



The Impact of Age on the Speed and Quality of Children's Second Language Acquisition

Kristina Natalia Febrina Nainggolan^{1*}, Sesilia Seli²

^{1,2}Department of Indonesian Language Education, Faculty of Teacher Training and Education,
Tanjungpura University, Indonesia

*Correspondence: E-mail: kristinajak9@gmail.com

ABSTRACT

The opinion that the presentation of diverse languages or making multi-language in the development of children's age. Language is acquired, inherited and developed over Every human uses language as a means of communication and a tool to interact with each other. This study examines in depth how age factors affect the speed and quality of second language acquisition in children. This research uses descriptive qualitative method through case study. Data collection techniques were observation, documentation and interview. The data collection technique was also carried out with the technique of simak bebas libat cakap. The subject of this research is a 7-year-old child. The research data is in the form of second language acquisition. This study integrates various theoretical perspectives ranging from Critical Period Hypothesis, Input Hypothesis, to differences in acquisition mechanisms that occur unconsciously compared to explicit learning. In addition, the article examines the role of neurological factors, cognitive development, and social interaction in supporting second language acquisition. The results show that children who are introduced to a second language at an early age not only acquire more natural phonological and syntactic structures, but also develop near-native fluency due to optimal brain plasticity at a critical age. The practical implications of these findings emphasize the importance of exposure to meaningful language input early on in order to maximize the potential for natural language acquisition.

ARTICLE INFO

Article History:

Submitted/Received 02 Jan 2025

First Revised 05 March 2025

Accepted 29 Apr 2025

Publication Date 30 Apr 2025

Keyword:

Age, Acquisition, Children,
Critical Period, Input
Hypothesis, Second Language

1. INTRODUCTION

Language is a means of communication for a person, by using language humans can understand the meaning of our thoughts and speech in socializing. Language is the embodiment of the construction of understanding cognition of every human being. Humans are perfect creatures who are given privileges by the creator, with language tools in the form of affective networks in the human brain that greatly help humans in producing language. This is in line with Muradi's (2018) research findings that affective, cognitive, and psychomotor components have a significant influence on language growth (in Darihastining et al., (2023)).

Language acts as a communication tool that always develops along with the advancement of knowledge. Language becomes a medium that connects individuals with each other to achieve their respective goals. Humans acquire language through an acquisition process, which is an effort to know and understand language (Hikam, 2022). According to Swastyastu, (2020) every individual always tries to master or understand language. The process of language acquisition can be categorized into several types; the first is the acquisition of the first language or mother tongue, and the second is the acquisition of the second language (in Arifin et al., (2022)). Mother tongue is the initial language owned by a child, which then becomes the basis for children or adults to learn a second language.

As social beings who cannot live alone and always depend on the help of others, we need a means to communicate and interact, known as language. Language is a communication tool used by humans to connect with others. Through language, humans can share knowledge, convey ideas, exchange information, and understand each other. Thus, humans are able to master or acquire language throughout their lives, along with the process of growth and development. When communicating, we generally use two types of language, namely spoken language and non-spoken language. Spoken language is language that is spoken directly, while non-spoken language uses gestures, body movements, or symbols as a medium of delivery.

According to Azzahroh et al., (2021) the surrounding environment has a great influence on children's language development (in (Adellia Nur Aini, 2025)). The language acquisition process includes how children absorb, produce, and use words to communicate. Language skills in children include response to speech, ability to follow commands, and speaking skills. Humans cannot master language instantly because understanding of the language system can only be obtained through language stimulation from adults. Although the language that children hear is often not well structured, children still try to understand it and develop their linguistic abilities. Sulistianingsih et al., (2020) argue that the introduction of a second language, especially English, to children from an early age is best done through bilingual or multilingual introduction. The goal is that our young generation can become multilingual individuals and be able to face challenges in the ever-evolving digital era. This has been discussed by researchers in the study of second language acquisition.

First and second languages are very important in communication, both oral and written, in everyday life. The connection with these communication needs makes the language acquisition process easier. According to Princess (2020) language acquisition is very interesting to study, especially children's language acquisition. one of the factors that support the influence of parents is also very helpful in the process of children's language acquisition. Therefore, if parents want their children to acquire and use good language, parents should provide good examples and attitudes when they are and will use language in front of their children. Parents who successfully introduce their children to their first language can significantly improve their children's communication skills and facilitate the process of second language acquisition. The role of parents in monitoring the development of children's language skills is very important because language continues to develop along with the changing times. Suparman (2022) argues that the role of parents is very important in the process of language acquisition in children, because of the strong emotional bond between children and parents. The first language

mastered by children is known as mother tongue. In the early stages of mother tongue acquisition, the influence of the language used by parents is very dominant, because children tend to imitate the language they hear from their parents. Rosi Wulandari (2020) revealed that the basis of a child's language ability is formed during the toddler period, where language development takes place very quickly and will affect their language skills in the future. However, the speed of language acquisition can differ from one child to another, even though they have the same age (in Adellia Nur Aini, (2025)). This is because language acquisition develops along with the child's biological growth, especially the development of organs related to speech such as the organs of articulation and parts of the brain that regulate language functions.

According to Dailatus Syamsiyah (2017) language acquisition occurs naturally, while language learning takes place in structured and planned formal situations. Generally, someone learns a language because they are driven by motivation to achieve, while language acquisition is more due to the need to communicate. In language learning, the main emphasis is on mastering the rules or rules of the language. In contrast, language acquisition focuses more on mastering the skills to communicate fluently (in Pallawagau & Rasna (2022))

Language acquisition in children includes two main skills, namely the ability to speak spontaneously and the ability to understand speech from others. Thus, language acquisition can be defined as the process of acquiring language skills, both in the form of understanding and expression, which occurs naturally without going through a formal learning process (Khoirunnisa et al., 2023) in Azizah et al., (2024)).

In general, there are three term main related with language, namely Language mother (*mother tongue or first language*), language second (*second language*), and language foreign (*foreign language*). Mother tongue is the language we are born with and learn from our parents and the environment we grow up in, while second language is the language we learn after our mother tongue. Meanwhile, a foreign language is also a language learned after the first language, generally acquired through formal education and social interactions, such as at school and in everyday life. Language acquisition can be achieved through two main approaches, namely through language teaching and language acquisition. Language teaching is a learning process that takes place in a formal situation and usually focuses on conscious mastery of meaning and linguistic rules. On the other hand, second language acquisition (B2) is a process that requires time and opportunity to continue using the language, and the results are greatly influenced by various factors such as interaction between the first and second language, environment, age, culture, and media.

From a language acquisition perspective, mothers are generally positioned as primary caregivers who first establish verbal communication with their children. These early interactions play a fundamental role in the process of forming children's linguistic awareness, particularly in recognizing and understanding the sound system of language (phonology), sentence structure (syntax), and lexical and contextual meaning (semantics). Therefore, the quality of a mother's language use, including the variety of speech, complexity of structure, and breadth of vocabulary, significantly contributes to the overall development of a child's language competence. Solehan (2011) defines language as a system to convey meaning through the configuration of symbols based on certain rules (in Puspita et al., (2022)). Language acquisition is the process by which a child acquires his/her first language in the brain. During the education period, the development of learners must always adjust to the environment in which they grow and develop. However, as children get older, their ability to continuously acquire language does not stay the same. Children aged 0-7 years usually go through a good stage of sentence development, covering aspects of syntax, semantics, morphology, and phonology. In the early stages, children only produce words that do not yet have a complete meaning, which then gradually form meaning, until finally the child can dialogue using complete sentences accompanied by various intonations.

Children acquire their first language from their mother tongue. The language acquisition process includes how children capture, produce and use words for communication purposes. Language development in children shows their ability to respond to speech, follow commands, and speak well. According to Chairunnisa (2018), first language acquisition occurs naturally without formal language education. This is because humans cannot acquire language directly; the linguistic system can only be fully understood by children when they get language stimulation from adults. Although the language that children receive is not yet perfectly structured, they strive to master its linguistic aspects through a continuous internalization process. Language acquisition is the process of growing language skills in humans which is generally related to the development of second language acquisition, which usually begins when children are 3-5 years old. In addition, there is an opinion that in children's language acquisition there are two main processes, namely language acquisition itself and language learning. Both processes are influenced by two main factors, namely aspects of nurture and aspects of nature, each of which is influenced by biological factors and the surrounding environment. Dardjowidjojo (2010:33) argues that acquisition is used for the stages of language acquisition that a child does naturally when he learns his mother tongue (in Choirunnisa (2020)).

Second language acquisition (B2) is influenced by various factors so the process is not simple. Without adequate support from these factors, B2 learning can become very complicated. Among these factors are motivation, age, formal presentation, first language (B1) influence, and environment. The motivational factor shows that the success of B2 acquisition is highly dependent on the presence of a clear desire, drive, or goal within the individual; those who learn with strong motivation tend to be more successful than those who learn without such encouragement (Chaer, 2003: 251 (in Irwansyah, 2020)). Furthermore, the age factor plays a role in determining the speed and success of B2 learning, especially in aspects of phonology, morphology, and syntax, although it does not affect the order of language acquisition (Chaer, 2003: 253 (in Irwansyah, 2020)). In addition, formal presentation through learning that is non-natural and supported by official tools also influences the process. The influence of the first language also cannot be ignored, because children sometimes, either consciously or unconsciously, transfer elements from B1 to B2, which can lead to errors in acquisition. Finally, the language environment, which includes everything the child hears and sees in the context of B2 learning, also makes an important contribution to the success of the second language acquisition process.

Based on this discussion, it can be concluded that the acquisition of the first language or mother tongue occurs naturally along with the cognitive development, social interaction, and linguistic abilities of children.

This research will focus on children's language acquisition in the realm of syntax, which is a branch of linguistics that studies the system of structuring words, phrases and clauses. The process of language acquisition in the syntactic aspect in children goes through several stages of development. This research is expected to provide benefits in both theoretical and practical terms. Theoretically, the findings of this study can broaden insights and strengthen the results of other similar studies, especially those related to the process of acquiring a child's first language or mother tongue. While practically, the results of this study can help parents understand the various stages of children's language acquisition development, so that they can design more planned strategies and actions to support children in acquiring their first language effectively. In addition, this study is also expected to improve parents' communication skills in accordance with the child's language development stage.

2. METHODS

This research uses a descriptive qualitative approach with a case study method to explore the impact of age on the speed and quality of children's second language acquisition. The

research was conducted in Bengkulu for three months, from January to March 2025, to obtain in depth data on the process of second language acquisition that occurs naturally in children's lives. The research subjects were purposively selected, namely 7-year-old children who have mastered the first language (Bahasa Indonesia) and started using the second language (English) in daily interactions, especially in communication with their mothers. The selection of research subjects was based on theoretical foundations and considerations of child linguistic development. Seven-year-old children were chosen because at that age, they have generally achieved maturity in their first language (Indonesian) and begin to show cognitive readiness to process and use a second language (English). Exposure to the second language that occurs naturally through daily interactions with the mother also creates an emotionally conducive context for language acquisition. This condition is considered important in supporting the optimal internalization of the second language. Thus, the purposive selection of participants is considered appropriate for exploring the early stages of second language acquisition in a domestic environment.

This study used one participant who was selected purposively, namely a 7-year-old girl named Ratu Rosari, who had mastered her first language (Indonesian) and had begun to use a second language (English) in daily interactions, especially with her mother. Although the number of participants is limited, the selection of a single subject was made consciously and based on the exploratory objective of deeply examining the dynamics of second language acquisition at an early stage in a home environment. Such a study is referred to as a single case study, which in the tradition of qualitative research is considered valid and reliable for comprehensively exploring phenomena, especially if the subject represents relevant and distinctive characteristics (Yin, 2018). Although it involves only one participant, this study meets academic standards in qualitative research because it emphasizes depth of analysis, rich context, and scientifically accountable procedures. The case study of Ratu Rosari allows for an in-depth exploration of how a second language begins to be acquired in the context of natural family interactions, which in turn can serve as a foundation for further research or cross-case comparisons.

In this study, the data collection method used was qualitative observation, which focused on direct observation of the communication process between the research subjects (7-year-old children) and their mothers, with the aim of obtaining a realistic picture of the process of second language acquisition (Puspita et al., 2022). This study used participatory observation for two weeks, with five sessions per week lasting 60 minutes each, conducted in a natural home environment during play and learning activities. The focus of observation included phonological, syntactic, and pragmatic aspects of spontaneous English language use. Semi-structured interviews were conducted twice with the mother and once with the accompanying teacher, each lasting 30–45 minutes. The interviews were supplemented with documentation studies such as learning materials and children's work. Data collection and analysis were conducted simultaneously and iteratively to identify patterns and main themes in second language acquisition.

Data analysis was conducted using thematic analysis techniques, where data was coded and grouped into relevant categories. Triangulation techniques were also applied by comparing data from various sources to increase the validity and reliability of the findings. Triangulation was used in this study to increase the validity and reliability of the data by comparing results from various sources, methods, and times. The researchers used source triangulation by comparing data from children, mothers, and assistant teachers; method triangulation through observation, interviews, and documentation studies; and time triangulation by collecting data repeatedly over a two-week period. This technique enabled the researcher to verify the consistency of findings, avoid single bias, and gain a more comprehensive understanding of the process of children's second language acquisition in a natural context. With this methodology, the research is expected to produce a comprehensive picture of how age factors

affect children's second language acquisition process, as well as provide a theoretical and practical basis for the development of more effective language learning strategies.

3. RESULTS AND DISCUSSION

Based on data collection through participatory observation, in-depth interviews, and documentation studies, the data were analyzed thematically and through triangulation techniques to ensure consistency of findings. The findings show that 7-year-old children who have acquired a first language (Indonesian) and started using a second language (English) show a fairly high speed and quality of acquisition. This is supported by the high level of brain neuroplasticity in children, which allows them to absorb and internalize linguistic patterns naturally through daily interactions

First, in the phonological aspect, the 7-year-old children who were the subjects of the study showed a relatively good ability to pronounce words in the second language (English). However, there are some errors in pronunciation especially in phonemes that do not exist in the first language (Indonesian). For example, the pronunciation of the phoneme /θ/ in the word "*think*" is pronounced as /t/ or /s/. These phonological errors were gradually corrected through imitation of their mother's more correct pronunciation.

Conversation:

- Mother : "Say it again, 'think'. It's not 'tink'."
- Child : "Think." (Still pronouncing it wrong).
- Mother : "Good try, but listen carefully. Thiink."
- Child : "Thiink." (Starts to approach the pronunciation).

This phenomenon is in line with Krashen's Input Hypothesis, which states that children learn language through comprehensible input. Correction from the mother who provides an example of proper pronunciation becomes a very meaningful input for the child to correct phonological errors.

Secondly, in the syntactic aspect, the child showed good ability in constructing simple sentences with Subject-Predicate-Object (SPO) structure. However, when asked to construct more complex sentences, children have difficulties. For example, they tend to omit conjunctions or use sentence structures similar to Indonesian.

Conversation:

- Mother : "Tell me what you did today."
- Child : "I go to school and play." (This sentence is incomplete and does not follow the correct English pattern)
- Mother : "Try saying: 'I went to school and played with my friends.'"
- Child : "I went to school and played with my friends." (Follow the correct pattern after being given an example).

In second language acquisition, syntactic aspects usually develop more slowly than phonological aspects. Errors occur more often when children try to construct complex sentences or compound sentences. This phenomenon corroborates the Output Hypothesis theory which states that active practice and language practice are very important in the process of second language acquisition. This means that the more children practice constructing more complex sentences, the faster their syntactic skills will develop.

Third, in the pragmatic aspect, children's pragmatic ability in understanding the meaning of utterances is quite good. However, in more complex communication situations, children's responses are sometimes inappropriate or too short.

Conversation:

- Mother : "What do you say when someone gives you something?"
- Child : "Thank you." (correctly because it has been trained).
- Mother : "And if you want to ask for something nicely?"

- Child : "Give me."
 Mother : "Try saying, 'Could you please give me...'.
 Child : "Could you please give me...?" (incomplete but showing progress).

Pragmatic refers to the child's ability to use language in appropriate social contexts. Children are able to understand the meaning of simple conversations, but when faced with more complex communication situations, their responses are often limited. This is due to the lack of experience in using a second language in more complicated situations. Nonetheless, the progress in understanding the context of communication shows that the child continues to learn through interactions with her mother. The pragmatic skills are not yet fully mature, suggesting that this aspect needs more time and practice to develop.

Fourth, the observation shows that children often use Indonesian grammatical patterns when trying to speak in English. For example, the child said: "*I go to school with my friend by foot*" which is a direct translation of "*I go to school with my friend by foot*."

Conversation:

- Mother : "How do you go to school?"
 Child : "I go to school with my friend by foot."
 Mother : "In English, we say 'on foot' not 'by foot'.
 Child : "I go to school on foot." (Absorbs the correct language pattern after correction).

Language transfer occurs when the child tries to translate the patterns of the first language directly into the second language. This is a common strategy in the process of learning a new language and indicates that the second language acquisition process is still in its early stages.

Fifth, from the results of the analysis conducted with reference to the Critical Period Hypothesis theory, it was found that children aged 7 years are still in the critical age range for second language acquisition. This allows children to acquire a second language in a more natural and efficient way compared to children who start learning a second language at a more mature age. At this age, the child's brain is still very plastic and easily absorbs new language patterns more effectively.

Sixth, based on the Input Hypothesis theory, it is found that the quality of language input received by children greatly affects the process of second language acquisition. Children who get exposure to language regularly and in contextualized situations show better ability to form more complex syntactic structures.

When the child interacts with the mother in longer conversations:

- Mother : Tell me, what did you learn at school today honey?"
 Child : "Earlier, I learned... about animals. There was an elephant, a horse, and a cat.
 The elephant is big, the horse runs fast, and the cat likes to sleep."
 Mother : "Wow, that's great! Can you tell me more about other animals?"
 Child : "Yes. There's a fish. The fish... um, it... swims in the water."

The above conversation shows that children can relate the information received to their personal experiences and are able to process the information into sentences even though they are simple. This shows that the language input received by the child is able to encourage the formation of new syntactic patterns that are more complex than before.

The findings of this study corroborate the Critical Period Hypothesis theory which states that children have better abilities in learning a second language (B2) at a critical age range. The 7 year old children who were the subjects of the study showed the ability to process phonology, syntax, and pragmatics of the second language more effectively than adult individuals who have just started learning a second language (B2). This can be seen from the child's ability to imitate the pronunciation of words and form simple sentences quickly although there are still errors in pronunciation and sentence structure..

In the phonological aspect, although children still have difficulty pronouncing phonemes that are not present in the first language (B1), the correction process carried out by the mother

consistently helps children correct these errors. In accordance with the Input Hypothesis theory (Krashen), children acquire language through exposure to comprehensible input. With intensive interaction with their mother, children receive meaningful input so that they can correct phonological errors and enrich their vocabulary.

In the syntactic aspect, children's limitations in constructing complex sentences indicate that the grammatical structure of the second language (B2) has not been fully mastered. However, with more frequent exposure and continuous practice, children show positive development in the use of the second language (B2). This is in line with the Output Hypothesis theory which emphasizes the importance of practice opportunities in the second language acquisition process.

The pragmatic aspect of children shows significant development, although the responses given in communication are still limited. This shows that the ability to understand context and provide appropriate responses needs to be further developed. However, the progress seen in the child's ability to answer simple questions is good enough for a child of their age. The phenomenon of language transfer shows that children still rely on the structure of the first language (B1) in trying to form sentences in the second language (B2). This process is part of the child's adaptation to the new language and shows that the process of acquiring a second language (B2) is still in its early stages.

Overall, this study shows that children's age, social interaction and environment are important factors in second language acquisition. The implications of the results of this study provide a basis for developing more effective language learning strategies, especially for children who are in the critical age range. A more contextual and communicative approach needs to be applied to optimize the second language acquisition process.

Factors such as age, type of language input, social interaction, and parental involvement play an important role in determining the speed and quality of children's second language acquisition. To provide a systematic and concise overview, the following table is compiled based on theoretical studies and field findings to clarify the relationship between these factors and their impact on the second language acquisition process:

Table 1. Key Factors Influencing Second Language Acquisition and Their Impact

Factor	Influence To Speed	Influence To Quality
Child age 7 years	High levels of neuroplasticity accelerate the formation of neural pathways for new languages.	Pronunciation and intonation are closer to native speakers due to the unconscious acquisition process.
Meaningful Input	Intense and varied interactions from the environment (family and school) support internalization.	Increase vocabulary diversity and natural syntactic structures in communication.
Social Interaction	Active communication between the child and mother and peers accelerates the language adaptation process.	Allows children to effectively imitate and modify linguistic patterns so that they are more accurate.
Parental Involvement	Continuous support and correction help speed up second language acquisition.	Reduce structural errors and increase fluency

The simultaneous case study approach where data collection, initial analysis, and narrative writing took place simultaneously helped the researcher to continuously integrate new findings into the analysis. The triangulation technique, which compared results from observations, interviews, and documentation, ensured that every aspect of second language (B2) acquisition was identified holistically. Thus, this study confirms that in early childhood, second language

acquisition depends not only on formal exposure, but also on the quality of social interactions and support from the immediate environment, which together result in rapid and high-quality acquisition.

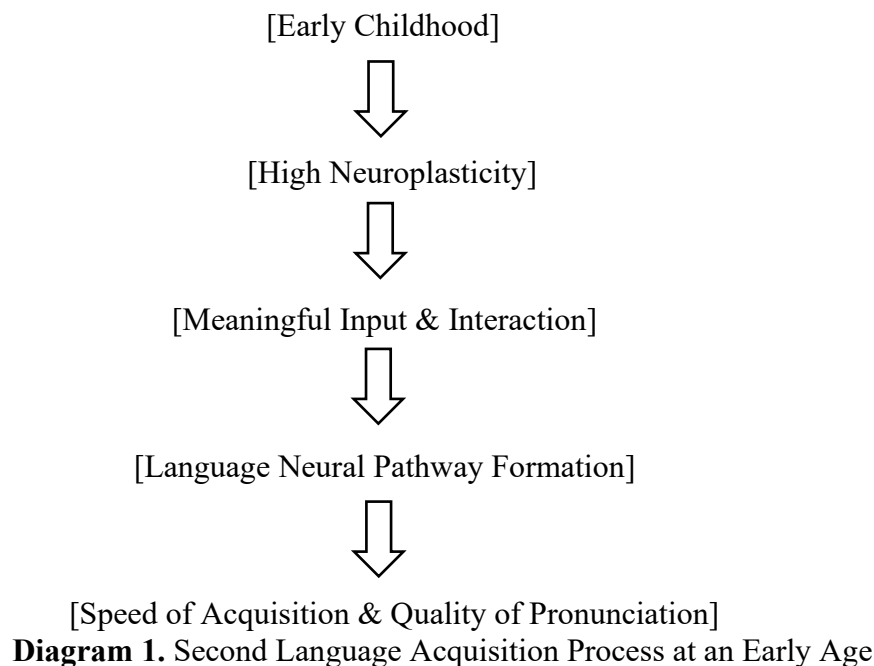
Overall, the findings support the hypothesis that second language (B2) learning strategies should capitalize on children's natural acquisition strengths by creating an environment rich in meaningful input and social interaction, so as to optimally maximize language acquisition potential from an early age. In addition, the quality of children's second language (B2) acquisition is also influenced by the intensity and quality of the input they receive. The interactions that occur between children and their mothers provide a context that supports natural language use, where children can imitate intonation, rhythm, and sentence structure more effectively. Thus, children not only learn the language quickly, but also develop near-native fluency, in contrast to adult learners who tend to experience interference from their first language (B1).

In the study of second language acquisition, identifying the factors that influence the acquisition process is crucial to understanding the extent to which environment, age, and social support contribute to children's linguistic development. Based on a synthesis of theoretical frameworks and initial research findings, there are several variables that have consistently been shown to influence two main aspects of language acquisition: speed and quality of acquisition. To present these findings in a more systematic and structured manner, the following table has been compiled as a conceptual representation illustrating the relationship between each factor and its impact on the dimensions of second language acquisition:

Table 2. Factors in Second Language Acquisition

Factor	Effect on Speed	Effect on Quality
Early Childhood	The plastic brain allows for the rapid formation of neural pathways for new languages.	Produces pronunciation closer to and native speakers due to the natural imitative process.
Meaningful Input	Intensive exposure through social interaction accelerates the process of internalization of language structures.	Provides a variety of vocabulary and complete sentence structures that improve fluency.
Social Interaction	Direct interaction with parents and peers accelerates understanding of language context.	Improve adaptability to language nuances, such as the use of non verbal expressions and cues.
Parental Involvement	Active parental support through consistent communication helps children get the right input.	Ensure that children receive correction and good language models, thus reducing structural errors.

The conceptual diagram presented below is the result of integrating empirical findings and theoretical foundations discussed in the previous section. Although the findings are not explicitly detailed in a single integrated section, each element in the diagram, from early childhood, neuroplasticity, meaningful input, social interaction, to the formation of language neural pathways, has been analyzed step by step in the results and discussion section. The presentation of this diagram aims to visualize the process of second language acquisition holistically, in line with Krashen's (1985) theoretical framework of the input hypothesis. Thus, the diagram does not stand alone but is derived from the findings that have been examined and analyzed conceptually in the manuscript:



This diagram conceptualizes the process of children's second language acquisition, showing how various factors interact to produce optimal speed and quality of language acquisition.

1. Early Childhood
The process of second language acquisition begins when children are still in the early age range, which is between 3 and 7 years old. At this age, the child's brain is still very adaptive and flexible, making it easier to absorb new information, including language. Thus, age is not only a numerical variable, but also an indicator of cognitive readiness to receive new language input.
2. High Brain Neuroplasticity
Because early childhood brains have a high degree of neuroplasticity, children easily form and strengthen the neural pathways necessary to internalize a second language. This allows the language acquisition process to proceed quickly and efficiently.
3. Meaningful Input & Interaction
The input children receive, whether through conversations, stories or play activities, should be meaningful and contextualized. The social interactions that occur with parents, teachers and peers provide the stimulation necessary for children to understand the structure of language. It is this input that encourages children to associate words with their meanings naturally.
4. Language Neural Pathway Formation
This process of internalization of meaningful input through social interaction helps children form neural pathways that support second language acquisition. At this stage, linguistic patterns such as vocabulary, grammar and intonation begin to be embedded in the child's brain.
5. Speed of Acquisition and Quality of Pronunciation
The end of this process is seen in the child's speed in mastering the second language as well as the quality of pronunciation that is close to native speakers. The child not only learns the language quickly, but also gains the ability to pronounce words, form sentences, and use the language with natural intonation and rhythm.

Overall, this diagram emphasizes that second language proficiency (B2) in 7-year-old children, namely RR, is not the result of a single factor, but rather a synthesis of various elements that interact in complex ways. By understanding these cause-and-effect relationships and interactive dynamics, we can conclude that the success of second language proficiency (B2) depends heavily on the integration of age, neurological conditions, input quality, and the intensity of social interaction. In this context, this encourages us to analyze not only each component separately but also how the combination of these factors creates a holistic and efficient language acquisition process. Therefore, this diagram does not merely depict a linear flow but a system that operates simultaneously and interactively, where each layer supports and reinforces the next, resulting in rapid and high-quality second language acquisition (B2).

So from the table and diagram above, it explains that in early childhood, children who learn language at an early age have a very adaptive brain (high neuroplasticity). Meaningful inputs and interactions obtained from interactive activities between children and the environment (especially with parents) provide relevant and meaningful inputs. The formation of neural pathways for language, consistent and contextualized input helps the child's brain form neural pathways for language. Speed and quality, in this process results in rapid language acquisition and near-native quality of pronunciation and language structure.

4. CONCLUSION

Based on the results of this study, it can be concluded that the age of the child has a significant influence on the speed and quality of second language acquisition. Children aged 7 years who are in the critical age range show a more optimal ability to absorb a second language compared to individuals who learn a second language at an older age. This is evident from the child's ability to develop phonological, syntactic, and pragmatic aspects although not yet fully perfect.

In the phonological aspect, the child is able to imitate the correct pronunciation through the process of imitation from the mother, indicating that meaningful exposure and direct interaction are very supportive of pronunciation improvement. However, difficulties in pronouncing phonemes not found in the first language still occur frequently, indicating that the second language acquisition process requires time and consistent practice.

In terms of syntax, children's ability to construct simple sentences has developed well. However, in constructing complex sentences, children often use first language sentence patterns as a form of compensation. This phenomenon of language transfer shows that children are still in the stage of integrating knowledge of the first language with the second language, and need more practice in order to master the grammatical structure of the second language well.

In the pragmatic aspect, the child showed a fairly good ability to understand everyday communication contexts. However, responses to more complex communication situations are still limited. This suggests that the pragmatic aspect needs to be further developed through more varied and meaningful interactions.

Overall, this study confirms the Critical Period Hypothesis and Input Hypothesis theories which state that critical age and exposure to appropriate input are major factors in second language acquisition. The implications of these findings suggest that second language learning strategies need to be designed by considering the child's age condition, social interaction patterns, and supportive environment. By providing wider opportunities for children to practice using a second language in various contexts, the language acquisition process will take place more effectively and thoroughly.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

6. REFERENCES

- Adellia Nur Aini, NKS (2025). Analysis Of The Influence Of Family Environment On The Development Of First Language Acquisition In Early Childhood. *Deixis Education* , 7 (1), 8–16. <https://doi.org/10.31849/dinamisia.v7i3.14575>
- Arifin, S., Hermoyo, RP, & Ridlwan, M. (2022). The Impact of Spongebob Movies and Online Games on Second Language Acquisition of 6-Year-Old Children. *Proceedings of Samasta (National Seminar on Indonesian Language and Literature)* , 431–436.
- Azizah, LN, Yunita, MI, Lidiyawati, S., Muzakkiyah, DF, & Fauziah, M. (2024). Analysis of Language Acquisition Process in 5-Year-Old Children. *Indo-MathEdu Intellectuals Journal* , 5 (1), 50–60.
- Azzahroh, P., Sari, RJ, & Lubis, R. (2021). Analysis of Language Development in Early Childhood in Kunciran Health Center Area, Tangerang City in 2020. *Journal for Quality in Women's Health*, 4(1), 46-55. <https://jqwh.org/index.php/JQWH/article/view/104>
- Chairunnisa, C. (2018). Language Acquisition in Infants and Children. *Cakrawala Dini: Journal of Early Childhood Education*, 9(2), 125-137
- Choirunnisa, BC (2020). The Role of Mothers in Language Acquisition of Children Aged 4-5 Years. *Jubindo: Journal of Indonesian Language and Literature Education* , 5 (1), 30–37. <https://doi.org/10.31849/dinamisia.v7i3.14575>
- Darihastining, S., Mardiana, W., Misnawati, M., Sulistyowati, H., Rahmawati, Y., & Sujinah, S. (2023). Application of Various Second Language Acquisition Hypotheses to Early Childhood. *Obsesi Journal: Journal of Early Childhood Education* , 7 (1), 685–698.
- Endang Sulistianingsih, Mursyidah Dwi Hartati, SD (2020). Discovering Second Language Acquisition In Higher Education In Dealing With Industrial Revolution 4.0 Challenges. *SSRN Electronic Journal* . , 11 (1), 1–14. <http://dx.doi.org/10.2139/ssrn.3565768>
- Hikam, AI (2022). Analysis Of Second Language Acquisition In Children Aged 4-5 Years (Case Study of a Child Named Elwa in Alam Sari Housing). *Sandhyakala Journal*, 3(1), 61–71.
- Irwansyah, IS (2020). The Influence of Age on the Ability to Understand a Second Language. *SASTRANESIA: Journal of the Indonesian Language and Literature Education Study Program* , 8 (2). <https://doi.org/10.32682/sastranesia.v8i2.1264>
- Krashen, S. (1985). The input hypothesis: Issues and implications. *Laredo, Beverly Hills/longman*.
- Khoirunnisa, I., Diniyah, T., & Noviyanti, S. (2023). The nature of language acquisition and supporting factors for children's language acquisition. *Innovative: Journal Of Social Science Research*, 3(6), 4353-4363.
- Lenneberg, E. H. (1967). The biological foundations of language. *Hospital Practice*, 2(12), 59-67.
- Muradi, A. (2018). Language acquisition in the perspective of psycholinguistics and the Qur'an. *Tarbiyah: Scientific Journal of Education*, 7(2) <https://doi.org/10.18592/tarbiyah.v7i2.2245>
- Pallawagau, B., & Rasna, R. (2022). Acquisition of a Foreign Language as a Second Language (Study of Arabic Language Acquisition). *Journal of Arabic Education and Linguistics* , 2 (2), 64–76. <https://doi.org/10.24252/jael.v2i2.31151>
- Puspita, Y., Hanum, F., Rohman, A., Fitriana, F., & Akhyar, Y. (2022). The Influence of Family Environmental Factors on the Development of First Language Acquisition in Children Aged 2 Years 5 Months. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini* , 6 (5), 4888–4900. <https://doi.org/10.31004/obsesi.v6i5.2500>
- Putri, SW (2020). The Influence of Parental Roles in Language Acquisition in Children Aged 4-5 Years. *Kadera Bahasa* , 12 (2), 123–133. <https://doi.org/10.47541/kaba.v12i2.140>

- Rosi Wulandari, G. (2020). Language Acquisition: A Study of Phonological Aspects in Children Aged 2-2.3 Years. *Imajeri: Journal of Indonesian Language and Literature Education*, 2(2), 129-136. <https://doi.org/10.22236/imajeri.v2i2.5084>
- Sugiyono. (2016). Quantitative, Qualitative and R & D Research Methods. Alfabeta
- Suparman, S. (2022). Language Acquisition Of 3 Year Old Children. *Indonesian Language and Literature Education Research Journal*, 7, 239–257. <https://doi.org/10.31943/bi.v7i1.145>
- Swastyastu, LTJ (2020). Benefits of Learning Media in Second Language Acquisition for Early Childhood. *Journal of Early Childhood Education*, 5(1), 52–59.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press. Lenneberg
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.