

Research Review

Phonological Strategy Differences in Language Acquisition: A Comparative Study of Two Three-Year-Old Boys

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Abstract: This study aims to identify the phonological differences shown by two three-year-old boys, namely Galfin Yasasi Habbika and Muhammad Arkhan Al Hafiz with different family backgrounds in Pangalengan, Bandung, and it analyzed the environmental factors and parental roles that contribute to variations in their phonological acquisition. This Study uses descriptive qualitative method with the data were conducted through video documentation of natural interactions and interviews with the parents of both children. The data collected were 18 utterances from each child which were then analyzed based on phonological aspects to identify error patterns, compensation strategies, and articulation skills. The findings showed that the two children has different phonological development patterns with Galfin showing more conservative phonological strategy by maintaining the original word structure, and people interaction environment from digital medias showing good phonological awarenees in Indonesian language development. While Arkhan showed more active phonological reconstruction by transforming difficult words into more easily produced form with a family environment that often made direct correction to Arkhan's phonological errors which more stable and consistent phonological structure. Their phonological development was also successfully achieve through a variety of consistent support strategies that were responsive to the child's emotional state and learning style. The result of this study support Chomsky's Language Acquisition Device theory, in which both children demonstrated an innate capacity for language learning while showing how environmental triggers activated and shaped this biological predisposition because the children's ability to produce complex phonological structures without explicit instruction supports the nativist perspective on language acquisition.

Keywords: comparative, language acquisition, phonological, structure

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1. Introduction

From an early age, language plays an important role in a child's life. In his daily life, he begins to recognize the voices of people around him such as his mother speaking softly or when his father greets him cheerfully. Language can be a bridge for a child to think, communicate, express emotions, and understand the world around them. More than just a

means of communication, language also shapes children's way of thinking (Pebriana, 2017). With strong language, children will be more confident in communicating and more easily absorb new knowledge.

At the age of 0-3 years, language development becomes very rapid, forming the foundation for thinking skills, social interaction, and knowledge acquisition. Because when children are 0-3 years old, children's language development occurs very rapidly in forming the foundation of the ability to think, interact and acquire knowledge so that at this time it is considered a very important golden period for children in their development, because this period can affect children's development in the next stage towards adulthood (Agustina et al., 2024), so the role of parents is urgently needed today. But in addition, language is not only a means of communication, but a reflection of children's cognitive and emotional development. With the right stimulation, such as actively talking to children, reading stories, and introducing new vocabulary, they will more easily absorb information and develop strong language skills (Wahidah & Latipah, 2021). This is where the role of parents and the environment becomes very important in shaping children's language skills from an early age.

According to Chomsky (1965), every human being is born with an innate language ability, which he called as the Language Acquisition Device (LAD). This internal mechanism allows children to learn the rules of their native language quickly and also naturally without the need for explicit instruction. Chomsky argues that grammatical complexity can not only be learned through environmental factors alone, but suggests that some aspects of language can be acquired biologically. This theory of language acquisition emphasizes that children are biologically ready to learn language. As Lightbown and Spada (2013) explain, children do not need to be taught every aspect of grammar explicitly; Instead, they have been equipped with built-in ability structures that can help them understand the language they hear in their environment. According to Chomsky, children do not need to be taught language explicitly because they already have the basic structure of a universal language called universal grammar. This structure allows children to understand and form new sentences based on the exposure they hear, although input from the environment is often imperfect. In terms of language acquisition, children at the age of 3 do not realize that they are acquiring language, but they only realize that they are actually using language.

In a previous study from (Nasution & Putera, 2023) entitled "The Effect of Democratic Parenting on the Language Acquisition of 1 and 4 Year Old Children", it was found that there were differences in the research subjects with the first object named Khr aged 1 year and 7 months producing 42 utterances, dominated by one-word utterances. The word categories that appear include nouns, verbs, numeralia, and phatic and the second object named Syf aged 4 years and 8 months produced 70 utterances dominated by two-word utterances, even up to seven words with a more complex and diverse vocabulary including the use of conjunctions, prepositions, and pronomines. In this research, they analyzed phonology, morphology and syntax with a comparison of Khr was able to pronounce vowel phonemes and some consonants, but there were still missing or replacing phonemes while Syf showed a more stable and complex pronunciation, including the use of reduplication and affixation. From the two objects of this study, it was mentioned that parenting and the way parents communicate proved to be very supportive of early language development.

Further research from (Harisha et al., 2024) entitled "Phonology, Morphology, and Parents' Role in Language Acquisition (A Comparative Study)" also found that there are differences in the acquisition of phonology and morphology in 3-year-old children with different genders, the object of this study is female child with male children with the difference that the boy has difficulty in pronouncing some phonemes in phonological aspects and are able to pronounce free morpheme in morphological aspects. Whereas the girl has the ability to be clearer and more stable even though there are still errors in certain phonemes and are able to produce morphemes with more complexity so that she shows higher vocabulary mastery. The difference between these two objects is the role of the mother and also the environment in children's language development both phonological and morphological.

For another study entitled "Comparative Analysis of Language Acquisition of 2-Year-Old Girls and Boys on Phonological Aspects" by (Rahmanianti et al., 2018) a comparison of the phonological aspects of language acquisition of 2-year-old boy and girl was found with the difference that girl tend to simplify their phonemes and word structures more than the boy, so it is in line with psycholinguistic theory that brain development in the language acquisition of boy and girl is different.

In all of these studies, the objects involved were children aged around 2-4 years old, which is an important phase in early language acquisition with the findings that early children tend to experience phoneme reduction, sound replacement, or simplification of syllable structure. These three studies highlighted how the role of parents either through multiple interaction approaches as an important factor in children's language development. Although some of these previous studies have examined aspects of early childhood phonology and morphology-both from the perspective of democratic parenting (Nasution & Putera, 2023) the role of mothers and stimulation activities (Harisha et al., 2024), and gender differences (Rahmanianti et al., 2018). However, in this study, the researcher will focus on comparing children of the same age and the same gender who come from different parenting backgrounds and environments by focusing on the factors that trigger variations in language acquisition in these two three-year-old children through contextual phonological analysis.

This study refers to the theory of language acquisition developed by Noam Chomsky (1965) who introduced the concept of Language Acquisition Device (LAD), which is the innate ability or children born already have the ability to understand and produce a language. This is in line with the findings of (Nasution & Putera, 2023) which show that children can master through democratic parenting even though there are still errors in their language skills. On the other hand, (Harisha et al., 2024) emphasized how important the role of the mother and her stimulating activities are in language acquisition, as seen in the process of children's imitation of the speech of adults around them. And (Rahmanianti et al., 2018) who focused their research on children who have gender differences where brain development in language acquisition of boys and girls is different. Thus, this study combines these two perspectives in which children's innate (biological) abilities facilitate language acquisition, as well as parental and environmental influences that trigger the active use of language in children's social interactions in everyday life.

This study departs from one of the problems that arise, namely how the comparison of 2 three-year-old children in their language development through daily interactions, and what can be observed from the factors that influence their phonological development. This study

aims to analyze and compare the process of language acquisition in three-year-old children by focusing on phonological aspects with different family backgrounds during natural interactions with family members so as to provide practical insights for parents, teachers, and students, especially in the context of comparative linguistics. Based on the background, the author formulates the problem as follows:

1. What are the phonological differences shown by two three-year-old children with different family environment backgrounds in the context of daily interactions?
2. What environmental factors contribute to the variation in the phonological acquisition of the two children?
3. How does the role of parents influence children's pronunciation and use of language sounds?

Thus, the purpose of this study are

1. To analyze the phonological differences shown by two three-year-old children who come from different family environment backgrounds.
2. Identify the environmental factors that influence the acquisition of phonological aspects in the two children.
3. Exploring the contribution of parents' role to the process of children's phonological acquisition.

In this study, the scope is focused on 2 male children aged 3 years old named Galfin Yasasi Habbika as first object and Muhammad Arkhan Al Hafidz as second object who come from Pangalengan, Bandung.

2. Literature Review

This section presents a review of previous studies and theoretical frameworks relevant to the topic of first language acquisition in children. The discussion includes key concepts, theories, and findings from experts in the field of linguistics that serve as the foundation for this research.

Language Acquisition

Language acquisition is a process that occurs innately in humans. Chomsky (2009) argues that humans have a Language Acquisition Device (LAD), which is a biological mechanism that allows children to acquire language naturally and systematically without the need to be explicitly taught. This also involves the concept that humans are born with an innate capacity to learn language, known as "universal grammar". Chomsky (2009) argues that children can naturally acquire language because they have cognitive structures that support language understanding and use. In addition, the environment can act as a trigger only, while the basic structure of language is already embedded in them from birth biologically. He also rejects the behavioristic view that language is acquired entirely through imitation of the environment. So in the context of this study, Chomsky's theory is used by the researcher to understand how a three-year-old child can acquire language through social interaction in everyday life, and how this innate ability functions in real situations. Through naturalistic observation, researchers seek to identify evidence that children's language processes are not only influenced by the environment, but also by innate mental structures or what is called the nativist theory of language acquisition. And in the concept of phonology, LAD explains how

children are able to produce sounds in language such as phonemes and syllables without complex explicit instructions even though they have not fully mastered phonetics perfectly.

The Stages in First Language Acquisition

First language acquisition is a gradual process that humans experience from birth. According to (Fromkin et al., 2014), babies do not immediately possess full language skills, but rather learn them gradually through interaction and cognitive growth. The mother tongue is acquired slowly through several stages of development, bringing children closer to the form of adult language.

2.1 Pre-Speech Stage (Cooing) (0–6 Months)

In this early stage, babies begin to respond to human voices by making vocal sounds called cooing. (Bolinger, 2002) states that these sounds are similar to back vowels such as [u] and [o], for example, the sounds “oh,” “uh,” and “ah.” Babies will turn their heads or gaze toward the speaker and sometimes also make sounds like small laughs. However, babies at this stage still have difficulty producing vowel sounds like [i] and are not yet able to pronounce consonants like [b], [p], or [m].

2.2 Babbling Stage – (6–8 Months)

The babbling stage is characterized by the baby's ability to produce combinations of consonant and vowel sounds such as [ma-ma-ma], [ba-ba-ba], or [da-da-da]. According to (Steinberg & Sciarini, 2013) these sounds do not necessarily have meaning, but they are an important step in the process of learning to speak. Although babies from different languages produce similar sounds, not all of these sounds will eventually be used in their native language.

2.3 Holophrastic Stage – (9–18 Months)

The term holophrastic comes from the words holo (meaning “whole”) and phrase (meaning “phrase” or “sentence”). At this stage, children begin to use a single word to represent an entire meaning or sentence. (Fromkin et al., 2014) explains that these words are often used to express desires or feelings. For example, a child might say “[ad]” to refer to their dad. During this period, children's vocabulary development increases significantly.

2.4 Two-Word Stage – (18–24 Months)

Between the ages of 1.5 and 2 years, children begin to combine two words to form simple sentences. These sentences generally show semantic and syntactic relationships, such as “mama go” or “eat milk.” (Fromkin et al., 2014) adds that the intonation patterns in this stage already resemble complete sentences, even though they consist of only two words. Children also begin to be able to pronounce various consonant sounds such as [j], [p], [b], [d], [t], [m], and [n].

2.5 Telegraphic stage – (24–30 Months)

At this stage, children begin to form sentences longer than two words, although they still omit functional words such as “at,” “the,” or “with.” (Fromkin et al., 2014) uses the term “telegraphic” because the sentence structure resembles the style of a telegram, where only important words are used. Nevertheless, the child's sentence structure begins to show grammatical patterns similar to those in adult language.

2.6 Later multiword stage (30+months)

According to (Bolinger, 2002), this stage is a period of very rapid development in terms of vocabulary. Children can add many new words each day, and the sentences they produce already have clear communicative intent. Children no longer produce babbling sounds and

begin to understand most of the speech directed at them. Although there are individual differences in development, generally children have achieved language skills that approach those of adult speakers.

3. Methodology

According to Moleong (2005), descriptive qualitative research is research whose data consists of words and pictures, not numbers. Furthermore, the subjects of this study were two three-year-old children named Galfin Yasasi Habbika and Muhammad Arkhan Al Hafidz. Galfin is the researcher's nephew and Arkhan is the researcher's cousin. They are physically, mentally and socially healthy children. Galfin and Arkhan are known to be playful, story-telling, active and cheerful. He also shows a high level of curiosity, often asking his parents about the names of objects, activities and things he observes around him. The language used in this family is Indonesian.

Data collection and analysis in this study were conducted through several systematic stages in accordance with the descriptive qualitative research approach. According to Sugiyono (2013), data collection techniques in qualitative research can include observation, interviews, and documentation. In this context, video-recording documentation techniques were used to capture natural linguistic data and interview activities conducted with the parents of both children aimed at understanding the role of the family in the process of phonology acquisition, such as how often children are invited to communicate, pronunciation correction strategies, and other verbal stimulation habits at home. The data collected through interaction recordings were converted into written transcripts, which were then analyzed based on aspects of phonology as stated by experts. Furthermore, the data was classified based on these aspects: in terms of phonology, the researchers observed the ability to pronounce vowels and consonants and detected phenomena such as substitution or omission of sounds. The results of this analysis were then compared with theories of child language acquisition to ensure that the development between Galfin's and Arkhan's language was in line with the stages described by experts.

4. Result And Discussion

Result

The results presented describe the development of Galfin and Arkan's language skills as three-year-olds and show the extent to which their abilities can be understood by adults. These results are described systematically according to the classification of language acquisition aspects on the specified aspects of phology.

Table 1. Galfin & Arkhan Utterance Differences

No.	Galfin's utterances	Arkhan's utterances	Meaning
1.	"Besal"	"Besyal"	Besar
2.	"Kepiting"	"Peting"	kepiting
3.	"Kucing"	"Kucing"	Kucing
4.	"Gulita"	"Gulita"	Gurita
5.	"Sungai"	"Syungai"	Sungai
6.	"Timakasih"	"Telikasih"	Terimakasih

7.	“Hambelgel”	“Hambulgen”	Hamburger
8.	“Taksi”	“Taksyi”	Taksi
9.	“Polisi”	“Polisi”	Polisi
10.	“Monstel”	“Monstel”	Monster
11.	“Twampolin”	“Nampeulin”	Trampolin
12.	“Wangi”	“Wani”	Wangi
13.	“Esklim”	“Eskim”	Es Krim
14.	“Alkan”	“Akan”	Arkhan”
15.	“Ketemu”	“Kemu”	Ketemu”
16.	“Sehat”	“Syehat”	Sehat
17.	“Ikan”	“Ikan”	Ikan
18.	“Kamal”	“Kaman”	Kamar

Table 2. Interview with Galfin’s Mother

No.	Question	Answer
1.	How old is your child now?	Galfin is currently 3 years old.
2.	Does the child have a history of speech delays or language development?	Galfin does not have a speech delay. his speech development is in accordance with the milestones recommended by the Ministry of Health. I think his language development is at 80% good, because he is able to say a sentence according to what he means. and 70% can be immediately understood by parents.
3.	What language is most often spoken at home?, Is the child also exposed to other languages?	The language most often used by Galfin at home is Indonesian 70%, and English Sundanese 30%. However, when Galfin is outside the home, he can use a little bit of Sundanese. If it is said to be exposed to other languages, it is clear because there is an impact from the media and the environment and other families except parents.
4.	How often do you talk directly to your child in your daily life?	How I often talk to Galfin is can be categorized as often because in his daily activities such as eating, napping and sleeping at night, his mother always guides him with conversation, such as before taking a nap, we always take the time to chat first, namely "aa It's already 14.00, and now we have time to rest for a nap, because naps are good for growth and health".

5.	What activities are usually done with children that involve language?	There are many activities that parents often do with Galfin that involve language, there is reading books interactively, sometimes chatting with Galfin himself asking how he feels, how his activities are, today how the taste of the dishes that mom gave Galfin, so there is a lot of chatting. another thing that involves Galfin's daily language is that he really likes singing, because he is able to absorb the spectacle in the form of singing, he can immediately memorize it in 1-2 times listening to it and is able to implement it well.
6.	Have you ever noticed your child's pronunciation mistakes? How did you respond?	I am well aware of some Galfin language pronunciation errors, especially for non-vocal letters, sometimes the pronunciation is not perfect but the delivery can still be understood by parents.
7.	Whether it is left out, corrected directly, or corrected indirectly (e.g. repeating with the true version)	When I realize the pronunciation of Galfin's language is wrong, sometimes I correct it directly or I see his mood, if he is in a bad mood, I just let it go first, because there are still many opportunities to learn and chat with Galfin about it.
8.	Do your children learn more from direct interaction or from media?	Galfin seems to learn more from watching about 60%, because there are many lessons that he absorbs from watching the media. but we also as parents provide teaching through books, montesori directly such as buttoning clothes, learning to open pants, and learning to flush the toilet after shitting even though he can't wash himself yet.

Table 3. Interview with Arkhan's Mother

No.	Question	Answer
1.	How old is your child now?	3 years old
2.	Does the child have a history of speech delays or language development?	No, my child does not have a diagnosis of developmental language delay.
3.	What language is most often spoken at home?, Is the child also exposed to other languages?	Indonesian language, but sometimes exposed to a little Sundanese language.
4.	How often do you talk directly to your child in your daily life?	I interact with my child all the time.

5.	What activities are usually done with children that involve language?	His activities are watching videos and telling stories about his daily life
6.	Have you ever noticed your child's pronunciation mistakes? How did you respond?	Yes, I have. When my child pronounces a word or sentence incorrectly, I immediately tell him the correct pronunciation.
7.	Whether it is left out, corrected directly, or corrected indirectly (e.g. repeating with the true version)	I correct him directly so that he knows the correct pronunciation so that he can follow the pronunciation, but if the child is in a state of tantrum, I let him go first.
8.	Do your children learn more from direct interaction or from media?	My child interacts directly with me, but lately he has started learning through YouTube media.

Discussion

1. Phonological Differences between Galfin and Arkhan

From the example of the word “Besal” means big, “gulita” means octopus, “esklim” or icecream, “kamal” for room and “Monstel” for monster are clear that Galfin still has difficulty pronouncing the /r/ sound at the end of words, so he replaces it with the /l/ sound, which is easier to pronounce. So Arkhan’s ability is also same that the difficulty of pronouncing the /r/ sound at the end of words, This process is known as liquid substitution and its very common in young children who are in the process of acquiring phonology, especially for sounds that are more complex in terms of their place of articulation. This difficulty leads children to simplify the production of /r/ by dropping one of the gestures and replacing it with a lighter articulatory gesture, such as /l/ (Namasivayam et al., 2020) Meanwhile, with the word “crab” (crab), ”taxi” or taxi and “ketemu” means meet, Galfin demonstrated more stable phonological abilities. He was able to pronounce the sound sequences /k/, /p/, /m/ and /t/ completely without any changes. Meanwhile, Arkhan showed the replacement of /k/ with /t/ in the word “crab” which became “peting” which means crab. This shows a tendency to use consonants that are more familiar and easy to produce. The /t/ sound is one of the consonants mastered early in child development, so Arkhan naturally uses it as a substitute for more complex sounds. This phenomenon also reflects the normal phonological simplification process in the language acquisition stage. According to McLeod & Crowe (2018) Plosive consonants such as /p/, /t/, and /k/ belong to a group of sounds that are generally mastered by children between the ages of 2;0 and 3;11, with an accuracy rate of 90%-100%. This indicates that children who can produce plosive consonants correctly are already able to effectively coordinate the articulatory system and airflow. (Alwan et al., 2011)

Galfin and Arkhan's ability to pronounce the word “kucing” for cat, “ikan” for fish, and “polisi” for police in its entirety show that they have mastered three fairly complex consonants, namely the velar plosive /k/, the palatal affricate /tC/, and the velar nasal /ŋ/. This success reflects a more mature phonological development compared to other children of the same age. According to (Ma et al., 2022), affricates like /tC/ start to be acquired by children at the age of three, but they're usually stabilize around age five. Also, the velar

nasal /ŋ/ requires more complex articulatory coordination than anterior nasals like /m/ or /n/. This mastery of affricates and nasals is often one of the last stages in early phonological development due to their higher articulatory complexity and lower frequency in early child-directed speech (Ingram, 1989)

The omission of the /r/ sound in the words “hambulgel” for hamburger and “timakasih” for thankyou show that Galfin still has difficulty producing the /r/ sound that lives in the middle position of the syllable. The articulation of the /r/ sound in Indonesian involves vibration of the tip of the tongue on the alveolar ridge (the part of the palate behind the upper teeth). This requires fine motor control which is not yet fully developed in 3-year-olds. Whereas Arkhan shows greater difficulty with this sound, seen from “Hamburger” which becomes “hambulgen” because of the substitution of /r/ → /n/ in the final position of the word shows that Arkhan has recognized the need for a liquid sound in that position, but has not been able to produce /r/ at the end of the word appropriately so this ability shows a good understanding of word structure but there is a modification of the sound at the end of the word which becomes /n/. According to (Labrune & Labrune, 2024), the production of rhotics like /r/ is among the most developmentally challenging phonemes for children due to its high articulatory demand and variability across languages. In Indonesian, /r/ is typically acquired between ages 4 and 6, and even later in bilingual or dialect-influenced environments.

One of the most interesting differences between the two children is seen in the handling of the word trampoline. Arkhan produced “nampeulin” with the removal of the /tr/ cluster which was then replaced with /n/, as well as vowel modification in the last syllable. This process shows that Arkhan actively reconstructs difficult words into easier to produce forms while trying to maintain the phonological identity of the word. Meanwhile, Galfin produces “twampolin” with a simple metathesis /tr/ → /tw/. This also known as liquid substitution and its very common in young children who are in the process of acquiring phonology, especially for sounds that are more complex in terms of their place of articulation because Phonological simplifications are common in early language development, including cluster reduction, substitution, (G. Yule, 1985). Galfin's strategy shows an attempt to maintain the original structure of the word while simplifying the difficult consonant cluster. This approach is actually more conservative and shows a good phonological awareness of the original word structure despite articulatory limitations (Baker & Bernhardt, 2004)

Another interesting aspect of Arkhan's utterances is the tendency to palatalize the /s/ sound, where “river” is pronounced as “syungai” and ‘sehat’ becomes “Syehat”. This palatalization process shows that Arkhan is exploring sound variations in the Indonesian phonological system. The palatalization of /s/ into /ʃ/ or /sy/ actually reflects good phonetic sensitivity, as in some linguistic contexts, this variation is acceptable. This phenomenon may also be influenced by exposure to the Sundanese dialect mentioned in the interview, although the exposure was minimal. Whereas Galfin's ability on the /s/ sound in his utterance shows that he has mastered the complex consonants of palatal. This strategies of both indicate emerging phonological awareness and an effort to maintain the segmental integrity of complex words, despite articulatory limitations (Baker & Bernhardt, 2004)

2. External Factors Influencing Phonological Development

1) Environmental Factors

Significant differences were seen in the linguistic background of the two children. Galfin was exposed to a more multilingual environment with the proportion of Indonesian 70% and English-Sunda combination 30%, so Galfin's multilingual exposure could explain some of the phonological variations observed, as different phonological systems can influence each other in the acquisition process. This phonological awareness is a core predictor of early literacy and pronunciation accuracy among children, especially in multilingual context (Kasmadiana & Tul Adawiyah, 2025). However, no significant interference was observed that could hinder the development of Indonesian as the dominant language. Whereas Arkhan had a more limited exposure to Sundanese so as to optimize the learning of one language's phonological system without significant interference from other language systems. This allows for a more in-depth and systematic development of phonological rules (G. U. Yule, 1944)

Galfin also showed a remarkable ability to memorize songs, which indicating good auditive memory and phonological reproduction skills as said by (Pavlekovic, 2024) the child's working memory and phonological loop skills play a role in maintaining the correct and consistent phoneme form. However, uncontrolled gadget use can reduce the quality of social interaction and cause language delays and articulation disorders (Nurul Fikriyah, 2025). But in this case, Galfin's ability was reflected in the more accurate production of certain words compared to predictions based on other phonological errors.

2) Parental Factors

Both families showed different approaches in supporting children's language development. Arkhan's family focuses more on direct interaction with systematic correction so that Arkhan can accept direct correction from his parents who show good emotional resilience in the face of negative feedback because children actively construct language rules through repeated exposure and correction. And direct correction enhances faster phoneme stabilization (Clark, 2004). This characteristic is very important for long-term learning, as the language acquisition process requires tolerance for mistakes and motivation to keep improving (Huang, 2025). Galfin's family, on the other hand, was able to combine direct interaction with more intensive media exposure, with 60% learning from the media that her mother said during the interview. But despite his exposure to the media, Galfin remains under parental supervision because there are many lessons that he absorbs from watching the media. And Galfin's Mother provide teaching through books, and also montesori directly. According to (Clark, 2004) cognitive development in early childhood is optimized through active engagement with caregivers. Social interaction shapes internal language representations.

Based on this comparison, both children do not require special intervention as the observed error patterns are still within the normal range as both families have demonstrated appropriate strategies in providing support according to the child's emotional state, which is crucial for optimal phonology learning. However, support strategies can be customized according to each child's characteristics (Huang, 2025). For

Arkhan, consistency in direct correction can be maintained while providing more variety of input to enrich the phonological system. For Galfin, the utilization of superior auditory learning ability can be optimized by providing more accurate phonological models through high-quality media. In this case, children's phonological development is strongly influenced by the quality of interaction with parents. Sensitive and responsive verbal interactions can accelerate phoneme acquisition (Jakkula & Helenius, 2004)

Conclusion

This comparative study examines the phonological development of two three-year-old children, Galfin Yasasi Habbika and Muhammad Arkhan Al Hafidz, provides valuable insights into the complex interplay between innate language acquisition mechanisms and environmental factors in early childhood phonological development. An analysis of two boys from different family backgrounds revealed some significant phonological differences between the two children despite their similar age and gender. Both children showed common developmental patterns expected at their age, including substitution of /r/ sounds for /l/ and /n/ sounds, catalyzation of /s/ to /ʃ/ or /sy/ as well as simplification of consonant clusters, and omission or replacement of sounds.

In these findings, Galfin suggests a more conservative phonological strategy, often retaining the original word structure while simplifying difficult consonant clusters (e.g., “twampolin” for trampoline). Her multilingual exposure (70% Indonesian, 30% English-Sundaese) seems to enhance her phonological awareness without significantly impeding her Indonesian language development. His superior auditory memory, evidenced by his ability to memorize songs quickly, correlated with more accurate production of certain phonemes with the help of media exposure. In contrast, Arkhan showed more active phonological reconstruction, by restructuring difficult words into easier forms (e.g., “nampeulin” for trampoline) and exhibiting palatalization tendencies in fricative production. His more limited linguistic exposure seems to allow for a deeper and more systematic development in one phonological system.

This study confirms that environmental factors significantly influence phonological acquisition patterns. Contrasting family approaches such as the Galfin family which combines direct interaction with supervised media exposure versus the Arkhan family which emphasizes systematic direct correction, both proved effective in their respective contexts. This suggests that successful phonological development can be achieved through a variety of supportive strategies, provided they are consistent and responsive to the child's emotional state and learning style. This study validates Chomsky's theory of the Language Acquisition Device (LAD), as both children demonstrated an innate capacity for language learning while showing how environmental triggers activated and shaped this biological predisposition. The children's ability to produce complex phonological structures without explicit instruction supports the nativist perspective in language acquisition.

References:

- [1.] Agustina, R. K., Laili, E. N., Daristin, P. E., Indrawana, F., Fajarina, M., & Zuhriyah, M., "The importance of language learning for early children in Kasreman Village, Kandangan, Kediri," pp. 48–55, 2024.
- [2.] Alwan, A., Jintao, J., & Willa, C., "Perception of place of articulation for plosives and fricatives in noise," *Speech Communication*, vol. 53, no. 2, pp. 195–209, 2011. <https://doi.org/10.1016/j.specom.2010.09.001>
- [3.] Baker, E., & Bernhardt, B., "From hindsight to foresight: Working around barriers to success in phonological intervention," *Child Language Teaching and Therapy*, vol. 20, no. 3, pp. 287–318, 2004. <https://doi.org/10.1191/0265659004ct276oa>
- [4.] Bolinger, D., *Aspect of Language*, America: Harcourt Brace Jovanovich, Inc., 2002.
- [5.] Chomsky, N., *Cartesian Linguistics: A Chapter in the History of Rationalist Thought*, Cambridge: Cambridge University Press, 2009.
- [6.] Clark, E. V., "How language acquisition builds on cognitive development," *Trends in Cognitive Sciences*, vol. 8, no. 10, 2004. <https://doi.org/10.1016/j.tics.2004.08.012>
- [7.] Fromkin, V., Rodman, R., & Hyams, N., *An Introduction to Language*, 10th ed., Boston: Cengage Learning, 2014.
- [8.] Harisha, N., Perdana, P. R., & Fitriani, D., "Phonology, morphology, and parents role in language acquisition (A comparative study)," *Foremost Journal*, vol. 5, no. 1, pp. 71–81, 2024. <https://doi.org/10.33592/foremost.v5i1.4465>
- [9.] Huang, X., "How parents can support language development in children approaching age two: What to know and what to do," vol. 2, no. 2, pp. 30–35, 2025.
- [10.] Jakkula, K., & Helenius, A., *The Quality of Early Interaction in Mother-Child Dyads*, University of Turku, 2004.
- [11.] Kasmadiana, M., & Tul Adawiyah, R., "Learning through the screen: Malaysian parents' perspectives on YouTube and their children's English acquisition," *Southeast Asia Early Childhood Journal*, vol. 14, no. 1, pp. 18–32, 2025. <http://ejournal.upsi.edu.my/index.php/SAECJ>
- [12.] Labrune, L., & Labrune, L., "Word-initial rhotic avoidance: a typological survey," vol. 6, no. 1, 2024.
- [13.] Ma, J., Wu, Y., Zhu, J., & Chen, X., "The phonological development of Mandarin voiceless affricates in three-to five-year-old children," *Frontiers in Psychology*, vol. 13, article 809722, 2022.
- [14.] Namasivayam, A. K., Coleman, D., O'Dwyer, A., & Van Lieshout, P., "Speech sound disorders in children: An articulatory phonology perspective," *Frontiers in Psychology*, vol. 10, article 2998, 2020.
- [15.] Nasution, K. R., & Putera, D. A. K., "Pengaruh pola asuh demokratis terhadap bahasa anak usia 1 dan 4 tahun," vol. 1, pp. 39–47, 2023.
- [16.] Nurul Fikriyah, R., "Pengaruh penggunaan gadget terhadap perkembangan kognitif pada anak usia dini," *Jurnal Psikologi dan Bimbingan Konseling*, vol. 13, no. 3, pp. 1–7, 2025.
- [17.] Pavlekovic, R., "Language learning aptitude and working memory in L2 acquisition: The role of proficiency and structure difficulty," University of Essex, Dec. 2024.
- [18.] Pebriana, P. H., "Analisis penggunaan gadget terhadap kemampuan interaksi sosial pada anak usia dini," *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, vol. 1, no. 1, p. 1, 2017. <https://doi.org/10.31004/obsesi.v1i1.26>

- [19.] Rahmianti, D., Triyani, N., Yuniswara, N. S., Ismayani, M., & Siliwangi, I., "Analisis perbandingan pemerolehan bahasa anak perempuan dan laki-laki usia 2 tahun pada aspek fonologi," *Parole: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, vol. 1, no. 2, pp. 233–240, 2018. <http://dx.doi.org/10.22460/p.v1i2p%25p.251>
- [20.] Steinberg, D. D., & Sciarini, N. V., *An Introduction to Psycholinguistics*, Routledge, 2013.
- [21.] Wahidah, A. F. N., & Latipah, E., "Pentingnya mengetahui perkembangan bahasa anak usia dini dan stimulasinya," *Jurnal Pendidikan Raudhatul Athfal (JAPRA)*, vol. 4, no. 1, pp. 43–62, 2021. <https://doi.org/10.15575/japra.v4i1.10940>
- [22.] Yule, G. U., *The Statistical Study of Literary Vocabulary*, Cambridge University Press, 1944.
- [23.] Yule, G., *The Study of Language*, vol. 22, no. 2, Cambridge: Cambridge University Press, 1985.