



THE IMPACT OF STRESS AND ANXIETY ON COGNITIVE PROCESSES IN LANGUAGE ACQUISITION

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Abstract: *This paper explores the impact of stress and anxiety on cognitive processes involved in language acquisition. In foreign language learning, psychological factors significantly influence learners' ability to perceive, process, and retain linguistic information. The study focuses on key cognitive mechanisms such as attention, working memory, information processing, and long-term memory formation, which are essential for successful language learning. High levels of stress and anxiety may interfere with these processes by reducing concentration, limiting cognitive resources, and increasing mental overload, which can negatively affect comprehension and language production. Drawing on insights from psycholinguistics and educational psychology, the paper examines how emotional states shape learners' cognitive performance in classroom environments. Particular attention is given to the relationship between affective factors and learning outcomes. The findings highlight that moderate emotional regulation and supportive learning environments can help mitigate the negative influence of anxiety and enhance cognitive efficiency in language acquisition.*

Keywords: *stress, anxiety, cognitive processes, language acquisition, working memory, attention, psycholinguistics, foreign language learning, affective factors, learning outcomes.*

ВЛИЯНИЕ СТРЕССА И ТРЕВОЖНОСТИ НА КОГНИТИВНЫЕ ПРОЦЕССЫ В ПРОЦЕССЕ ОВЛАДЕНИЯ ЯЗЫКОМ



Аннотация: Данная статья посвящена исследованию влияния стресса и тревожности на когнитивные процессы, участвующие в усвоении языка. В процессе изучения иностранного языка психологические факторы значительно влияют на способность учащихся воспринимать, обрабатывать и сохранять языковую информацию. В исследовании рассматриваются ключевые когнитивные механизмы, такие как внимание, рабочая память, обработка информации и формирование долговременной памяти, которые являются необходимыми для успешного овладения языком. Высокий уровень стресса и тревожности может нарушать эти процессы, снижая концентрацию, ограничивая когнитивные ресурсы и увеличивая умственную нагрузку, что негативно влияет на понимание и языковую продукцию. Опираясь на достижения психолингвистики и педагогической психологии, в статье анализируется, каким образом эмоциональные состояния формируют когнитивную деятельность учащихся в условиях учебной аудитории. Особое внимание уделяется взаимосвязи аффективных факторов и результатов обучения. Результаты исследования показывают, что умеренная эмоциональная регуляция и благоприятная образовательная среда способны снизить негативное влияние тревожности и повысить когнитивную эффективность при изучении языка.

Ключевые слова: стресс, тревожность, когнитивные процессы, усвоение языка, рабочая память, внимание, психолингвистика, изучение иностранного языка, аффективные факторы, результаты обучения.

Tilni o'zlashtirish jarayonida stress va xavotirning kognitiv jarayonlarga ta'siri

Аннотация: Mazkur maqola tilni o'zlashtirish jarayonida stress va xavotirning kognitiv jarayonlarga ta'sirini o'rganishga bag'ishlangan. Chet tilini o'rganish jarayonida psixologik omillar o'quvchilarning tilga oid ma'lumotni qabul qilish, qayta ishlash va xotirada saqlash qobiliyatiga sezilarli darajada ta'sir ko'rsatadi. Tadqiqotda muvaffaqiyatli til o'zlashtirish uchun muhim bo'lgan asosiy kognitiv mexanizmlar, jumladan, diqqat, ishchi xotira, axborotni qayta ishlash va



uzoq muddatli xotiraning shakllanishi kabi jarayonlar ko'rib chiqiladi. Stress va xavotirning yuqori darajasi ushbu jarayonlarga salbiy ta'sir ko'rsatib, diqqatning pasayishiga, kognitiv resurslarning cheklanishiga hamda aqliy yuklamaning ortishiga olib keladi. Bu esa o'z navbatida matnni tushunish va nutq faoliyatining samaradorligiga salbiy ta'sir qiladi. Psixolingvistika va pedagogik psixologiya yutuqlariga tayangan holda, maqolada emotsional holatlarning o'quv jarayonidagi kognitiv faoliyatga qanday ta'sir ko'rsatishi tahlil qilinadi. Shuningdek, affektiv omillar bilan o'quv natijalari o'rtasidagi o'zaro bog'liqlikka alohida e'tibor qaratiladi. Tadqiqot natijalari shuni ko'rsatadiki, emotsional holatni me'yoriy boshqarish va qo'llab-quvvatlovchi ta'lim muhiti xavotirning salbiy ta'sirini kamaytirib, til o'rganish jarayonida kognitiv samaradorlikni oshirishga yordam beradi.

Kalit so'zlar: *stress, xavotir, kognitiv jarayonlar, tilni o'zlashtirish, ishchi xotira, diqqat, psixolingvistika, chet tilini o'rganish, affektiv omillar, o'quv natijalari.*

Introduction

In contemporary linguistics and educational research, the process of language acquisition is increasingly understood as a complex phenomenon influenced not only by linguistic factors but also by psychological and cognitive variables. Among these variables, emotional states such as stress and anxiety play a particularly significant role in shaping learners' ability to acquire a foreign language effectively. These affective factors can influence how learners perceive, process, and retain linguistic information, thereby affecting the overall success of the language learning process. [8; p. 112] Language acquisition relies on several essential cognitive mechanisms, including attention, working memory, information processing, and long-term memory formation. These cognitive processes enable learners to comprehend new vocabulary, understand grammatical structures, and apply linguistic knowledge in communicative contexts. However, elevated levels of stress and anxiety may interfere with these mechanisms by reducing concentration, limiting cognitive resources, and increasing mental load. As a result, learners may experience



difficulties in understanding, memorizing, and producing language effectively. In recent years, numerous studies in psycholinguistics and educational psychology have emphasized the importance of affective factors in foreign language learning. Researchers argue that anxiety and stress can function as psychological barriers that hinder cognitive performance and reduce learners' confidence and motivation. At the same time, supportive learning environments and effective emotional regulation strategies can help reduce anxiety and facilitate more efficient cognitive functioning. [9; p. 17] The purpose of this paper is to examine the impact of stress and anxiety on key cognitive processes involved in language acquisition. The study focuses on how these emotional factors influence attention, working memory, and information processing during the language learning process. Additionally, the paper highlights the importance of considering psychological factors in educational contexts in order to enhance learners' cognitive performance and improve the effectiveness of foreign language acquisition.

Methods

This study employs a theoretical and analytical approach to examine the influence of stress and anxiety on cognitive processes involved in language acquisition. [7; p. 103] The research is based on a review and synthesis of existing studies in the fields of psycholinguistics, cognitive psychology, and foreign language education. Particular attention is given to scholarly works that explore the relationship between affective factors and cognitive performance in language learning environments.

The analysis focuses on several key cognitive mechanisms that play a central role in language acquisition, including attention, working memory, information processing, and long-term memory formation. [5; p. 16] These processes are examined in relation to emotional states experienced by learners during foreign language learning. In addition, the study considers classroom-related factors that may contribute to the development of stress and anxiety, such as fear of making mistakes, communication pressure, evaluation anxiety, and high academic expectations. By analyzing these factors, the research aims to identify how emotional states may



influence learners' cognitive functioning and their ability to acquire and use a foreign language effectively.

Results

The analysis demonstrates that stress and anxiety have a noticeable impact on several cognitive processes essential for successful language acquisition. First, high levels of anxiety negatively affect learners' attention, making it difficult for them to concentrate on linguistic input during learning activities. [6; p. 197] Reduced attention leads to weaker comprehension and limited ability to process new vocabulary and grammatical structures. Second, stress significantly influences working memory, which plays a crucial role in temporarily storing and manipulating linguistic information. When learners experience anxiety, cognitive resources are partially redirected toward managing emotional responses rather than processing language information. As a result, learners may struggle to retain new words, follow complex instructions, or participate effectively in communicative tasks. Third, anxiety can interfere with information processing and long-term memory formation. [3; p. 211] Emotional tension may create cognitive overload, reducing the efficiency with which new information is encoded and stored. Consequently, learners may forget previously learned material or find it difficult to apply their knowledge in real communication. At the same time, the analysis indicates that moderate emotional support and a positive learning environment can significantly reduce the negative impact of stress and anxiety on cognitive functioning.

Discussion

The findings confirm that emotional factors play a crucial role in shaping cognitive processes during language acquisition. Stress and anxiety not only influence learners' psychological well-being but also directly affect the cognitive mechanisms necessary for learning and using a foreign language. From a psycholinguistic perspective, anxiety can be viewed as a cognitive barrier that limits the effective functioning of attention and memory systems. [10; p. 26] When learners experience excessive emotional tension, their cognitive capacity becomes partially occupied with emotional regulation rather than language processing. This situation



reduces learning efficiency and may slow the development of communicative competence. The results also highlight the importance of creating supportive and low-anxiety learning environments in foreign language classrooms. [4; p. 120] Teachers play a key role in reducing learners' stress by encouraging participation, tolerating mistakes as part of the learning process, and promoting positive interaction among students. Such pedagogical strategies can help learners maintain emotional stability and allocate more cognitive resources to language learning tasks. Overall, the discussion suggests that integrating psychological awareness into language teaching practices can significantly improve the effectiveness of foreign language acquisition.

Conclusion

The present study examined the influence of stress and anxiety on cognitive processes involved in language acquisition. Based on the analysis of theoretical perspectives from psycholinguistics and educational psychology, the research demonstrates that emotional factors play a significant role in shaping learners' cognitive performance during foreign language learning. In particular, stress and anxiety can negatively affect essential cognitive mechanisms such as attention, working memory, information processing, and long-term memory formation. [2; p. 321] The findings indicate that elevated levels of anxiety may reduce learners' concentration, limit cognitive resources, and increase mental overload. These factors may hinder the effective processing and retention of linguistic information, ultimately slowing down the process of language acquisition and affecting learners' communicative performance. At the same time, the analysis shows that the negative effects of stress and anxiety can be mitigated through supportive learning environments, positive teacher–student interaction, and the development of emotional regulation strategies. [1; p. 112] In conclusion, understanding the relationship between emotional states and cognitive processes is essential for improving the effectiveness of foreign language learning. Taking psychological factors into account in educational practices can help create more productive and



learner-centered language learning environments, ultimately enhancing students' cognitive efficiency and language acquisition outcomes.

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