A Research Update on Factors Influencing Second Language Acquisition: Native Languages and Learning Difficulty

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Abstract: Learning a second language is a complex process that is influenced by a variety of factors, including the learner's first language. This study investigates the reasons behind language learning decisions made by speakers of different native tongues and investigates whether the difficulty of learning a second language is related to the difficulty of learning the first language. Psychological development, career advancement, and cultural fusion are some of the reasons why language learning is desirable. Additionally, by highlighting potential challenges and resources, it examines the linguistic gap between the target language and the originating language.The study's research design, datagathering strategies, and analytic approaches are all covered in the methodology section.The findings improve knowledge of the interactions between first-language acquisition and secondlanguage learning, direct methods of teaching languages, and promote effective multilingual communication.

Keywords: second language acquisition, factors affecting second language learning, language learning aptitude, learning style, personality

1. Introduction

The ability to communicate in multiple languages is more crucial than ever in today's globalized world. Individuals with diverse linguistic backgrounds begin studying a second language for several reasons, such as advancing professionally, developing personally, and experiencing other cultures[1]. However, there are differences in the methods by which second languages are learned, and these can be influenced by things like the learner's native tongue and the linguistic distance between the two languages[2]. This study looks at why people who speak different native languages decide to learn a second language and whether or not their first language affects how difficult a second language is to learn. Understanding these variables can help educators, legislators, and language learners improve learning processes, build curricula, and tailor language training.

2. Literature Review

2.1. First language acquisition

The process of acquiring a first language, starting in infancy and continuing into childhood, is both fascinating and complex. Researchers have been fascinated by the easy way in which children learn different language abilities like phonology, syntax, morphology, and semantics in a relatively brief

period [1]. This review aims to provide a thorough overview of key theories and findings in the field of first language acquisition.

The natural talent to easily learn a language in early childhood is a distinctive characteristic that only humans possess [1]. Chomsky's Innateness Hypothesis is explored in his influential work "Language and Mind" [3]. Chomsky's Innateness Hypothesis suggests that humans are born with a language acquisition device (LAD) already in place [4]. This device is thought to be a specific cognitive mechanism that focuses on processing and acquiring language skills. Chomsky believes that children can quickly and proficiently learn a language without specific teaching due to the presence of the LAD [5].

Marschark & Spencer note that the inherent nature of the LAD suggests that elements such as syntax and grammar are naturally embedded in the human brain [6]. Chomsky's proposition greatly impacted the study of linguistics by transforming scholars' understanding of language universality and children's language learning processes.

Social interactionism became prominent during the 1950s in the examination of how children acquire their first language. The viewpoint of Social Interactionism, often associated with researchers like Lev Vygotsky, highlights the importance of social interaction and cultural environment in the development of first language acquisition [7]. According to this perspective, children develop language abilities by interacting with caregivers, peers, and their surroundings. Language development is seen as a collaborative effort where children engage in communication with others to actively acquire linguistic skills. Additionally, the Social Interactionism Perspective underlines the significance of cultural context in influencing language development. Vygotsky argues that the relationship between the mind and the wider societal context must be taken into account when seeking to understand the mind [8]. Children learn language from specific cultural groups, where societal norms, traditions, and behaviours influence language patterns. Through participation in cultural customs and communication with peers, children not only enhance their language skills but also acquire cultural knowledge and understanding. According to Milton & Fitzpatrick, the Social Interactionist Perspective focuses on the dynamic and interactive way children acquire language, stressing the important role of social interactions and cultural context in shaping their linguistic development [9]. The process of acquiring a first language is intricate and influenced by biological, cognitive, social, and environmental factors. Scholars continue to improve our understanding of how children acquire language and the complex mechanisms that help them achieve this remarkable feat by integrating theoretical perspectives, methodological approaches, and empirical data.

2.2. Second language acquisition

The process of learning a language other than one's native tongue is known as second language acquisition (SLA), and it is a multifaceted and intricate process. Scholars from various disciplines, including linguistics, psychology, and education, have long been intrigued by the variables that impact SLA and the mechanisms involved in language development. The goal of this review of the literature is to provide an overview of key theories and findings connected to SLA [10].

The input hypothesis, which claims that language learners learn best when they receive understandable input slightly more advanced than their current skill level, was first proposed by Stephen Krashen in his book about second language acquisition in 1981. According to Krashen, language learning occurs naturally when learners are exposed to intelligible linguistic input, which enables them to understand the message even if they do not understand every word [11]. The Input Hypothesis has been the subject of research on several language learning topics, such as the impact of exposure to real language input, the efficacy of various teaching modalities, and the connection between input and the development of language ability.

In the 1980s, these theories gained prominence in the field of second language acquisition (SLA) and significantly advanced our understanding of how interaction and communication support language learning. In addition, sociocultural theories which were developed by Lev Vygotsky and further developed by other scholars have been included in studies on second language acquisition. These theories highlight the significance of social interaction and cultural background in cognitive development, including language acquisition. Lev Vygotsky's 1978 book "Mind in Society: The Development of Higher Psychological Processes" presents his primary sociocultural theory. In this seminal work, Vygotsky examines the relationship between social interaction, the cultural environment, and cognitive development with a particular emphasis on language acquisition.

According to this theory, kids pick up the language through interacting with and learning from adults who are more knowledgeable than them—like parents, instructors, or friends [12]. Through these exchanges, students get feedback, encouragement, and assistance in internalizing language patterns as well as enhancing their communication abilities. Students gain support, guidance, and assistance from these exchanges, which helps them assimilate language patterns and enhance their ability to speak successfully [13]. Languages are tools of culture that reflect and impact cultural norms, beliefs, and actions in addition to being a means of communication. As a result, cultural engagement and language acquisition are closely related since language use helps learners develop their identity and cultural comprehension in addition to their linguistic abilities.

2.3. Reasons for Second Language Learning

Learners with different linguistic backgrounds could have different reasons and objectives for picking up a second language. A variety of often-reported causes have been recognized by the literature. Being able to communicate in a widely spoken or important global language, like Mandarin, Spanish, or English, can improve one's social and economic situation and provide access to better healthcare, educational opportunities, and career progression [13]. Cultural assimilation: Immigrants, refugees, and multilingual individuals feel more at home and assimilated into the new culture when they learn the primary language of the host country.

2.4. Intellectual progress and personal interest

Some students might be motivated by a sincere curiosity about other cultures, a desire to grow personally, or a fascination with linguistic intricacy. It may be necessary for someone to be fluent in a language to pursue specific academic or professional paths, which encourages people to acquire it to progress in their careers or continue their education [6]. Even while these factors may transcend linguistic distinctions, the particular social, cultural, and economic situations in which students find them might affect their motivation and viewpoint on learning a new language.

3. Learning Difficulties and the Influence of L1

A lot of studies have been done on the impact of a learner's native language on their acquisition of a second language. Several scholarly investigations have explored the challenges encountered by language learners from diverse backgrounds, emphasizing the connection between acquiring one's first language (L1) and second language (L2).

3.1. Variations in sound and spelling patterns

Students who speak a language different from the one they are trying to learn may find it difficult to pronounce and spell the new language correctly. For example, learners who do not know phonemic distinctions or specific sounds in their first language may find it challenging to pronounce and

comprehend those sounds correctly [11]. Similar to this, those accustomed to logographic writing systems like Chinese may find it challenging to master alphabetic writing systems like English.

3.2. Variations in Sentence Structure and Word Forms

Differences in structure between the learner's native language and the language being learned can complicate understanding the syntax and morphology of the new language. Learners may make errors or experience interference in constructing grammatical structures in a second language due to applying patterns and rules from their native language. For instance, a student who speaks a language without grammatical gender or plural markers may struggle to comprehend these features in Spanish or German.

3.3. Variations in significance and terminology

Understanding the organization and articulation of words and ideas in different languages can be challenging for individuals trying to acquire them. False cognates, which are deceptively similar words, can lead to confusion and errors. Moreover, learners might find it difficult to grasp the nuances of meaning in the target language because words and expressions are conceptually linked in diverse ways across languages**.**

3.4. Differences in pragmatics and sociolinguistics

Language is not only a system of rules and words but also a means of communication shaped by cultural and societal elements. Students may encounter difficulties in understanding and applying the appropriate pragmatic and sociolinguistic aspects of the new language, such as speech acts, politeness strategies, and changes in the register. Challenges can result from the influence of the socio-cultural norms and conventions of their native language [2].

The challenges in language acquisition can be influenced by one's mother tongue, but personal differences, age of learning, study surroundings, and teaching strategies also have an important impact.

4. Implications and Strategies

The results of studies on how a person's native language affects their learning of a second language have various consequences for how languages are taught and learned.

4.1. Contrastive Analysis and Error Analysis are compared.

Teachers can anticipate difficulties in learning and adapt teaching resources and techniques by examining the student's mother tongue and the target language [14]. This approach involves identifying common errors or obstacles and addressing them directly in the classroom.

Acquiring knowledge of metalinguistic awareness is a crucial development.

Helping students understand the differences in structure and concepts between their native language and the language they are learning can facilitate the learning process [15]. Achieving this can be done by offering clear instructions, involving learners in activities that highlight differing language features, and helping them build the ability to analyze and differentiate linguistic traits.

4.2. Using L1 as a valuable resource

While excessive use of one's native language can hinder learning a new one, incorporating it wisely in classroom teaching can aid comprehension and improve the learning journey. Utilizing careful

translation, switching between languages, and comparing first and second languages can aid in understanding complex ideas and improving metalinguistic awareness.

Instruction that is sensitive to diverse cultural backgrounds.

Recognizing the diverse language and cultural backgrounds of students is crucial for effective language instruction. Incorporating culturally relevant materials, examples, and activities can increase learners' engagement and understanding of social and practical norms in the language being studied.

4.3. Personalized and Tailored Teaching

Language instructors should strive to use a teaching method that is personalized and adaptable to meet the needs of students with different language backgrounds and educational requirements [6]. By acknowledging the strengths and areas of improvement in students, teachers can tailor their teaching approaches and provide individualized support, direction, and feedback.

5. The relationship between first- and second-language acquisition

Academics studying linguistics, psychology, and education have been fascinated by the connection between learning one's mother tongue and learning a second language for a long time. Understanding how people learn their first language and then pick up additional languages can help us understand the factors and processes that go into language acquisition [6]. This literature review aims to give a summary of important theories and research on the connection between FLA and SLA.

The transfer idea was first presented in the 1950s by American linguist Robert Lado [16]. Particularly around the middle of the 20th century, he had a significant influence on the fields of second language acquisition research and language instruction. Lado provides a detailed analysis of the transfer hypothesis in his 1957 book "Cross-cultural Linguistics: Applied Linguistics for Language Teachers". Lado's theory of contrastive analysis and the transfer hypothesis which postulates that a person's first language structure influences their ability to learn a second language— is examined in this book [9].

The input hypothesis put forth by Stephen Krashen is crucial to the study of first- and second-language acquisition. According to this hypothesis, learners' chances of acquiring a language are highest when they are exposed to understandable input [11]. This hypothesis suggests that the amount and quality of linguistic input influence each other's significance in FLA and SLA.

There are several facets and a complex link between FLA and SLA. While there are similarities between the two processes, there are also differences because of things like language usage settings, starting age, and language proficiency. By examining the relationship between FLA and SLA, scholars can expand their understanding of the process of language acquisition. By utilizing this data, language training methods can be enhanced, benefiting people of all ages and backgrounds in terms of language acquisition outcomes.

6. Methodology

6.1. Research Design

To obtain a comprehensive understanding of the study's queries, this research will employ a mixed-methods strategy, combining quantitative and qualitative data collection techniques.

6.2. Participants

A diverse range of adult learners of second languages, representing a range of native tongue backgrounds, will participate in the study. People will be enrolled through online resources, educational institutions, and language learning facilities.

6.3. Data Collection

6.3.1. Quantitative Data

To gather information on participants' mother tongues, reasons for learning a second language, perceived difficulty level, and demographics, a formal survey will be held.

Standardized language proficiency exams will be used to assess participants' second language proficiency.

6.3.2. Qualitative Data

Some participants will be the subject of semi-structured interviews to gain a deeper understanding of their motivations, challenges, and experiences in learning a second language.

We will conduct classroom observations and focus group discussions to gather more qualitative data on the educational process and methodologies.

6.4. Data Analysis

6.4.1. Quantitative Analysis

To compile the information from the questionnaire and the results of the proficiency test, summary statistics will be calculated.

Regression analysis and analysis of variance (ANOVA), two inferential statistical techniques, will be used to examine the relationships among native language, learning objectives, and perceived levels of difficulty.

6.4.2. Qualitative Analysis

The transcripts of focus groups, observations made in classrooms, and interviews will be subjected to thematic coding methodologies to identify recurring themes, patterns, and insights related to the research questions.

By using a mixed-methods approach, data from multiple sources may be cross-verified, improving the reliability and trustworthiness of the findings.

6.5. Ethical Considerations

The ethical standards and procedures for researching human subjects will be adhered to in this study. For the duration of the research, all participants will be kept anonymous and confidential, and they will all need to give informed consent. The study will be conducted in compliance with the Institutional Review Board's (IRB) recommendations [9].

7. Findings and Recommendations

Research on the impact of one's mother tongue on learning a second language indicates that a person's cognitive processes, articulation, verbal abilities, grammatical proficiency, and overall progress in learning the new language are all significantly shaped by their mother tongue [11]. Effective

communication, scholastic achievement, and the comprehension of foreign language grammar can all be hindered by interference from one's home language. Preschool environments where local language is used can benefit children's language development and learning, according to research. In addition, age, societal pressures, mental factors, teaching methods, and the impact of their native tongue all provide challenges for pupils trying to learn a second language [5].

To properly acquire language skills, one must recognize the significance of one's native language in shaping cognitive processes, supporting cognitive growth, and creating a connection to one's ancestry. These findings lead to recommendations that to improve language learning outcomes, it is essential to provide bilingual education, incorporate the native language into instruction, and acknowledge the influence of the first language on learning a second language [11]. Educators and legislators must prioritize the protection of original languages to promote language acquisition and maintain cultural variety in educational environments.

8. Conclusion

Understanding how linguistic backgrounds affect language learning outcomes has been made feasible by the ongoing research into the motivations behind learners of different native languages pursuing second language acquisition and the potential link between learning difficulties and their mother tongue. A thorough analysis of various aspects, including linguistic variations, cognitive processes, and cultural influences, indicates that students' first languages have a significant influence on their second language learning. Educators and legislators must understand these dynamics to develop customized teaching methods that satisfy the various needs of language learners. To progress in the field and deepen our knowledge of how to improve language acquisition outcomes for individuals from varied linguistic backgrounds, further research is required. Research into how native languages affect the acquisition of a second language has provided an important understanding of why learners from varying linguistic backgrounds decide to learn a new language and the possible difficulties they could face. Recognizing the influence of multiple factors, such as socio-cultural, cognitive, affective, and pedagogical influences, is crucial in shaping a learner's language learning journey, alongside the impact of their mother tongue.

By identifying the possible difficulties in the phonological, syntactic, lexical, and pragmatic distinctions between a learner's first language and the language they are attempting to acquire, educators can develop specialized tactics and teaching approaches. Embracing contrastive analysis, encouraging metalinguistic awareness, utilizing L1 as a resource, and putting culturally sensitive and customized teaching methods into practice are all ways to support language learners from diverse linguistic backgrounds on their language learning journey. Ultimately, successful and comprehensive language instruction depends on recognizing and addressing the influence of indigenous languages. By adapting their teaching strategies to each student's unique requirements and background, language instructors can encourage linguistic variety and facilitate the successful acquisition of a second language.

References

[1] Meisel, J. M. (2011). First and second language acquisition: Parallels and differences. Cambridge University Press. https://doi.org/10.1017/CBO9780511862694
[2] Bruno, D. C., Jessica, S., & Christina, H. (2012). Educational research and innovation languages in a global world learning for better cultural understanding: Learning for better cultural understanding (2nd ed.). OECD Publishing.
[3] Chomsky, N. (1968). Language and mind. Harcourt, Brace and World.
[4] Hanc-Azizoglu, E., & Kavakl, N. (2020). Futuristic and linguistic perspectives on teaching writing to second language students (1st ed.). IGI Global.

[5] Lu, X. (2022). Factors influencing second language processing and production. Corpus Linguistics and Second Language Acquisition, 12(6), 46-78. https://doi.org/10.4324/9781003054948-3

[6] Marschark, M., & Spencer, P. E. (2010). The Oxford handbook of deaf studies,   language, and education, Vol. 2. Oxford University Press.

[7] Vygotskiĭ, L. S., & Kozulin, A. (1986). Thought and language (Translation newly rev. and / by Alex Kozulin. ed.). MIT Press.

[8] Vygotskiĭ, L. S., Cole, M., John-Steiner, V., Scribner, S., & Souberman, E.   (1978). Mind in society: The development of higher psychological processes.   Harvard University Press.

[9] Milton, J., & Fitzpatrick, T. (2017). Dimensions of vocabulary knowledge (2nd ed.).   Bloomsbury Publishing.

[10] OECD. (2012). Educational research and innovation languages in a global world learning for better cultural understanding: Learning for better cultural understanding (2nd ed.). OECD Publishing.

[11] Krashen, S. D. (1981). Second language acquisition and second language learning (1st ed.). Pergamon.

[12] Shu, D., Xu, J., & Zhang, H. (2024). Second or foreign language learning and cognitive development (1st ed.). Frontiers Media SA.

[13] Szyszka, M. (2016). Foreign language anxiety in the context of foreign language oral performance, language and pronunciation learning strategies. Second Language   Learning and Teaching, 13(15),   51-85. https://doi.org/10.1007/978-3-319-50642-5_3

[14] Khansir, A. A. (2012). Error analysis and second language acquisition. Theory and Practice in Language Studies, 2(5), 1027. https://doi.org/10.4304/tpls.2.5.1027-1032

[15] Bialystok, E. (2001). Bilingualism in development: Language, literacy, and cognition. Cambridge University Press.

[16] Lado, R. (1958). Linguistics across cultures: Applied linguistics for language teachers. University of Michigan Press.