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THE IMPACT OF FOREIGN LANGUAGE ANXIETY ON WORKING MEMORY AND ORAL PERFORMANCE IN EFL CLASSROOMS

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Abstract: This article investigates the impact of Foreign Language Anxiety on Working Memory capacity and students' oral performance in English as a Foreign Language classrooms. Integrating perspectives from psycholinguistics and cognitive psychology, this study analyzes how high anxiety distracts working memory and depletes limited cognitive resources during oral communication. The paper theoretically demonstrates that affective filters increase cognitive load, subsequently impairing the fluency, accuracy, and complexity of oral performance. The findings indicate that mitigating linguistic anxiety and optimizing cognitive load are crucial factors for ensuring effective oral communication in EFL environments.

Keywords: foreign language anxiety, working memory, oral performance, cognitive load theory, EFL, affective filter, psycholinguistics, speech fluency.

The process of acquiring a foreign language is a complex psychophysiological system that encompasses not only purely cognitive and linguistic operations but also the learner's emotional state and psychological stability. In recent decades, the methodology of teaching English as a Foreign Language has increasingly focused on the role of affective factors alongside cognitive processes. Among these affective variables, the most debilitating phenomenon restricting students' language learning potential is foreign language anxiety. Language anxiety is conceptualized in the literature not as a general personality trait, but as a situation-specific psychological reaction manifested precisely within particular language learning environments and communicative contexts [Horwitz et al., 1986]. In EFL classrooms, oral performance stands out as the skill demanding the highest level of cognitive activation and real-time linguistic processing from learners. However, many learners experience intense stress and fear when expressing thoughts orally, answering questions, or speaking publicly during class. From the perspective of cognitive psychology, this condition is directly linked to the human information processing system, specifically the functioning of working memory [Baddeley, 1992].

Working memory is a cognitive mechanism with a limited capacity that is responsible for simultaneously storing and manipulating information over short periods, such as selecting vocabulary, applying grammatical rules, and monitoring pronunciation. According to cognitive load theory, negative affective states like fear and anxiety occupy the limited capacity of working memory with irrelevant "noise," such as self-criticism and fear of failure [Sweller, 1988]. Consequently, the learner lacks the necessary cognitive energy to formulate speech, which directly and detrimentally impacts the quality, fluency, and accuracy of their oral output. To systematically analyze this issue, one must first comprehend the nature of foreign language anxiety. According to the conceptual framework proposed by Horwitz and her colleagues, this anxiety comprises three main components: communication apprehension, test anxiety, and fear of negative evaluation [Horwitz et al., 1986].

In the EFL classroom, oral performance lies at the intersection of these three components. As a student speaks in front of peers and the teacher, they are not only trying to convey a message but are also constantly subjected to external evaluation. This sharply escalates linguistic anxiety.

Fundamental research conducted by MacIntyre and Gardner demonstrates that anxiety creates barriers at every stage of language learning: input, processing, and output [MacIntyre & Gardner, 1994a]. The affective filter becomes maximally active during the output stage, which involves oral performance. According to Krashen's affective filter hypothesis, high anxiety, low motivation, and lack of self-confidence create an invisible barrier that prevents language input from being successfully processed and outputted by the brain [Krashen, 1982].

However, to understand how this affective barrier paralyzes neurocognitive processes, one must turn to models of working memory. The working memory model developed by Baddeley and Hitch, and later refined, includes the central executive, the phonological loop, the visuo-spatial sketchpad, and the episodic buffer [Baddeley, 2000]. During foreign language speech production, the phonological loop and the central executive bear the heaviest cognitive load. While the phonological loop temporarily stores speech sounds and word forms being generated in internal speech, the central executive manages attention allocation, retrieves necessary lexical items from long-term memory, and synchronously activates grammatical rules. The attentional control theory advanced by Eysenck and his co-authors perfectly explains the effect of anxiety on working memory [Eysenck et al., 2007].

According to this theory, anxiety impairs the attentional allocation and control functions of the central executive. An anxious individual's attentional resources are divided: one part is directed toward the task at hand (e.g., answering a question in English), while a parallel part is consumed by internal threats (e.g., thoughts like "everyone will laugh if I make a mistake" or "I forgot the word, I am failing"). This reduces processing efficiency; even though the student exerts more effort, their overall cognitive performance drops sharply [Eysenck et al., 2007]. As a result, stuttering, prolonged pauses, and basic grammatical errors increase during lessons because the brain lacks the free cognitive space required for self-monitoring. When learners freeze or falter in class, teachers frequently misinterpret this as a "lack of preparation" or "poor language proficiency," whereas it is often the direct result of working memory blockages. Robinson's cognitive complexity and task demand hypotheses further support this view, showing that as a task becomes more complex and a learner's anxiety rises, oral performance stagnates [Robinson, 2001].

A student may possess sufficient vocabulary and grammatical knowledge in their long-term memory, but the high cognitive load induced by anxiety blocks the retrieval pathways of this information into working memory [MacIntyre & Gardner, 1994b]. This phenomenon manifests in practice as "the mind going blank." In EFL classrooms, oral performance is traditionally evaluated using three metrics: fluency, accuracy, and complexity [Skehan, 1998]. Foreign language anxiety exerts a distinct yet systematically negative impact on each of these criteria. In terms of fluency, highly anxious students utilize excessive silent pauses, frequent repetitions, and speech hesitations. This happens because their working memory loses the speed required to predict the next word and command the articulatory apparatus. At the level of accuracy, anxiety forces students to misuse rules they otherwise know well; for instance, they may omit the third-person singular "-s" ending or confuse irregular past tense verb forms. Because attention is consumed by managing fear, insufficient resources remain for online monitoring and error correction. When it comes to lexical and syntactic complexity, anxious students avoid risk-taking; to maintain cognitive safety, they resort to the simplest, most primitive sentence structures and repetitive vocabulary, which perpetuates a cycle of low evaluation in the classroom [Skehan, 1998]. Thus, a vicious circle forms between the negative emotional state and cognitive failure: anxiety restricts memory, anxious memory produces poor speech performance, and poor performance intensifies anxiety for future tasks. Furthermore, while the nature of anxiety can vary across different genders, age groups, and

language-learning objectives, the underlying neurocognitive mechanism remains identical. Empirical studies conducted by Derakshan and Eysenck have shown that even individuals with high intellectual capacity fail to fully execute the higher-order functions of working memory, specifically shifting and inhibition, under the influence of anxiety [Derakshan & Eysenck, 2009].

This implies that even if a student's aptitude or interest in the subject is high, their actual knowledge will not surface if the classroom environment is not psychologically safe. This reality calls into question the fairness of traditional assessment systems, as an oral exam often measures a student's stress tolerance rather than their actual linguistic competence. Therefore, developing methods to minimize extraneous cognitive load on students' working memory during lessons is one of the most pressing tasks in modern EFL pedagogy. To achieve this, educators must first foster a classroom culture where mistakes are viewed as a natural part of language acquisition rather than an object of punishment or ridicule. Additionally, providing students with strategic planning time before they perform oral tasks significantly unburdens working memory, as it allows the phonological loop time to partially pre-process the linguistic material [Ellis, 2005]. In conclusion, foreign language anxiety is not merely a subjective whim or feeling; it is a psycholinguistic factor that directly alters the cognitive architecture of the brain, blocking working memory resources and dramatically reducing classroom efficiency and oral performance. EFL teachers must account for this cognitive and affective balance when planning their methodologies, softening the classroom atmosphere to ensure that learners' working memory is dedicated entirely to linguistic creativity.

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