreign Language Anxiety
MEAN	3.31	3.51	3.40
SD	0.66	0.85	0.46

4.2. Differences in Foreign Language Anxiety, Learning Motivation, and Classroom Participation Among College Students with Different Characteristics

Independent samples t-tests or analysis of variance (ANOVA) were conducted with gender, grade, academic major, years of systematic English learning, self-rated English proficiency level, and daily frequency of English use as independent variables, and foreign language anxiety, learning motivation, and classroom participation as dependent variables, respectively. The results (Tables 3, 4, and 5) indicated that male students exhibited more active classroom

participation than female students. The F-value for foreign language anxiety (3.847) reached statistical significance ($p < 0.05$), with findings specifically revealing that high-frequency use may trigger higher levels of anxiety; frequent users demonstrated significantly higher anxiety than those who only used English in classroom settings.

Table 3. Differences in foreign language anxiety among college students with different characteristics

Independent Variable	Mean	SD	T/F	P
Male	3.3702	0.50587	2.06	0.040*
Female	3.432	0.42197		
Freshman	3.398	0.4548	1.199	0.31
Sophomore	3.3406	0.5207		
Junior	3.4663	0.39993		
Senior	3.3854	0.48751		
Liberal Arts	3.3971	0.46588		
Science	3.392	0.45299	1.082	0.366
Engineering	3.3349	0.55109		
Arts	3.5316	0.35142		
Business	3.4848	0.39903		
7-9 years	3.3842	0.471		
10-12 years	3.4295	0.44991	0.476	0.622
≥13years	3.3612	0.50381		
A1	3.4443	0.46832		
A2	3.3621	0.47123	0.84	0.501
B1	3.3652	0.51676		
B2	3.4923	0.31453		
C1	3.4138	0.45587		
Almost Never (Only in Class)	3.3216	0.54712		
Occasional Use (≥3 times/month)	3.4187	0.43415	3.847	0.022*
Regular Use (≥1-2 times/week)	3.5356	0.28597		

Table 4. Differences in learning motivation among college students with different characteristics

Independent Variable	Mean	SD	T/F	P
Male	3.5778	0.81341	1.422	0.156
Female	3.4391	0.87957		
Freshman	3.5256	0.86404	0.938	0.423
Sophomore	3.6008	0.7833		
Junior	3.3994	0.92085		
Senior	3.535	0.80241		
Liberal Arts	3.6101	0.82586		
Science	3.5766	0.84614	1.558	0.186
Engineering	3.3848	0.81596		
Arts	3.2629	0.91544		
Business	3.403	0.92249		
7-9 years	3.4313	0.85415		
10-12 years	3.5505	0.86028	0.919	0.4
≥13years	3.6018	0.79221		
A1	3.5429	0.81666		
A2	3.5429	0.79659	0.164	0.956
B1	3.4934	0.87964		
B2	3.4274	0.95946		
C1	3.5	0.81644		
Almost Never (Only in Class)	3.497	0.86999		
Occasional Use (≥3 times/month)	3.5368	0.82543	0.253	0.777
Regular Use (≥1-2 times/week)	3.4388	0.88499		

Table 5. Differences in classroom participation among college students with different characteristics

Independent Variable	Mean	SD	T/F	P
Male	3.3942	0.61765	2.06	0.040*
Female	3.2383	0.69437		
Freshman	3.3167	0.61619	0.978	0.403
Sophomore	3.3342	0.64367		
Junior	3.2359	0.7362		
Senior	3.4157	0.58642		
Liberal Arts	3.2949	0.69624		
Science	3.3847	0.62295	0.336	0.765
Engineering	3.257	0.64616		
Arts	3.1933	0.72685		
Business	3.3262	0.74097		
7-9 years	3.2592	0.69466		
10-12 years	3.3534	0.64342	0.757	0.47
≥13years	3.3561	0.61475		
A1	3.3571	0.60217		
A2	3.3485	0.67743	0.338	0.852
B1	3.3094	0.6608		
B2	3.2719	0.66791		
C1	3.2036	0.75793		
Almost Never (Only in Class)	3.3275	0.65164		
Occasional Use (≥3 times/month)	3.3023	0.67278	0.045	
Regular Use (≥1-2 times/week)	3.3169	0.66528	0.956	

4.3. Correlation Analysis of College Students' Foreign Language Anxiety, Learning Motivation, and Classroom Participation

As presented in Table 6, a significant negative correlation was identified between foreign language anxiety and classroom participation, indicating that the higher the level of students' foreign language anxiety, the lower their classroom participation engagement. A significant negative correlation was also observed between foreign language anxiety and learning motivation, suggesting that increased foreign language anxiety suppresses students' learning motivation. Furthermore, a significant positive correlation was found between classroom participation and learning motivation, indicating that higher levels of classroom participation are associated with stronger learning motivation among students.

Table 6. Correlation analysis of college students' foreign language anxiety, learning motivation, and classroom participation.

Variable		Foreign Language Anxiety	Classroom Participation	Learning Motivation
Foreign Language Anxiety	Pearson Correlation	1	-.373**	-.259**
	Sig. (2-tailed)		.000	.000
Classroom Participation	Pearson Correlation	-.373**	1	.751**
	Sig. (2-tailed)	.000		.000
Learning Motivation	Pearson Correlation	-.259**	.751**	1
	Sig. (2-tailed)	.000	.000	

Note: ** indicates significance at the 0.01 level (two-tailed).

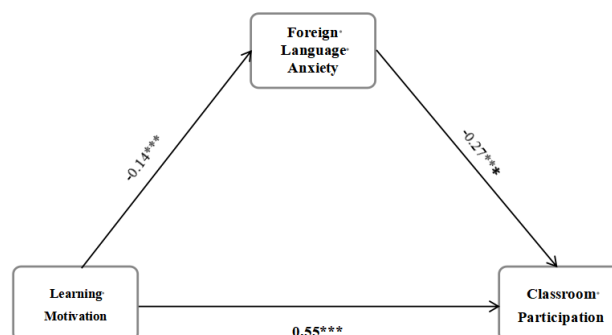
4.4. Mediating Effect of Foreign Language Anxiety on the Relationship Between Learning Motivation and Classroom Participation

To further validate the relationships among foreign language anxiety, learning motivation, and classroom participation, and to test the mediating role of foreign language anxiety between learning motivation and classroom participation, all continuous variables were standardized. Controlling for demographic variables, mediation analysis was conducted using PROCESS macro Model 4, with learning motivation as the independent variable, classroom participation as the dependent variable, and foreign language anxiety as the mediator. The mediation effect was estimated using bootstrap resampling with 5,000 iterations, and 95% confidence intervals were calculated. A mediation effect is considered significant if the 95% confidence interval does not contain zero. The results, presented in Table 7 and Figure 1, revealed that learning motivation significantly negatively predicted foreign language anxiety ($b = -0.1416$, $p < 0.001$) and significantly positively predicted classroom participation ($b = 0.5466$, $p < 0.001$). Foreign language anxiety significantly negatively predicted classroom participation ($b = -0.2721$, $p < 0.001$). The indirect effect of learning motivation on classroom participation through foreign language anxiety was 0.04, indicating that foreign language anxiety serves as a significant mediator in the relationship between learning motivation and classroom participation. Learning motivation indirectly enhances classroom participation by reducing anxiety levels.

Table 7. Mediation analysis of foreign language anxiety on the relationship between learning motivation and classroom participation

Variable	Classroom Participation (Y)	t	95%CI
	b		
Learning Motivation (X)	0.547	18.523***	0.489, 0.605
Foreign Language Anxiety (M)	-0.272	-5.045***	-0.378, -0.166
Constant	2.323	9.924***	1.862, 2.784
R ²	0.598		
F	223.405***		

Note: Demographic variables were controlled; b represents standardized regression coefficients; *** indicates $p < 0.001$



Note: *** indicates $P < 0.001$.

Figure 1. Path diagram of the mediating role of foreign language anxiety on the relationship between learning motivation and classroom participation

5. Summary of Results

5.1. Foreign Language Anxiety Negatively Affects Learning Motivation and Classroom Participation

The findings indicate a significant negative correlation between foreign language anxiety and learning motivation, suggesting that increased foreign language anxiety undermines students' learning motivation. According to learning motivation theory, anxiety, as a negative emotional experience, diminishes students' expectations and perceived value of learning tasks, thereby weakening both intrinsic and extrinsic motivation. A significant negative correlation was also identified between foreign language anxiety and classroom participation, indicating that higher anxiety levels are associated with lower classroom participation, corroborating Horwitz's theory of foreign language classroom anxiety. Horwitz et al. [6] posits that foreign language classroom anxiety affects students' language processing abilities and classroom behavioral engagement through "cognitive interference." Furthermore, foreign language anxiety was found to partially mediate the relationship between learning motivation and classroom participation, demonstrating that learning motivation indirectly enhances participation by reducing anxiety levels, thereby further validating the theoretical hypothesis of anxiety as a "learning obstacle."

5.2. Learning Motivation Positively Predicts Classroom Participation

Learning motivation demonstrated a positive correlation with classroom participation and directly and positively predicted participation, indicating that the stronger the intrinsic or extrinsic motivation, the more inclined students are to actively engage in classroom interaction. Constructivist theory posits that "learners actively construct knowledge," suggesting that under strong learning motivation, students'

participatory behaviors facilitate the integration of language input and output. The findings of this study corroborate this perspective [21].

5.3. Gender Differences in Classroom Participation

Male students exhibited significantly higher mean classroom participation scores than female students, a finding consistent with Lundeborg's [9] empirical research indicating that male students tend to speak more frequently in class. According to social role theory, in traditional classroom settings, males may be more inclined to demonstrate engagement through overt behaviors, such as speaking, whereas females, influenced by socialization processes, may opt for more covert forms of participation, such as listening and note-taking [4]. However, regarding gender differences in classroom participation, the results of an independent samples t-test indicated that male students' participation scores ($M = 3.39$, $SD = 0.62$) were statistically significantly higher than those of female students ($M = 3.24$, $SD = 0.69$), $t = 2.06$, $p = .040$. However, the further calculated effect size was small (Cohen's $d = 0.24$), suggesting that despite the statistical significance, the magnitude of the difference attributable to gender is limited, and its practical significance or predictive value for classroom participation is weak. Consequently, gender should not be considered a primary predictor of classroom participation, and instructional practices should avoid reinforcing stereotypes [18].

5.4. High-Frequency Foreign Language Users Experience Higher Anxiety

This finding aligns with the emphasis of communicative language teaching on authentic contexts, suggesting that forced output without adequate support may exacerbate anxiety [15]. Communicative language teaching advocates for "communication-centered" language use but may not fully account for the "identity threat" learners face in authentic settings [13]. Such anxiety reflects the dimension of "performance apprehension" within foreign language classroom anxiety proposed by Horwitz. Moreover, high-frequency foreign language users frequently need to produce language spontaneously across various scenarios; in some contexts, excessively high demands for linguistic accuracy and fluency may lead to "cognitive overload," triggering anxiety responses. This finding also corroborates Krashen's [7] "affective filter hypothesis," which posits that anxiety constitutes an obstacle to language input.

5.5. Suggestions

Based on the analysis of the aforementioned findings, this study contends that proactive attention to students' psychological well-being and enhancement of teaching quality in instructional practice can be pursued through improvements in the following three aspects.

First, teachers must fully recognize the negative impact of foreign language anxiety on students' classroom participation and learning motivation. To alleviate students' foreign language anxiety, teachers can foster a relaxed and pleasant classroom atmosphere. For instance, by employing humorous language and conducting engaging interactive activities to enable students to learn in a comfortable environment. Simultaneously, attention should be paid to differentiated instruction, tailoring learning plans to students' varying levels and needs to help them build confidence and reduce anxiety.

Grounded in humanistic pedagogy, teachers should pay greater attention to students' affective needs and the development of learning strategies [14]. For example, teachers may share their own experiences with foreign language anxiety to establish rapport with students, helping them feel understood and supported. Furthermore, institutions should regularly organize training for teachers on how to convey support for student performance through tone of voice, body language, and other non-verbal cues, ensuring that students perceive teacher attentiveness and encouragement in the classroom.

Vygotsky's constructivist theory underscores the importance of learning motivation in the active construction of knowledge [21]. In light of the findings of this study, teachers may adopt task-based language teaching to stimulate students' learning motivation through the completion of meaningful tasks [23]. However, students' foreign language anxiety may lead to task aversion. To address this, teachers may implement the following strategies: differentiate instructional tasks by academic major, designing tasks that align with the characteristics and needs of students in different disciplines. For engineering students, incorporate academic paper translation tasks to enhance their English proficiency in specialized domains; for arts students, facilitate cross-cultural art critique activities to enable them to use the foreign language within their professional fields; for humanities students, organize simulated international conference debates to enhance their language expression and critical thinking skills.

This study found that within the participant sample, high-frequency foreign language users exhibited higher foreign language anxiety. Teachers may leverage multimedia and digital tools, employing "anonymous discussion" and "group presentation" formats to provide appropriate channels for classroom participation for students of different personality types. Concurrently, teachers should attend to grading the difficulty level of instructional tasks, categorizing authentic contextual tasks by complexity to enable students to gradually adapt to tasks of varying difficulty levels. Encouraging collaborative learning in the classroom, such as pairing high-frequency users with low-frequency users for practice, can reduce anxiety through mutual assistance and cooperation, thereby jointly enhancing learning outcomes.

6. Conclusion

This study focused on university students at Guilin University of Technology, systematically examining the relationships among foreign language anxiety, learning motivation, and classroom participation across behavioral, emotional, and cognitive dimensions. The results indicate that students experience moderate levels of foreign language anxiety, relatively high learning motivation, and active classroom participation, suggesting that the current higher education environment provides students with opportunities for psychological engagement in language learning, though challenges remain. Further analyses revealed significant negative correlations between foreign language anxiety and both learning motivation and classroom participation, with a particularly strong positive correlation between learning motivation and classroom participation. Most importantly, mediation analysis (with an indirect effect of 0.04) demonstrated that foreign language anxiety plays a partial mediating role in the relationship between learning motivation and classroom participation. Specifically, stronger

learning motivation reduces students' foreign language anxiety, which in turn indirectly mitigates the negative impact of anxiety on classroom engagement, thereby fostering students' willingness to engage in academic tasks. This finding elucidates the psychological pathways through which emotional barriers influence behavioral outcomes, offering nuanced insights into the dynamics of language learning.

Overall, this study extends theoretical perspectives on the interplay between affective and motivational factors in foreign language education while providing empirical evidence and practical implications for educators. By prioritizing anxiety reduction strategies—such as creating supportive classroom climates and differentiated instruction—and cultivating motivation through meaningful, goal-oriented activities, institutions can enhance students' classroom participation and language proficiency. Future research should expand samples to diverse regions and cultural contexts, incorporating longitudinal or experimental designs to explore additional mediators (e.g., teacher support, peer interaction) and refine interventions targeting these core psychological factors. Such efforts hold substantial significance for fostering holistic development in university students.

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