

# Foreign Language Classroom Anxiety: Past Developments and Future Innovations in the Age of AI

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## **Abstract:**

Foreign Language Classroom Anxiety (FLCA) has received wide attention in Second Language Acquisition (SLA), yet existing studies still show limitations in capturing its characteristics and meeting learners' diverse needs. This article examines FLCA from multiple perspectives, including its definition, classification, manifestations, effects and causes. Analysis demonstrates that FLCA negatively influences learners' willingness to communicate, academic achievement, self-efficacy and long-term motivation. It is shaped by personal, linguistic, classroom, and cultural factors. Based on these findings, this article provides practical suggestions to alleviate FLCA. For teachers, strategies such as cultural response, constructive feedback and personalized interaction are emphasized. For students, concrete practices such as positive self-talk, mindfulness, preparation and peer collaboration--are highlighted. Moreover, technological innovation, particularly AI-assisted learning tools, is shown to offer new possibilities for reducing speaking anxiety. Finally, this article calls for improving FLCA measurement instruments and strengthening psychological research to meet the challenges of increasingly internationalized and diverse learning contexts.

**Keywords:** Foreign language classroom anxiety; second language acquisition; AI-assisted learning

## **1. Introduction**

Foreign Language Classroom Anxiety (FLCA) has become one of the most widely discussed affective variables in Second Language Acquisition (SLA). Since the emergence of the affective filter hypothesis, researchers have recognized that language learning is

not only a cognitive process but also can be strongly influenced by learners' emotions [1]. Among different affective factors, anxiety stands out as a strong predictor of foreign language learning [2].

FLCA refers to a specific form of anxiety that appears in classroom contexts--in a target language environment, where learners are required to communicate,

perform, and be evaluated. Over the past four decades, researchers have examined its definition, manifestations, effects and causes through both theoretical and empirical studies. These studies consistently show that FLCA is a multidimensional construct that affects students' willingness to communicate, academic achievement, long-term motivation, etc.

In the post-pandemic era, new learning environments such as online classrooms have introduced additional sources of anxiety, while at the same time offering new tools for alleviation, such as AI-assisted language learning platforms. This article aims to review the definition, classification, manifestations, effects and causes of FLCA, and also provides practical suggestions for teachers, students and researchers. This may help FLCA be better understood and addressed in modern language learning contexts.

## 2. Definition and Classification of FLCA

### 2.1 Definition and Classification of Foreign Language Classroom Anxiety (FLCA)

Foreign Language Anxiety (FLA) has always been considered a significant affective variable in Second Language Acquisition (SLA). In the 1970s, Spielberger proposed the State-Trait Anxiety Inventory, which distinguished temporary state anxiety and stable trait anxiety [3]. Based on this, Krashen introduced the famous Affective Filter Hypothesis, suggesting that learners' negative emotions like anxiety can act as a filter and impede the effective language input [1].

As SLA usually occurs in classroom contexts, Horwitz et al. firstly conceptualized this specific type of anxiety -- Foreign Language Classroom Anxiety (FLCA) as a distinct complex of self-perceptions, beliefs, emotions and behaviors associated with language learning in classroom settings, arising from the uniqueness of the language acquisition process [2]. Based on this definition, he founded the FLCA construct and also created the widely used Foreign Language Classroom Anxiety Scale (FLCAS).

Since then, FLCA has been categorized into different factor structures. Based on different empirical research, researchers conducted different factor analyses. Horwitz et al. initially identified three components: communication apprehension, test anxiety and fear of negative evaluation [2]. His conclusions were the theoretical basis and starting point of subsequent research. Later, plenty of researchers proposed different factor theories based on all kinds of factor analysis. Most of them are three-factor or four-factor structures but also exist two-factor or five-factor structures. For example, Aida proposed a four-factor structure:

speech anxiety and fear of negative evaluation, lack of confidence, fear of failing the class, and negative attitudes toward the English class or teacher [4]. Her research targets were Japanese language learners, which added a more learner-specific dimension to FLCA. Also, due to Kitano, sources of anxiety in his college Japanese FL classroom mostly came from dispositional fear of negative judgment and self-assessed speaking ability relative to peers and native speakers [5].

### 2.2 Manifestations of FLCA

FLCA manifests in multiple ways, ranging from physiological reactions to cognitive symptoms.

Physiological symptoms such as increased heart rate, sweating, trembling, or voice shaking easily appear, especially when learners are required to speak in front of others [6].

Emotional manifestations include nervousness, fear, worry, or feelings of inadequacy, especially when students realize the tendency to make mistakes or receive negative feedback [2].

From a behavioral perspective, anxious learners often reduce voluntary participation, avoid answering questions, or even skip classes to minimize stressful situations. In speaking tasks, some learners prefer silence over the risk of error because of the tendency linked to perfectionism [7].

Cognitive symptoms are also evident: anxiety consumes limited attentional resources, leads to difficulty concentrating, slower language processing progress and impaired short-term memory [8].

In the post-pandemic era, the shift from traditional classrooms to virtual classrooms has introduced new forms of language anxiety. Although online classes suited some students who preferred to remain in the background, their anxiety was exacerbated when called to participate.

These findings point out that FLCA is not a single observable behavior, but a multidimensional phenomenon, with different expressions between individuals and diverse learning contexts.

### 2.3 Effects of FLCA

There are also many negative effects brought by FLCA.

First of all, students' willingness to communicate is negatively correlated with their FLCA [9]. Which means anxious learners tend to avoid participating in class discussions. The reduced willingness to communicate is one of the negative effects.

Also, there is a negative correlation existing between FLCA and academic achievement, as demonstrated by the research conducted by Botes et al. [10]. Due to this research, all five forms of academic accomplishment: general academic achievement and four competency-specific

outcome scores (reading-, writing-, listening-, and speaking academic achievement) are affected.

FLCA also negatively impacts learners' self-efficacy and motivation. When students experience high levels of anxiety, they often develop negative self-beliefs about their ability to perform in the target language, which can undermine their willingness to engage in learning tasks [11].

Moreover, avoidance behavior always occurs because of FLCA, which means learners consciously or unconsciously avoid tasks leading to anxiety, for example speaking in class and volunteering to answer. Woodrow found that learners experiencing high levels of anxiety were more likely to avoid oral tasks and reduce their exposure to speaking opportunities [12]. Similarly, Gregersen and Horwitz observed that anxious learners tend to exhibit perfectionist tendencies—fearing mistakes so that they would rather remain silent [8].

### 3. Causes of FLCA

Based on empirical studies, researchers have identified a range of causes associated with FLCA.

#### 3.1 Personal Factors

Personal factors are one of the most frequent factors in FLCA.

A core element is low self-perceived language competence, which often does not match learners' actual proficiency. According to Yan and Horwitz, students often feel anxious because of their perceived language shortcomings, regardless of their actual proficiency level [13]. This low self-assessment leads to a negative feedback loop: fearing mistakes, participating less, limiting opportunities for practice and leading to their lack of confidence.

Another important personal factor is self-esteem and perfectionism. Learners with low self-esteem often fear that any error will expose their inadequacy. When it comes to perfectionist students, they may prefer silence to risking mistakes, which intensifies their anxiety levels [7].

Moreover, motivation and self-efficacy strongly influence anxiety levels. Learners with high motivation and strong self-efficacy beliefs are less likely to feel anxious, as they perceive challenges as opportunities rather than threats. In contrast, learners who doubt their ability to succeed often interpret difficulties as overwhelming tasks, which increases tension and avoidance behaviors.

#### 3.2 Language Factors

Language-related factors are another important source of FLCA.

One key factor is grammatical complexity. Aida found that Japanese learners of English often experience high anxiety when dealing with advanced grammar structures, as gram-

mar errors are more visible [4]. They are also more easily to get negative evaluations with these kinds of mistakes. This perception raises students' fear of being judged and decreases their risk-taking tendency in communication.

Another crucial dimension is vocabulary limitations. Learners who lack sufficient lexical resources often fail to express themselves fluently and accurately, which leads to frustration and avoidance of speaking tasks. Realizing the lack of vocabulary, especially when compared to peers or native speakers, is strongly linked with increased speaking anxiety.

Pronunciation and oral fluency also contribute significantly. Learners who worry about mispronouncing words or speaking with a foreign accent often experience a high level of communication apprehension [2]. Such worries are particularly strong because errors will be immediately noticed. In contrast, written tasks usually allow more time for students' correction, so they are less anxiety-provoking.

#### 3.3 Classroom Factors

Students' anxiety levels in the classroom are greatly influenced by their teachers. Supportive teachers who create a positive and non-threatening classroom atmosphere may help students become more confident and willing to participate. Supportive teachers who create a positive and non-threatening classroom environment can help students feel more confident and willing to participate. Additionally, teaching styles that focus more on error correction or competition may increase pressure on students.

Communication apprehension also plays a large role in FLCA. According to Horwitz et al., students who have trouble speaking in groups or public are more likely to experience difficulties speaking in classrooms [2]. That's because of their fear of being unable to express themselves clearly or misunderstanding others.

Test anxiety is another cause. This kind of anxiety arises from fear of failing language tests and not being able to perform well. Horwitz et al. found that it even affects the brightest and most prepared students [2]. However, MacIntyre and Gardner suggested that test anxiety isn't a specific one. It also occurs in all other general conditions, which is a controversial point in this field.

Students also fear negative evaluation. They worry about being judged not only by teachers, but also their peers. Horwitz et al. proposed that, especially during oral tasks or presentations, they may be more sensitive to the real or imagined negative evaluations [2]. The way teachers evaluate may also trigger their fear. According to Gregersen & Horwitz, high-anxious students sometimes even view teacher and peer evaluations as a judgment of "self-ability" rather than an opportunity to improve [7].

### 3.4 Cultural Factors and Other Factors

Cultural differences can also significantly contribute to FLCA.

Firstly, the gap between students' own cultural background and the target language culture is an obvious cause. For example, learners from cultures where face-saving is highly valued, such as many East Asian contexts, often experience higher anxiety due to fear of losing face in front of peers [9]. As a result, this cultural expectation discourages risk-taking spirits in language learning, as making mistakes may be seen as embarrassing instead of a part of learning. Also, students from more collectivist societies may find it difficult to adapt to Western classrooms, whose main target is to emphasize individual participation and public speaking, leading to their high stress levels [12]. Moreover, identity issues may affect learners, mostly when they feel their cultural identity conflicts with the expectations of the target language community [14]. Technology also became a major source of FLCA. Actually, most students were familiar with the use of technology; however, they lacked familiarity with a specific online learning environment [15]. This suggests the need to explore strategies to reduce anxiety in digital settings, such as supportive teacher presence and peer collaboration.

## 4. Suggestions

### 4.1 Teachers' Aspects

Culturally responsive teaching is an effective way. First, teachers should understand and discuss students' different cultural beliefs. Students should also emphasize the significance of learning the culture of the target language. Being familiar with the target language culture can reduce uncertainty in cross-cultural communication and reduce anxiety.

Raising students' awareness of corrective feedback can also help form positive attitudes and reduce anxiety [16]. They can reduce students' anxiety through positive feedback and reducing the need for perfection [7]. As a result, teachers can use a more encouraging way to teach and make students understand the purpose of error correction. Another effective suggestion is to create an environment of personalized interaction. Teachers need to interact meaningfully with each student and adapt their way of learning to their specific conditions, thereby transforming potential dysphoric tension into euphoric tension that would push the learning process.

### 4.2 Students' Aspects

Although teachers are important in reducing FLCA, learners themselves can also adopt self-regulation skills to con-

trol their anxiety.

One effective way is the use of positive self-talk. This helps students reinterpret mistakes as opportunities for growth rather than as failures. For example, before class, students can remind themselves, "It is okay to make mistakes because they help me learn," or "I have already prepared well and I can express my opinions clearly." During speaking tasks, self-talks such as "I can take my time, I do not need to be perfect" can help reduce performance pressure. After class, reflective ideas like "Compared to last time, I have improved, and I can keep progressing" reinforce self-efficacy. This shift in mindset can reduce the fear of negative evaluation and encourage more active participation.

Another strategy is to be more prepared and develop time management skills. Learners who review material before classes and set achievable goals regularly often feel more confident. Also, practicing mindfulness and relaxation techniques has been shown to reduce anxiety and improve focus during classes and tests.

Finally, students can build peer collaboration and a supportive network. Working with classmates in pairs or groups not only enhances language practice opportunities but also creates a sense of community, which reduces feelings of isolation and increases the opportunities of being helped.

By adopting these strategies, learners can actively contribute to reducing their own anxiety and beginning a more positive learning experience.

### 4.3 AI-assisted Learning Tools

In addition, technological developments --especially AI-assisted learning tools --offer new opportunities for anxiety reduction. For instance, an AI-speaking assistant can effectively support Chinese EFL learners, leading to low anxiety and high communicative confidence [17]. Research conducted by Wu et al. also showed that incorporating the AI chatbot into TPS activities notably reduced the students' foreign language speaking anxiety and improved their speaking performance [18]. However, more empirical study is still required to determine their long-term and general effects on FLCA.

### 4.4 Specific FLCAS Tools

Recent studies have also called for the development of more culturally responsive and language-specific FLCAS tools. Traditional scales, like Horwitz's FLCAS, may not completely capture anxiety triggers in diverse contexts. Researchers such as Teimouri et al. emphasize the importance of reconstructing FLCA instruments based on different backgrounds [19].

Moreover, future improvements should also focus on the psychological dimension of FLCA research. As language



learning becomes more internationalized and learners' backgrounds become more diverse, psychological mechanisms such as coping strategies, self-regulation and resilience become more essential.

Thus, advancing both assessment instruments and psychological research can ensure that interventions are more targeted and effective.

## 5. Conclusion

This article has reviewed the main concept of Foreign Language Classroom Anxiety (FLCA), including its definition, manifestations, impacts and causes. The research consistently shows that FLCA is not a simple emotional reaction, but a multidimensional phenomenon shaped by personal, linguistic, classroom, and cultural factors. Its manifestations range from physiological symptoms to cognitive symptoms, and its effects can seriously affect learners' academic performance, willingness to communicate, and long-term motivation.

At the same time, practical strategies to reduce FLCA have been identified. Teachers play a central role in creating a supportive learning environment and providing constructive feedback. Students can develop self-regulation strategies such as positive self-talk, mindfulness, and peer collaboration. Moreover, new technological tools, especially AI-based applications, offer promising opportunities to alleviate speaking anxiety and enhance learner confidence.

In conclusion, understanding and addressing FLCA is essential for promoting effective foreign language learning. Future research should continue to explore culturally responsive approaches, the long-term impact of technological interventions and the interaction between learners' psychological traits and classroom contexts. By integrating both traditional pedagogical experience and modern innovations, educators and researchers can work together to reduce FLCA and foster more positive language learning experiences.

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