

THE EFFECT OF USING MOTHER TONGUE ON THE DEVELOPMENT OF COGNITIVE ABILITIES AND SECOND LANGUAGE IN EARLY CHILDHOOD

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Abstract: *This study aims to analyze the effect of using the mother tongue on the development of cognitive abilities and second language acquisition in early childhood. The use of the mother tongue during early childhood plays a crucial role in shaping children's cognitive and linguistic development, influencing their ability to acquire a second language. This research examines how the mother tongue serves as a foundation for cognitive processing, problem-solving, and the transfer of linguistic skills to a second language. Using a mixed-methods approach, the study involves observations, cognitive assessments, and language proficiency tests to explore the relationship between mother tongue usage and the development of bilingual abilities. The results indicate that children who actively use their mother tongue show enhanced cognitive flexibility and improved second language proficiency. Moreover, the study highlights strategies to optimize the integration of the mother tongue in early education, including creating bilingual learning environments, fostering cultural awareness, and engaging parents in the language development process. These findings are expected to contribute to educational practices that support cognitive and linguistic growth in young children.*

Keywords: *Mother tongue, cognitive development, second language acquisition, early childhood education, bilingualism*

Article History

Received: Desember 2024

Reviewed: Desember 2024

Published: Desember 2024

Plagiarism Checker No 234

Prefix DOI : Prefix DOI :

10.8734/Sindoro.v1i2.365

Copyright : Author

Publish by : Sindoro



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INTRODUCTION

A. Background

The role of the mother tongue in early childhood education has been a subject of global interest due to its impact on cognitive and linguistic development. Many studies emphasize that children learn best when instruction is delivered in their first language during the early stages of development. This approach enables them to build a strong foundation in cognitive skills, which later facilitates the acquisition of additional languages, including second languages. In many multilingual societies, early childhood education often incorporates mother tongue-based instruction to support these developmental processes.

The use of the mother tongue in early childhood education is especially critical during the sensitive period of brain development. At this stage, children are highly receptive to learning and forming complex neural connections. Research suggests that using the first language enhances critical thinking, problem-solving, and creativity, as it allows children to

internalize concepts more effectively. Furthermore, early exposure to a rich linguistic environment in the mother tongue creates a smoother transition when children begin learning a second language, promoting bilingual or multilingual proficiency.

Despite these benefits, debates persist regarding the balance between mother tongue usage and early exposure to a second language. In some educational settings, the emphasis on second language acquisition may overshadow the role of the mother tongue, potentially hindering cognitive development. Conversely, there is concern that over-reliance on the mother tongue could delay the mastery of a second language, which is often deemed essential for academic and professional success in a globalized world.

This study seeks to explore the effects of using the mother tongue on the development of cognitive abilities and second language acquisition in early childhood. By analyzing both the cognitive benefits and the implications for second language learning, this research aims to provide insights into how a balanced approach can enhance overall development. The findings will be valuable for educators, policymakers, and parents in designing early childhood education strategies that maximize children's cognitive potential while fostering bilingual or multilingual competence.

B. Research Problem

This research focuses on the influence of using the mother tongue on the cognitive and second language development of early childhood learners aged 3-7. Despite the widespread belief that introducing a second language early benefits children's linguistic proficiency, the role of the mother tongue in fostering cognitive growth and its potential interference with or support for second language acquisition remains underexplored. The study aims to examine how the use of the mother tongue in early learning contexts impacts children's ability to develop cognitive skills, such as problem-solving and critical thinking, as well as their proficiency in a second language. It also seeks to identify strategies to balance mother tongue use and second language exposure in early education.

How does the use of the mother tongue influence cognitive development and second language acquisition in early childhood?

C. Research Objective

This research intends to explore the impact of using the mother tongue on the cognitive and second language development of early childhood learners. The main aim is to assess how the use of a child's native language influences cognitive abilities and second language acquisition during the critical early years of development. The study focuses on three primary objectives:

1. **Understanding the Role of Mother Tongue in Cognitive Development:** The research seeks to analyze how the use of the mother tongue supports cognitive growth in early childhood, particularly in areas such as problem-solving, memory, and critical thinking.
2. **Examining the Influence of Mother Tongue on Second Language Acquisition:** The study will investigate how early exposure to and reliance on the mother tongue impacts a child's ability to learn and use a second language effectively.
3. **Identifying Best Practices for Balancing Mother Tongue and Second Language Learning:** The research aims to identify strategies that optimize the benefits of mother tongue use

while supporting the development of second language proficiency, ensuring a balanced and effective approach to bilingual education.

By achieving these objectives, the study aspires to provide valuable insights into the interplay between mother tongue use and early childhood development. It is expected to offer practical recommendations for educators and parents to enhance cognitive and linguistic outcomes in young learners.

PREVIOUS WORK

This study aims to analyze the influence of language anxiety on children's English sp This study aims to examine the effect of using the mother tongue on the development of cognitive abilities and second language acquisition in early childhood. The variables under investigation are divided into the following two main aspects:

1. **Mother Tongue and Cognitive Development in Early Childhood:** This variable explores the role of the mother tongue in the cognitive development of young children. Research indicates that early exposure to the mother tongue plays a critical role in cognitive skills such as memory, problem-solving, and logical reasoning. Studies have shown that children's cognitive abilities develop more effectively when they have a strong foundation in their first language, which provides the framework for learning new languages and abstract concepts. This section reviews existing literature on the positive correlation between proficiency in the mother tongue and the growth of general cognitive functions in early childhood.
2. **Second Language Acquisition in Early Childhood:** This variable examines how the use of the mother tongue influences the acquisition of a second language. It includes studies that investigate how bilingual children develop language skills in both their native language and a second language. Existing research suggests that while the mother tongue serves as a cognitive anchor, it can also facilitate or hinder the learning of a second language, depending on factors like language exposure, cognitive load, and age of acquisition. Previous studies have highlighted the complex interaction between first and second languages in early childhood, with some suggesting that early bilingualism may enhance cognitive flexibility, while others point out challenges related to language interference and delayed second language proficiency.

By analyzing these variables, this study seeks to provide a comprehensive understanding of the impact of using the mother tongue on both cognitive development and second language learning in early childhood.

RESEARCH METHOD

A. Research Design

This study investigates the influence of using the mother tongue on the cognitive development and second language acquisition in early childhood through a mixed-methods approach. The research will focus on children aged 3-6 years, a crucial period for both cognitive and language development. The mixed-methods design integrates both qualitative and quantitative data to provide a comprehensive understanding of the effects.

Qualitative data will be gathered through observations, interviews with parents and teachers, and detailed case studies, capturing the nuanced ways in which the mother tongue

affects the children's cognitive abilities and second language learning. This qualitative approach, as defined by Creswell (2014), is suitable for understanding complex phenomena in natural settings, focusing on the subjective experiences of the participants.

Quantitative data will be collected using standardized cognitive tests and language proficiency assessments in both the mother tongue and the second language. The aim is to analyze any correlations between the use of the mother tongue and improvements in cognitive skills and second language proficiency. This quantitative approach will allow for statistical analysis and generalization of findings, as outlined by Fraenkel, Wallen, and Hyun (2015).

By combining both qualitative and quantitative methods, this research will provide a holistic view of how the use of the mother tongue influences both cognitive abilities and second language development in early childhood, offering insights into best practices for language acquisition in early education settings.

B. Research Subjects

The subjects for this research are early childhood learners, specifically children aged 3 to 6 years old, who are exposed to both their mother tongue and a second language in their daily environments. These children are selected from various educational settings such as preschools, daycare centers, and homes where bilingual or multilingual practices are common. The study will focus on children from diverse linguistic backgrounds to examine the impact of mother tongue usage on cognitive development and second language acquisition. The data will be gathered through observations, assessments, and interviews with educators, parents, and language experts, ensuring a comprehensive understanding of the subject matter.

C. Research Object

The research object in this study focuses on the impact of using the mother tongue on the development of cognitive abilities and second language acquisition in early childhood. It examines how the use of a child's first language in early educational settings influences their cognitive development, including memory, problem-solving, and reasoning skills, as well as the learning of a second language. This study centers on young children as the primary subjects, considering the role of the mother tongue in shaping their language skills and cognitive growth, while also investigating how this interaction affects their ability to acquire additional languages. The objective is to provide a detailed analysis of the connection between language use, cognitive development, and second language learning in early childhood education.

DATA ANALYSIS

1. The Effect of Mother Tongue on Cognitive Development:

The use of a child's mother tongue in early childhood plays a significant role in shaping cognitive development. Research indicates that cognitive skills such as problem-solving, memory, and reasoning are strengthened when children are allowed to use their mother tongue in their learning environment. Vygotsky's (1978) sociocultural theory suggests that language is a tool for cognitive development, and when children can express themselves in

their mother tongue, they can better understand and manipulate the world around them. Studies have shown that children who have a strong foundation in their native language tend to perform better in tasks involving abstract thinking and concept formation.

Additionally, using the mother tongue fosters emotional security and self-confidence, enabling children to engage more actively in cognitive tasks. The comfort of using a familiar language allows them to focus on the task at hand, rather than struggling to understand or express themselves in a second language. This foundational knowledge not only enhances their cognitive abilities but also lays the groundwork for successful second language acquisition.

- Data 1: Research shows that the use of mother tongue in early childhood plays an important role in shaping cognitive development. Cognitive skills such as problem solving, memory and reasoning are strengthened when children are allowed to use their mother tongue in the learning environment. Vygotsky's (1978) sociocultural theory states that language is a tool for cognitive development. When children can express themselves in their native language, they can better understand and manipulate the world around them (Rowe et al., 2017).
- Data 2: Research has shown that children who have a strong foundation in their native language tend to do better in tasks involving abstract thinking and concept formation. For example, a study by Cummins (2001) found that bilingual children with strong skills in their mother tongue showed better abilities in analytical and cognitive thinking compared to children who used only one language (Spelke, 2017).
- Data 3: In addition, using the mother tongue fosters emotional security and self-confidence, which allows children to engage more actively in cognitive tasks (Song et al., 2022). Research by Thomas and Collier (2002) shows that children who feel comfortable using their mother tongue at school have higher participation rates and show better academic results.
- Data 4: The comfort of using a familiar language allows children to focus on the task at hand, rather than struggling to understand or express themselves in a second language. This basic knowledge not only improves their cognitive abilities but also lays the foundation for successful second language acquisition. According to Genesee (2008), strong mother tongue skills facilitate the second language learning process, as children can transfer their cognitive and linguistic skills from one language to another (Roussel et al., 2017).

By understanding the positive influence of mother tongue use on children's cognitive development, educators and policy makers can design more inclusive and effective curricula and teaching methods. This is essential to support optimal cognitive development in children, especially in multilingual societies.

2. The Role of Mother Tongue in Second Language Acquisition:

The use of the mother tongue in early childhood education also has a crucial impact on the development of second language skills. According to Cummins' (2000) theory of bilingualism, the skills developed in the mother tongue can transfer to second language learning, especially in terms of literacy, vocabulary, and grammar. Children who are fluent in

their native language often find it easier to learn a second language because they can draw upon cognitive skills such as syntax and sentence structure learned in their first language.

Furthermore, bilingual children often exhibit enhanced metalinguistic awareness, which refers to their ability to reflect on and manipulate language. This awareness helps them grasp the rules of a second language more effectively. The mother tongue serves as a scaffold for understanding the complexities of a second language, and early exposure to both languages in an integrated manner can lead to improved proficiency in both.

- Data 5: According to Cummins (2000), literacy skills developed in the mother tongue can be directly transferred to the second language. For example, children who are proficient readers in their mother tongue tend to master reading skills in a second language more quickly because they already have a foundation of understanding of text structure and effective reading techniques (Nishanthi, 2020).
- Data 6: Research by Bialystok (2001) shows that children who are exposed to their mother tongue early on have a richer vocabulary in their second language. This happens because they can utilize the understanding of vocabulary in the mother tongue to understand similar concepts in the second language, thus accelerating the vocabulary learning process (Hoque, 2017).
- Data 7: Based on Genesee's (2006) study, children who master their mother tongue are better able to understand the grammar of the second language. This is because they already have an understanding of the grammar rules of their mother tongue, which can be applied in the context of the second language. For example, children who understand the subject-predicate-object rule in their mother tongue tend to recognize and apply similar rules in the second language more easily (Nishanthi, 2020).
- Data 8: According to García and Kleifgen (2010), bilingual children show higher metalinguistic awareness. For example, they are better able to recognize the difference between word forms and word functions in sentences, which helps them in learning and mastering the second language more effectively (Yusuf et al., 2019).
- Data 9: Studies by Kenner (2004) show that the use of the mother tongue in a child's early education also supports broader cognitive development, which in turn strengthens second language ability. Children who are given the opportunity to learn in their mother tongue show a deeper understanding of abstract concepts and are better able to apply this knowledge in a second language context (Nishanthi, 2020).
- Data 10: Research conducted by August and Shanahan (2006) found that children who develop literacy skills in their mother tongue show increased proficiency in second language literacy. This is because they can use the reading strategies they have learned in their mother tongue to comprehend texts in the second language (Ganuza & Hedman, 2019).
- Data 11: Cummins (2000) also states that children who learn two languages simultaneously tend to have an advantage in cognitive tasks that require selective attention and executive control (Blom et al., 2017). For example, they are better at ignoring irrelevant information and focusing on a given task, which is an important skill in second language learning.
- Data 12: Research conducted by Snow (2007) shows that the integration of mother tongue in the early education curriculum helps children to develop better social and emotional skills (Housman, 2017). This, in turn, creates a positive learning environment that supports

second language learning. For example, children who feel comfortable and confident in using their mother tongue at school are more likely to actively participate in second language learning activities.

Overall, the data suggests that the use of mother tongue in early childhood education plays a significant role in second language learning. Skills developed in the mother tongue not only transfer directly to the second language but also enhance children's metalinguistic abilities, which are crucial in second language learning. Early exposure to both languages in an integrated manner can provide significant cognitive and linguistic advantages, which support the development of proficiency in both languages.

3. Impact of Mother Tongue on Emotional and Social Development:

Language is not only a cognitive tool but also an emotional and social one. The use of the mother tongue in early childhood enables children to express their thoughts and feelings more clearly, fostering emotional development. In social interactions, children who can communicate in their native language are more likely to engage with peers and adults confidently, forming stronger social bonds. This confidence and emotional security play a key role in their ability to learn a second language, as they are more likely to participate in language learning activities without the fear of making mistakes or facing social exclusion.

- Data 13: Studies show that speech errors often occur when there is competition between similar lexical items. For example, according to research conducted by Meyer (1996), it was found that substitution often occurs between words that have semantic or phonological relationships. This suggests that lexical retrieval is a competitive process, and errors are more likely to occur when two or more lexical items are activated simultaneously (Persici et al., 2019). In addition, Meyer explains that in the speech production process, the activation of multiple words that are similar in both meaning and sound can cause interference. This interference then leads to incorrect word selection, resulting in speech errors such as substitution (Brière, 2021).
- Data 14: Language is not only a cognitive tool, but also an emotional and social tool. The use of mother tongue in early childhood allows children to express their thoughts and feelings more clearly, thus promoting emotional development. In social interactions, children who can communicate in their mother tongue tend to be more confident in interacting with peers and adults, thus forming stronger social bonds (Housman, 2017). This confidence and emotional security plays an important role in their ability to learn a second language, as they are more likely to participate in language learning activities without fear of making mistakes or facing social ostracism.
- Data 15: Studies by Garrett (1980) show that phonological errors usually occur at the sub-lexical level, where individual phonemes are selected and organized into words (Alderete, 2023). Garrett suggested that this process involves an intricate phonological network that can be inadvertently activated, causing incorrect phonemes to be inserted into word sequences.

4. Challenges and Considerations in the Use of Mother Tongue in Early Childhood Education:

While the use of the mother tongue has numerous benefits, it is important to consider potential challenges. For instance, children who grow up in multilingual environments may face challenges in balancing the use of their mother tongue with a second language. In some cases, educators might focus more on the second language at the expense of the mother tongue, which can hinder the development of cognitive skills and second language proficiency. Additionally, the quality of the second language exposure and the context in which the mother tongue is used can significantly influence language development outcomes.

To address these challenges, it is essential for educators and parents to create a balanced approach, where both the mother tongue and second language are used strategically to support cognitive and language development. Ensuring that children have access to high-quality, interactive language learning experiences in both languages will maximize their potential for success in both their native and second languages. In conclusion, the use of the mother tongue in early childhood is a vital component in supporting cognitive development and second language acquisition. It provides a solid foundation for emotional, social, and cognitive growth, while also facilitating the learning of a second language. A balanced approach to language use in early childhood education can lead to significant benefits for children, enhancing both their cognitive abilities and their proficiency in multiple languages.

- Data 16: Studies show that speech errors often occur when there is competition between similar lexical items. For example, according to research conducted by Meyer (1996), it was found that substitution often occurs between words that have semantic or phonological relationships (Erben Johansson et al., 2020). This suggests that lexical retrieval is a competitive process, and errors are more likely to occur when two or more lexical items are activated simultaneously. In addition, Meyer explains that in the speech production process, the activation of multiple words that are similar in both meaning and sound can cause interference (He et al., 2021). This interference then leads to incorrect word selection, resulting in speech errors such as substitution (Brière, 2021).
- Data 17: Language is not only a cognitive tool, but also an emotional and social tool (Borghi et al., 2019). The use of mother tongue in early childhood allows children to express their thoughts and feelings more clearly, thus promoting emotional development (Housman, 2017). In social interactions, children who can communicate in their mother tongue tend to be more confident in interacting with peers and adults, thus forming stronger social bonds (Ladd & Kochenderfer-Ladd, 2019). This confidence and emotional security plays an important role in their ability to learn a second language, as they are more likely to participate in language learning activities without fear of making mistakes or facing social ostracism.
- Data 18: While mother tongue use has many benefits, it is important to consider potential challenges (Lundberg, 2019). For example, children growing up in a multilingual environment may face challenges in balancing the use of their mother tongue with a second language. In some cases, educators may focus more on the second language at the expense of the mother tongue, which may hinder the development of cognitive skills and second language proficiency (Hummel, 2021). In addition, the quality of exposure to the second language and the context in which the mother tongue is used can significantly

affect language development outcomes. To address these challenges, it is important for educators and parents to create a balanced approach, where both mother tongue and second language are used strategically to support cognitive and language development (Saneka & de Witt, 2019). Ensuring that children have access to high-quality interactive language learning experiences in both languages will maximize their potential for success in both their mother tongue and second language (Zhao & Lai, 2023).

RESULTS AND DISCUSSION

The study investigated the effect of using the mother tongue on early childhood cognitive abilities and second language development. Data were collected through tests, observations, and interviews, and the findings are summarized below:

1. Cognitive Development

Children exposed to their mother tongue in early childhood displayed significant progress in cognitive abilities, particularly in problem-solving, memory retention, and critical thinking. This progress was observed through structured cognitive tests, where these children performed better than those primarily exposed to a second language.

2. Second Language Acquisition

Children who maintained consistent exposure to their mother tongue alongside the second language demonstrated balanced development. Their understanding and fluency in the second language improved over time, attributed to the cognitive foundation provided by the mother tongue. In contrast, children who shifted to exclusive use of the second language exhibited slower development in comprehension and expressive skills.

3. Socio-Emotional Impact

Children who used their mother tongue regularly had better self-confidence and emotional security. This facilitated smoother interaction with peers and instructors, indirectly supporting their learning process in both cognitive and linguistic domains.

Discussion

The results align with Vygotsky's sociocultural theory, emphasizing the role of language as a tool for cognitive development. The mother tongue acts as a cognitive scaffold, enabling children to internalize complex concepts and apply them effectively in learning environments.

1. Mother Tongue as a Cognitive Anchor

Using the mother tongue in early learning provides a foundation for abstract reasoning and problem-solving. Language familiarity reduces cognitive load, allowing children to focus on conceptual understanding. This finding supports Cummins' Interdependence Hypothesis, which states that skills developed in one language can transfer to another.

2. Second Language as an Extension

The study highlights that simultaneous exposure to a second language alongside the mother tongue fosters bilingualism without compromising cognitive development. Early bilingualism was found to enhance metalinguistic awareness, enabling children to identify patterns and rules in both languages. However, children who prematurely transitioned to the second language often struggled due to the absence of a solid linguistic base.

3. Cultural and Emotional Factors

Maintaining the mother tongue promotes cultural identity and emotional well-being, which are critical for young learners. Emotional security enhances focus and motivation, indirectly boosting second language acquisition. This underscores the importance of creating an inclusive environment where both languages are valued.

In conclusion, the findings affirm that the mother tongue is essential for early cognitive and linguistic development. Incorporating the mother tongue in early education not only strengthens cognitive abilities but also facilitates second language acquisition. Future studies could explore the long-term effects of balanced bilingualism in academic achievement and social integration.

CONCLUSION AND SUGGESTION

CONCLUSION:

Based on the research conducted, the use of the mother tongue in early childhood plays a significant role in the development of cognitive abilities and the acquisition of a second language. Children who are encouraged to use their mother tongue tend to develop stronger cognitive skills such as critical thinking, problem-solving, and memory retention. Furthermore, proficiency in the mother tongue serves as a foundation for learning a second language more effectively, as it provides a solid linguistic structure and enhances metalinguistic awareness. However, excessive dependence on the mother tongue without balanced exposure to the second language may delay second language acquisition.

SUGGESTION

1. For Parents: Actively use the mother tongue at home while gradually introducing the second language through interactive activities, such as storytelling, games, or songs, to ensure balanced linguistic and cognitive development.
2. For Educators: Incorporate both the mother tongue and second language in early childhood education programs by designing bilingual activities that respect and integrate children's cultural and linguistic backgrounds.
3. For Policy Makers: Develop and promote educational policies that emphasize the importance of the mother tongue in early learning while providing opportunities for second language acquisition through structured and engaging programs.
4. For Researchers: Further studies are recommended to explore long-term impacts of mother tongue use on bilingual proficiency and cognitive growth, focusing on diverse linguistic and cultural contexts.

By implementing these suggestions, a more effective and inclusive approach to early childhood language and cognitive development can be achieved.

Bibliography

- Yazıcı, Z., Ilter, B. G., & Glover, P. (2010). How bilingual is bilingual? Mother-tongue proficiency and learning through a second language. *International Journal of Early Years Education*, 18(3), 259-268.
- Noormohamadi, R. (2008). Mother Tongue, a Necessary Step to Intellectual Development. *Journal of Pan-Pacific Association of Applied Linguistics*, 12(2), 25-36.

- Yadav, M. K. (2014). Role of mother tongue in second language learning. *International Journal of research*, 1(11), 572-582.
- Cummins, J. (1978). Educational implications of mother tongue maintenance in minority-language groups. *Canadian modern language review*, 34(3), 395-416.
- Khan, M. T. (2016). Mother Tongue an Effective Medium of Education-(Education, Which is a Factor of Human Capital Development). *International Journal of Information, Business and Management*, 8(3), 207.
- Phindane, P. (2020). The influence of mother tongue in second language learning in primary school. *Education and New Developments*, 380.
- Diaz, R. M. (1983). Chapter 2: Thought and two languages: The impact of bilingualism on cognitive development. *Review of research in education*, 10(1), 23-54.
- Alderete, J. (2023). Cross-linguistic trends in speech errors: An analysis of sub-lexical errors in Cantonese. *Language and Speech*, 66(1), 79-104.
- Blom, E., Boerma, T., Bosma, E., Cornips, L., & Everaert, E. (2017). Cognitive advantages of bilingual children in different sociolinguistic contexts. *Frontiers in Psychology*, 8, 552.
- Borghini, A. M., Barca, L., Binkofski, F., Castelfranchi, C., Pezzulo, G., & Tummolini, L. (2019). Words as social tools: Language, sociality and inner grounding in abstract concepts. *Physics of Life Reviews*, 29, 120-153.
- Brière, E. (2021). *A psycholinguistic study of phonological interference* (Vol. 66). Walter de Gruyter GmbH & Co KG.
- Erben Johansson, N., Anikin, A., Carling, G., & Holmer, A. (2020). The typology of sound symbolism: Defining macro-concepts via their semantic and phonetic features. *Linguistic Typology*, 24(2), 253-310.
- Ganuza, N., & Hedman, C. (2019). The impact of mother tongue instruction on the development of biliteracy: Evidence from Somali-Swedish bilinguals. *Applied Linguistics*, 40(1), 108-131.
- He, J., Meyer, A. S., & Brehm, L. (2021). Concurrent listening affects speech planning and fluency: the roles of representational similarity and capacity limitation. *Language, Cognition and Neuroscience*, 36(10), 1258-1280.
- Hoque, E. (2017). An introduction to the second language acquisition. *Language Acquisition*, 1-23.
- Housman, D. K. (2017). The importance of emotional competence and self-regulation from birth: A case for the evidence-based emotional cognitive social early learning approach. *International Journal of Child Care and Education Policy*, 11(1), 13.
- Hummel, K. M. (2021). *Introducing second language acquisition: Perspectives and practices*.
- Ladd, G. W., & Kochenderfer-Ladd, B. (2019). Parents and children's peer relationships. *Handbook of Parenting*, 278-315.
- Lundberg, A. (2019). Teachers' beliefs about multilingualism: Findings from Q method research. *Current Issues in Language Planning*, 20(3), 266-283.
- Nishanthi, R. (2020). Understanding of the importance of mother tongue learning. *International Journal of Trend in Scientific Research and Development*, 5(1), 77-80.
- Persici, V., Vihman, M., Burro, R., & Majorano, M. (2019). Lexical access and competition in bilingual children: The role of proficiency and the lexical similarity of the two languages. *Journal of Experimental Child Psychology*, 179, 103-125.

- Roussel, S., Joulia, D., Tricot, A., & Sweller, J. (2017). Learning subject content through a foreign language should not ignore human cognitive architecture: A cognitive load theory approach. *Learning and Instruction*, 52, 69–79.
- Rowe, M. L., Leech, K. A., & Cabrera, N. (2017). Going beyond input quantity: Wh-questions matter for toddlers' language and cognitive development. *Cognitive Science*, 41, 162–179.
- Saneka, N. E., & de Witt, M. (2019). Barriers and bridges between mother tongue and English as a second language in young children. *South African Journal of Childhood Education*, 9(1), 1–8.
- Song, J., Howard, D., & Olazabal-Arias, W. (2022). Translanguaging as a strategy for supporting multilingual learners' social emotional learning. *Education Sciences*, 12(7), 475.
- Spelke, E. S. (2017). Core knowledge, language, and number. *Language Learning and Development*, 13(2), 147–170.
- Yusuf, Q., Jusoh, Z., & Yusuf, Y. Q. (2019). Cooperative Learning Strategies to Enhance Writing Skills among Second Language Learners. *International Journal of Instruction*, 12(1), 1399–1412.
- Zhao, Y., & Lai, C. (2023). Technology and second language learning: Promises and problems. In *Technology-mediated learning environments for young English learners* (pp. 167–206). Routledge.