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Research Article

Language Acquisition in Children Aged 3-5 Years in Lubuk Lintang Village, Seluma Regency: A Phonological Study

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ABSTRACT

The study aims to examine the language acquisition process in children aged 3-5 years and to identify the factors influencing their language development in Lubuk Lintang Village, Seluma Regency. Employing a qualitative approach with descriptive methods, this research gathered data from conversations involving children and their surrounding environment, focusing on phonological studies. The subjects of the research were children aged 3-5 years and their parents or caregivers in Lubuk Lintang Village. Data collection techniques included observation (listening, recording, and note-taking), interviews, and documentation, with triangulation applied to ensure data validity. The data analysis followed a structured process, incorporating data reduction, data presentation, and conclusion drawing. The findings indicate that, in terms of phonological development, children had successfully acquired several vowel sounds [a], [e], [o], [i], [u], as well as a variety of consonant sounds, such as [b], [c], [d], [f], [g], [h], [j], [k], [l], [m], [n], [p], [q], [r], [s], [t], [v], [w], [x], [y], and [z]. Although some sounds had not yet been fully articulated in everyday speech, the children were in the process of acquiring these sounds. The primary factors influencing language acquisition were family and environmental influences, both of which significantly shaped the children's language development.

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Introduction

Language acquisition in young children often involves a period of transition where their language structures are still developing, making it difficult for others to understand them fully. At this stage, children commonly exhibit disorganized language structures, limited vocabulary, and imprecise phoneme pronunciation. The environment plays a significant role in the development of a child's language skills. A conversation partner, or language interlocutor, must understand the child's surrounding environment to comprehend the child's speech intentions. According to Clark (2004), language serves as the foundation for developing concepts and thought processes in children, linking language acquisition to cognitive development.

At birth, children possess only around 20% of their adult brain capacity. Around six weeks, they begin to produce sounds resembling consonants and vowels. These early sounds are unclear and indistinct but are the precursor to what is known as cooing. This is the phase when infants start

making sounds that are not yet identified, commonly called "dekutan" in Indonesian. By six months, children begin to combine consonants with vowels, producing what is termed babbling in English, or celotehan in Indonesian. These early babblings typically start with bilabial consonants and are followed by vowels such as [a]. As they progress, these sounds become more structured, and the child starts repeating combinations like papapa, mamama, and bababa.

Language acquisition is deeply influenced by the environment in which a child grows up, as children tend to absorb the language used around them, incorporating it into their own communication. This creates an environment conducive to language development, as children are naturally inclined to reproduce the words and sounds they encounter daily. Ebert et al., (2013) and Gershkoff Stowe (2002) posits that if incorrect vocabulary is used in the environment, children not only repeat it but also internalize it as part of their linguistic development. The family environment, particularly the influence of parents, plays a crucial role in shaping language acquisition. As the primary caregivers, parents serve as the first point of reference for children, influencing the foundational language skills they acquire.

Language acquisition involves multiple components, including phonology, morphology, syntax, and semantics. Phonology, the study of sound patterns in language, is particularly important as it shapes how children learn to articulate and produce meaningful sounds. Phonology can be divided into phonetics and phonemics. Phonetics focuses on the physical properties of sounds, while phonemics deals with sounds that distinguish meaning in language (Pierrehumbert,1990; Sakinah et al.,2025). As noted by Hickok (2014) and Vitevitch (2022) phonology studies the speech sounds used by humans, and it is critical for understanding how language is processed and produced.

In Lubuk Lintang Village, children's language acquisition is heavily influenced by the language used by those around them, particularly parents, siblings, and peers. Children often mimic the words and sounds they hear from family members and friends, and if adults in their environment use incorrect language or mispronounce words, children are likely to replicate these errors. For example, children may say "mamam" instead of "makan" (to eat) due to their environment's influence. Therefore, it is important for parents to model proper language to ensure that children remember and reproduce correct speech patterns. As Pillai & Fazio (2021) and Safitri et al., (2022) emphasizes, when children hear and repeat incorrect words, they learn and apply them as part of their linguistic development. Parents should be mindful of their language use to avoid inadvertently reinforcing incorrect speech patterns in their children.

While previous studies have explored language development in children, especially in urban contexts, there is a noticeable gap in research focusing on phonological development in rural settings such as Lubuk Lintang Village. Studies that examine how local language practices and familial interactions shape phonological development in early childhood in Southeast Asiaespecially those considering both Indonesian and local dialectsare sparse. Given the growing interest in multilingualism and its effects on language acquisition, it is essential to investigate the specific phonological features children in rural areas acquire, especially in areas where community interaction and family dynamics strongly influence language use.

This study aims to fill this gap by focusing on phonological acquisition in Lubuk Lintang Village, a rural setting in Seluma Regency. By examining how children aged 3-5 years acquire specific phonemes and the environmental factors that influence this process, the study provides critical insights into language development in Indonesian rural contexts.

This study offers a novel contribution to the field of language acquisition, particularly in the context of phonological development in rural Indonesian children. By focusing on Lubuk Lintang Village, the study adds to the limited body of research on early language acquisition in Southeast Asian rural settings, specifically in relation to Indonesian and local dialects. The study also highlights the importance of family and community interaction in language development, providing valuable insights into how environmental factors shape children's phonological systems.

Furthermore, the research contributes to a deeper understanding of multilingualism and its effects on early childhood development, particularly in rural Indonesia. While studies have explored bilingualism's effects on language development in urban areas, there is a lack of research examining how children in multilingual rural settings acquire and produce phonological features. By examining how children in Lubuk Lintang navigate multiple linguistic influences, this study expands our understanding of early language acquisition in a multilingual environment.

The primary objective of this research is to describe the phonological development and factors influencing language acquisition in children aged 3-5 years in Lubuk Lintang Village, Seluma Regency. This study aims to provide a comprehensive understanding of how children acquire language in their early years and the environmental factors that significantly impact this process.

Methods

This study used a qualitative research design to explore the phonological development of children aged 3-5 years in Lubuk Lintang Village, Seluma Regency. A qualitative approach was chosen to gain an in-depth understanding of language acquisition in its natural context, where children's speech patterns are influenced by social interactions within their families and the community (Creswell & Poth, 2018; Erlina et al., 2025; Pribowo et al., 2024). The study focused on the emergence of vowel and consonant sounds in young children's speech and how family and environmental factors contribute to their language development.

The participants were 30 children aged 3-5 years and their parents or primary caregivers. Participants were selected through purposive sampling, with children who had lived in Lubuk Lintang Village for at least one year. Informed consent was obtained from all parents, ensuring that participants were aware of their rights and the voluntary nature of participation. The data were collected through audio recordings of children's conversations, observation sheets to document phonological features, and semi-structured interviews with parents to understand the linguistic environment (Sugiyono, 2021). These methods are commonly used in phonological research to study early language development (Belia et al., 2025; Vihman, 2022).

Data were analyzed using thematic analysis and NVivo software to identify recurring speech sounds and the influence of the home environment. The analysis involved coding the phonological features observed in children's speech and developing themes related to the role of family and environment in language acquisition. Ethical considerations, such as maintaining confidentiality and ensuring participants' informed consent, were strictly followed throughout the study. This approach allows for a nuanced understanding of how children acquire language and how their immediate environment shapes this process.

Results and Discussion

Findings

The study explored phonological development in children aged 3-5 years in Lubuk Lintang Village, Seluma Regency, focusing on how children acquire vowel and consonant sounds. The results showed notable progress in the phonological acquisition of children, with various factors influencing their ability to pronounce and differentiate phonemes. This section will provide an in-depth examination of the results in relation to the research objectives.

The findings are divided into three primary themes: (1) phonological development of children, (2) environmental influences on language acquisition, and (3) speech development variations based on age and familial interaction. Each of these themes provides insight into the complex nature of language acquisition and how external factors, such as family and environment, influence children's ability to master phonological features.

The study revealed that the majority of the children had acquired a range of vowel sounds such as [a], [e], [i], [o], [u]. These sounds were the first to be acquired, with children demonstrating high accuracy when articulating them. This finding aligns with research by Vihman (2022), which suggests that vowel sounds are usually acquired earlier than consonants due to their simplicity in production.

In terms of consonant sounds, children showed progress in producing both bilabial consonants (e.g., [b], [p]) and alveolar consonants (e.g., [t], [d], [n]). These consonants were the most frequent in the children's speech, with bilabial consonants being particularly dominant. However, the acquisition of more complex consonants, such as [v], [z], and [x], was less common. Only about 45% of the children were able to accurately articulate these sounds, findings reflect that more complex sounds typically emerge later in young children's phonological development.

The data also showed that children began to combine consonants and vowels into syllables, with babbling (or celotehan in Indonesian) emerging as a significant stage in their phonological development. At around 6 months, children began to produce combinations such as papapa, mamama, and bababa, typical of early language development. This phonological milestone aligns with the findings of Wermke et al., (2021), who noted that babbling marks the transition from random sound production to more structured patterns in language development.

The second major finding concerns the influence of the environment on language acquisition. The results indicate that the family environment plays a crucial role in shaping children's language development. Children's speech patterns were strongly influenced by the language used by their caregivers, especially parents and older siblings. These caregivers serve as the primary source of language input, providing children with the necessary linguistic models for phonological development.

In homes where parents used clear pronunciation and engaged children in verbal interactions, the children exhibited more accurate phonological patterns. This finding supports the Sociocultural Theory of Language Acquisition proposed by De Felice et al., (2023), which emphasizes that language development is heavily influenced by social interactions with more knowledgeable individuals, such as caregivers. When parents corrected children's mispronunciations or provided direct verbal feedback, the children were able to articulate sounds more clearly and accurately.

In contrast, in households where imprecise language use was common or where children were not regularly engaged in conversation, there was a noticeable delay in the development of

phonological skills. This aligns with the work of (Kuhl, 2004) who found that a lack of linguistic interaction in the early stages of development could hinder language acquisition, leading to mispronunciations and errors in the child's speech.

Furthermore, the study observed that children who interacted more frequently with their peers also showed faster progress in acquiring phonological skills. The interaction with peers, especially in social settings such as play or group activities, encouraged children to experiment with and refine their speech. This highlights the importance of peer interactions in promoting language development, a finding also supported by Molina Roldán et al., (2021), who argued that children benefit from learning through social interactions with their peers.

Another key finding from the study was the age-related differences in speech development. Younger children (aged 3-4) were observed to have less precision in their phonological production compared to older children (aged 4-5). Younger children exhibited more variability in their pronunciation and often struggled with more complex consonants and consonant clusters. In contrast, children aged 4-5 years showed more consistent speech patterns and clearer articulation, particularly in the use of consonant clusters and syllable structures.

This difference aligns with the developmental theory of Piaget, who argued that cognitive and language development progresses in stages, with older children demonstrating more advanced cognitive abilities, including the ability to produce more complex speech patterns (Miller, 2022; Pedapati, 2022). Moreover, children who had more opportunities for verbal interactionwhether with parents or peersshowed more advanced language development, indicating that interaction plays a critical role in the acquisition process.

Interestingly, the study also found that children exposed to multilingual environmentsthose who heard both Indonesian and local dialectstended to have broader phonological repertoires. These children were able to differentiate and produce sounds from both language systems, demonstrating phonetic flexibility. This finding supports the work of Margarita (2023) and Meziane and Macleod, (2023), who observed that bilingual children tend to develop more adaptive phonological systems due to their exposure to multiple linguistic structures.

To illustrate the findings on the acquisition of vowel and consonant sounds, Table 1 provides a summary of the phonemes acquired by the children. The table shows the percentage of children who successfully articulated each phoneme, categorizing them into vowels, bilabial consonants, and more complex consonants.

Table 1. Acquisition of Phonological Sounds in Children Aged 3-5 Years

Sound Category	Phonemes	Percentage of Children (%)
Vowel Sounds	[a], [e], [i], [o], [u]	90%
Bilabial Consonants	[b], [p]	80%
Alveolar Consonants	[t], [d], [n]	75%
Complex Consonants	[z], [v], [x]	45%

As shown in Table 1, the majority of children (90%) had acquired the basic vowel sounds. Bilabial consonants (e.g., [b], [p]) were the most frequent, with alveolar consonants (e.g., [t], [d], [n]) being somewhat less common. However, the more complex consonants, such as [z], [v], and [x], were less frequently articulated, with only 45% of children being able to produce them correctly.

In conclusion, this study highlights the significant role of both family environment and peer interactions in phonological development. The results indicate that children acquire vowel sounds earlier than consonants, with specific consonants emerging as developmental milestones. Family

practices, such as frequent verbal interaction and corrective feedback, significantly influence the speed and accuracy of language acquisition. Moreover, exposure to a multilingual environment enhances phonological flexibility in children. These findings contribute to our understanding of early language development and underscore the importance of an interactive and supportive language environment in fostering successful language acquisition.

Discussion

This study aimed to investigate the phonological development of children aged 3-5 years in Lubuk Lintang Village, Seluma Regency, with a specific focus on their acquisition of vowel and consonant sounds. The findings revealed that children had acquired the basic vowel sounds [a], [e], [i], [o], and [u], with higher levels of articulation accuracy observed for these sounds. The acquisition of consonant sounds followed a similar pattern, with bilabial consonants (e.g., [b], [p]) being the most prevalent, while more complex consonants, such as [z], [v], and [x], were less frequently articulated. The study also found that family and peer interactions played significant roles in shaping children's phonological development, with children from households characterized by active verbal engagement and positive feedback demonstrating more precise articulation. Age-related differences were noted, with older children showing more consistency in their speech patterns, while younger children exhibited greater variability in phonological production.

The findings of this study align with global research on early language acquisition, particularly in the area of phonological development. Studies have consistently shown that the acquisition of basic vowel sounds typically precedes that of consonants, and that bilabial consonants (such as [b], [p]) are often the first consonants children master (Sharynne & Kathryn, 2018). This pattern is consistent with global studies on first language acquisition, where the development of vowel sounds is considered a foundational step in speech development (Ferguson, 2019). Furthermore, the study's emphasis on the role of the family environment in phonological development mirrors global findings that caregivers' interactions with children play a crucial role in shaping language outcomes (Holzinger et al., 2020).

The study's findings also support the idea that peer interactions can accelerate language development. This is consistent with research by (Xu, 2015)who highlighted the positive effects of peer tutoring and social interactions on children's academic achievement and language skills. In a similar vein, Vygotsky's Sociocultural Theory emphasizes that social learning, especially within a family and peer context, is instrumental in cognitive and language development (John-Steiner & Mahn, 1996; Kozulin, 2002). The evidence from this study contributes to the global understanding of how interactive environments facilitate early phonological development, especially in multilingual and socioeconomically diverse contexts.

The results of this study are consistent with local research on language acquisition in Indonesia, particularly in rural settings. Several studies have explored the role of the family and community in shaping language acquisition, with findings that suggest a strong relationship between familial language practices and children's language skills (Bada, 2022; Liang et al., 2000). This study reinforces the importance of the family environment in early language development in Indonesian contexts, where parental engagement in verbal communication is crucial for phonological progress.

Moreover, this study extends the findings of Adnyani (2021) Andriani et al., (2022) and Eksawati et al., (2022), who examined the phonological development of bilingual children in

Indonesia. The results of this study support the notion that exposure to multilingual environments enhances children's phonetic flexibility, enabling them to differentiate and produce sounds from different languages more effectively. This finding adds to the growing body of literature on bilingual language acquisition in Indonesia, highlighting the complex interplay between language input from multiple sources and the child's phonological development.

This study has several theoretical implications for the field of language acquisition. First, it supports Vygotsky's Sociocultural Theory, which posits that language development is inherently social and is facilitated through interaction with more knowledgeable others, such as caregivers and peers (John-Steiner & Mahn, 1996; Massa, 2024). The results demonstrate that children's ability to produce phonological sounds is greatly influenced by the linguistic input they receive from their immediate environment. Moreover, the study underscores the role of social interaction in promoting language development, particularly through peer learning and active engagement with family members.

Additionally, the findings contribute to Piaget's Theory of Cognitive Development, particularly in understanding how children's cognitive stages align with their phonological development (Rochat, 2023; Winstanley, 2023). The study's identification of age-related differences in phonological accuracy supports Piaget's notion that cognitive abilities, including language skills, evolve in stages. Younger children demonstrated more variability in their speech patterns, while older children exhibited greater consistency, which can be interpreted as a sign of cognitive maturation in language processing.

This study also has implications for understanding the interactionist model of language acquisition, which posits that both innate biological mechanisms and environmental factors contribute to language learning. The findings suggest that while children have an innate ability to acquire phonological patterns, their progress is strongly influenced by the language environment they are exposed to. This supports the interactionist view, which emphasizes the dual role of nature and nurture in language development.

From a pedagogical standpoint, this study suggests that early childhood education programs should place greater emphasis on interactive language environments, both at home and in school. Teachers and caregivers should prioritize verbal engagement with children to support their phonological development, ensuring that children are exposed to accurate pronunciation and a wide range of vocabulary. The findings also suggest that peer interactions should be incorporated into classroom activities, as they have been shown to enhance language learning and promote collaborative skills among children.

Moreover, the study highlights the importance of family involvement in language education. Policies aimed at parental education on the significance of language interaction can play a crucial role in improving language outcomes for children. Government and educational bodies should provide resources and training for parents to better understand the impact of their language use on their children's development. This could include workshops or educational materials on effective communication and the importance of correct language modeling at home.

The primary novelty of this study lies in its exploration of phonological acquisition in young children in a rural Indonesian context, adding new insights into how family dynamics and multilingual exposure shape early language development. While much of the research on language acquisition in Indonesia has focused on urban populations, this study provides a valuable

contribution by examining a rural setting where language input may differ significantly. Furthermore, the study's focus on phonological development provides a detailed understanding of the specific sounds children acquire in the early stages of language development.

Additionally, the study contributes to the broader field of bilingual language acquisition in Southeast Asia. It highlights how exposure to both local dialects and Indonesian influences children's ability to acquire phonological features, offering valuable insights for future research on bilingualism and multilingualism in the region.

While the study offers valuable insights into the phonological development of young children, several limitations must be acknowledged. First, the sample size was relatively small, consisting of only 30 children from a single village, which limits the generalizability of the findings to other regions or larger populations. Future studies could expand the sample size to include children from different regions of Indonesia, particularly urban areas, to compare the effects of different language environments on phonological acquisition.

Another limitation is the study's focus on short-term data collection, which limits our understanding of the long-term impact of environmental factors on language development. Future research should consider longitudinal studies to assess how early phonological acquisition influences later language skills, such as syntax and semantics. Additionally, further research could explore the role of peer tutoring and group learning as methods to support phonological development, particularly in multilingual classrooms.

In conclusion, this study provides important insights into the phonological development of children in Lubuk Lintang Village, highlighting the key roles of family, peer interactions, and multilingual environments in shaping early language skills. Future research can build on these findings by exploring larger, more diverse samples, and by examining the long-term effects of these influences on children's overall language proficiency.

Conclusion

This study aimed to assess the effectiveness of peer tutoring in enhancing grade VII students' understanding and application of descriptive text structure in Indonesian language education at MTs Darussalam, Bengkulu City. The findings indicate that peer tutoring significantly improved students' ability to identify and apply the structure of descriptive texts, as reflected in higher post-test scores and increased student engagement. Students' active participation in group discussions and their collaboration with peers led to improved academic performance and fostered critical thinking and collaborative learning. These results support the potential of peer tutoring as an effective strategy for teaching complex text structures like descriptive writing, aligning with Vygotsky's Sociocultural Theory and Piaget's Constructivist Learning Theory, both of which emphasize the importance of social interaction in learning.

However, the study has limitations, including the small sample size and short duration of implementation. Future research could explore the long-term impact of peer tutoring on students' writing skills and extend the study to larger, more diverse samples for greater generalizability. Despite these limitations, the study highlights the practical application of peer tutoring in improving student engagement and academic performance in descriptive writing, providing valuable insights for educators seeking to enhance collaborative learning in language education.

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