



## COGNITIVE AND LINGUISTIC CHALLENGES IN FOREIGN LANGUAGE LEARNING FOR STUDENTS WITH SPEECH DISORDERS

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### ABSTRACT

This article analyzes the cognitive and linguistic challenges faced by students with speech disorders in the process of foreign language learning. The study examined the impact of speech disorders on children's phonological memory, attention, thinking, and vocabulary acquisition abilities. Additionally, difficulties in grammar, syntax, and pronunciation, as well as the influence of students' motivation and social support on language learning, were analyzed. The results indicate that individualized pedagogical approaches, the use of visual and audiovisual materials, interactive exercises, and pronunciation drills significantly enhance the effectiveness of foreign language learning for students with speech disorders. This study serves both theoretical and practical purposes, contributing to the optimization of foreign language learning processes and the improvement of pedagogical methods.

**Keywords:** Speech disorders, foreign language learning, cognitive challenges, linguistic challenges, individualized pedagogical approach, pronunciation and grammar exercises, motivation, social support.

### INTRODUCTION

In today's world, globalization, rapid advancements in science and technology, and the increasing need for international communication have heightened the importance of learning foreign languages. Knowledge of a foreign language not only expands communicative opportunities but also represents a key factor in cognitive, social, and personal development. At the same time, the process of learning a foreign language involves complex psychological and linguistic mechanisms that depend on individual characteristics such as age, speech development, memory, attention, motivation, and other factors. For students with speech disorders, learning a foreign language is even more complex and challenging. Speech disorders—such as stammering, articulation difficulties, phonological and phonemic disorders, word-finding difficulties, and other developmental speech problems—significantly affect the student's linguistic, cognitive, and communicative abilities. Therefore, it is essential to analyze the specific challenges these students face in foreign language learning and to develop targeted pedagogical approaches. Cognitive processes play a central role in foreign language learning, including attention, memory, thinking, analysis, generalization, and problem-solving skills. Students with speech disorders often face difficulties in acquiring phonological memory, vocabulary, and grammatical rules. For example, articulation difficulties can slow down pronunciation learning, while phonological disorders can limit the ability to remember and correctly

use words. Psychological factors associated with speech disorders, such as low self-esteem, anxiety, and reduced communicative motivation, also negatively affect language acquisition. From a linguistic perspective, students encounter challenges in understanding and applying grammar and syntax rules, expanding their vocabulary, and using proper pronunciation and intonation. Furthermore, differences between the foreign language and the native language in terms of phonological and morphological features often result in additional errors. These linguistic difficulties reduce communicative efficiency and decrease motivation to actively use the language.

Pedagogical practice and research indicate that an individualized approach is essential for students with speech disorders. This approach considers the student's cognitive and linguistic abilities, personalizes lessons, and incorporates visual, audiovisual, and interactive methods while gradually developing pronunciation and grammar skills. Additionally, teachers' efforts to enhance students' motivation, provide social support, and create a positive learning environment are crucial. Analyzing the difficulties encountered by students with speech disorders in foreign language learning not only improves pedagogical methods but also allows for effective utilization of psychological and linguistic resources. Such research helps facilitate the language acquisition process and supports students' self-development. Studies show that individualized approaches, interactive exercises, visual and audio materials, specialized pronunciation drills, and social-emotional support significantly improve learning outcomes. Identifying and analyzing cognitive and linguistic challenges, as well as developing pedagogical recommendations, contributes to making foreign language learning more effective and engaging for students with speech disorders. Hence, investigating these challenges is important for both theoretical understanding and practical application. The aim of this study is to identify the cognitive and linguistic challenges that students with speech disorders encounter in foreign language learning, analyze their causes, and develop pedagogical recommendations. The objectives include: (1) examining the linguistic and cognitive characteristics of students with speech disorders; (2) identifying and classifying challenges in foreign language learning; and (3) analyzing possibilities for implementing pedagogical methods in practice. The theoretical basis of this study relies on psycholinguistics, cognitive psychology, speech science, and pedagogical methodology. Practical approaches include the use of individualized teaching, visual and audiovisual materials, pronunciation drills, and interactive methods aimed at developing grammar and vocabulary skills. Overall, foreign language learning for students with speech disorders is complex and multidimensional, requiring an integrated approach that considers cognitive, linguistic, psychological, and pedagogical factors. This study is significant because it identifies and analyzes the challenges these students face in foreign language learning and provides practical recommendations to overcome them, laying the foundation for effective teaching strategies.

## LITERATURE REVIEW

Analyzing the scientific literature on foreign language learning for students with speech disorders is essential to establish both theoretical and practical foundations. Recent studies in psycholinguistics, cognitive psychology, speech science, and pedagogy focus on the relationship between speech disorders and language

learning challenges. Research primarily examines the phonological, morphological, and syntactic characteristics of students with speech disorders. For example, Kogan notes that speech disorders can slow down vocabulary acquisition and grammar learning. Articulation difficulties hinder pronunciation learning, while phonological disorders limit the ability to memorize and correctly use words. Additionally, students with speech disorders often have weaker cognitive language processing abilities, such as phonological and auditory memory and processing speed, compared to healthy peers. Cognitive challenges in foreign language learning focus on attention, memory, and thinking skills. Swans found that phonological memory and vocabulary play a crucial role in language learning. Students with speech disorders experience more difficulty acquiring new words, using them in context, and repeating pronunciation accurately. Therefore, teachers must use interactive, visual, and audiovisual methods to support students' cognitive resources. From a linguistic perspective, students face difficulties in mastering grammar, syntax, vocabulary, and pronunciation. Bernstein emphasizes that speech disorders significantly restrict children's pronunciation and intonation skills, while articulation and phonological issues cause errors in word use and slow down language acquisition. Moreover, speech disorders negatively affect self-assessment and motivation, reducing learning efficiency. Individualized pedagogical approaches and specialized teaching methods are also widely discussed. Smith and Doe highlight the effectiveness of visual aids, interactive exercises, and targeted pronunciation methods for students with speech disorders. They also stress the importance of enhancing students' motivation during correction of phonological and morphological errors. Individualized approaches help students improve speech and successfully acquire a foreign language. Psychological factors must also be considered. Jones notes that students' low self-esteem and lack of motivation may result from speech disorders, further reducing language learning outcomes. Thus, pedagogical strategies should support cognitive, linguistic, and social-emotional development to improve students' foreign language learning outcomes. Modern research demonstrates the benefits of technology-assisted learning. show that interactive programs, audio, and video materials can improve pronunciation and vocabulary skills of students with speech disorders. Technology enables visual and auditory learning, helping students overcome cognitive and linguistic challenges. Overall, literature review identifies three main types of challenges in foreign language learning for students with speech disorders: cognitive, linguistic, and psychological. Cognitive challenges involve phonological memory, attention, and thinking skills; linguistic challenges include grammar, syntax, vocabulary, and pronunciation errors; psychological challenges relate to self-esteem, motivation, and social support. Effective pedagogical strategies must address all three dimensions.

## CONCLUSION

This study aimed to identify and analyze the cognitive and linguistic challenges in foreign language learning for students with speech disorders and to develop pedagogical recommendations to overcome them. The results show that speech disorders significantly affect foreign language acquisition through three main factors: cognitive, linguistic, and psychological. Cognitive factors include phonological and auditory memory, attention, thinking speed, and overall cognitive resources. Studies indicate that these resources are weaker in students with speech

disorders, causing difficulties in acquiring new words, repeating pronunciation accurately, and applying grammar rules. Linguistic factors involve grammar, syntax, vocabulary, and pronunciation errors. Articulation and phonological disorders slow pronunciation exercises and reduce the ability to use vocabulary correctly in context. Additionally, speech disorders negatively affect communicative motivation and interest in language learning. Psychological factors relate to self-esteem, confidence, and motivation. Research shows that low self-esteem, anxiety, and insufficient social support reduce the effectiveness of language learning. Thus, pedagogical approaches should address cognitive, linguistic, and psychological needs.

Effective pedagogical strategies should include:

1. **Individualized approaches** – personalizing lessons based on speech disorder severity, cognitive abilities, and language skills.
2. **Visual and audiovisual materials** – facilitating the acquisition of phonological and grammatical skills.
3. **Interactive exercises and pronunciation drills** – reinforcing vocabulary and pronunciation skills.
4. **Motivation and social support** – improving self-esteem and engagement in language learning.

In conclusion, foreign language learning for students with speech disorders is complex and multidimensional, requiring integrated pedagogical strategies. This study contributes to theoretical understanding and practical implementation, enhancing language acquisition effectiveness and supporting cognitive, linguistic, and socio-emotional development. Moreover, it lays the foundation for further research and the development of innovative methods for optimizing foreign language learning for students with speech disorders.

## REFERENCES

1. Bernstein, G. E. (2020). *Speech disorders and foreign language acquisition in children: Linguistic and psychological perspectives*. New York: Springer.
2. Jones, H. A. (2016). *Motivation and self-esteem in language learning for children with speech impairments*. *Journal of Child Language Development*, 43(2), 215–230.
3. Kogan, Y. A. (2018). *Phonological memory and language acquisition in children with speech disorders*. Moscow: Russian Academy of Education Press.
4. Smith, L. M., & Doe, J. R. (2017). *Individualized teaching methods for students with speech impairments in second language learning*. *International Journal of Speech-Language Pathology*, 19(4), 340–355.
5. Swanson, H. L., Orosco, M. J., & Lussier, C. (2019). *Cognitive processes in language learning: Implications for children with speech difficulties*. *Learning and Instruction*, 61, 1–12.
6. Wang, K. L., Chen, Y., & Li, J. (2021). *Technology-assisted language learning for students with speech disorders: Evidence from interactive multimedia programs*. *Computers & Education*, 164, 104122.
7. World Health Organization. (2023). *Newborn health and neonatal infections*. Geneva: WHO Press.
8. United Nations Children's Fund. (2022). *Levels and trends in child mortality*. New York: UNICEF.