

## **Phonological analysis of children's language acquisition at the age of 1 year 8 months**

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### **Abstract**

This study investigates the phonological acquisition of Kamari Sky Wassink, a child aged 1 year and 8 months, focusing on his mastery of vowel and consonant phonemes. The findings reveal that Kamari has successfully acquired several vowel phonemes, including [a], [i], [u], [e], and [o], as well as consonant phonemes such as [d], [g], [k], [l], [m], [n], [t], [p], and [w]. Despite facing challenges in pronouncing certain consonants like [r], [s], and [v], these difficulties are considered normal for his age. The study highlights the processes of sound deletion and substitution as natural efforts to simplify pronunciation. Additionally, the research emphasizes the significant role of the surrounding environment in language development, with the acquisition of the first language serving as a crucial foundation for future linguistic growth. Overall, Kamari's phonological development reflects a positive trajectory in his language acquisition journey.

*Keywords:* phonological acquisition, vowel phonemes, consonant phonemes, early childhood language, language environment.

### **Introduction**

Language plays a crucial role in everyday communication, serving as a tool for social interaction. It is a system of sound symbols characterized by arbitrary conventions that facilitate interaction and self-identification. The ability to use language is essential for humans, enabling them to communicate effectively (Adnyani et al., 2022; Fuad & Helminsyah, 2018; Wee & Goh, 2019). Language acquisition is part of the broader process of developing linguistic skills, which involves two key stages: language acquisition and language learning (Hayati, 2016; Mulyaningtyas, 2019). Through language, children can express themselves, share experiences, and articulate their thoughts (Fitriani et al., 2019; Khotijah, 2016). Language is innate, learned from birth, and involves a lengthy process from initial exposure to fluency. After mastering their mother tongue, children often begin learning a second language, which they recognize as a new body of knowledge. The mother tongue is the first language acquired through interaction with family and community (Putriyanti et al., 2018; Rohayati, 2018).

Currently, children's language acquisition is hindered, particularly because technological distractions lead to reduced parental engagement. Language acquisition is defined as the process through which children achieve fluency and a love for their mother tongue, shaped by their environment (Firmandasari et al., 2020; Yarti et al., 2021). Children learn language naturally by listening to parents and consuming content from various media (Meinzen-Derr et al., 2019; Yunus & Munisa, 2023). Their language development progresses from babbling to vocabulary expansion, facilitating better communication (Ahlquist, 2023; Meinzen-Derr et al., 2014). Language

acquisition is vital, as even an infant's cries can convey needs, such as hunger. Research indicates that stimulation at both the vocal and semantic levels influences language development.

This issue can be addressed through linguistic materials that are comprehensible. Linguistics studies language systematically, generating theories, but understanding students as language learners requires insights from psychology (Don, 2021; Schwarz & Hamman-Ortiz, 2020). While language is often described as a communication tool (Estrada & Mariam Rahman, 2018; Ngongo & Ngongo, 2022), this definition does not fully capture the essence of language itself (Frumuselu et al., 2015; Siregar, 2021). Linguistic study can be approached both internally, examining structure, and externally, considering context. Children can independently expand their vocabulary through effective communication (Potocki et al., 2021; Verhagen & Leseman, 2016). Interaction with adults allows children to learn not just words, but also sentence structures, as they mimic and interpret language used around them (Ahlquist, 2023; Bus et al., 2015). Thus, the process of acquiring language in early childhood is a significant focus for psycholinguistic researchers.

These studies reveal that phonological development is an integral part of overall language acquisition and should be studied in conjunction with other linguistic fields (Friska & Syafi'i, 2021; Minda & Rambe, 2021; Yanti, 2016). The findings show that Kamari Sky Wassink has mastered several vowels such as [a], [i], [u], [e], [o]. Likewise with consonants such as [m], [d], [y], [g], [n], [L], [p], [t], [k], [w]. The family environment has a significant impact on language acquisition, with children showing sound changes and deletions during the critical early years. Differences in phonological acquisition arise from various topics, materials, and outcomes. This study will focus on the analysis of children's language development in the home environment, especially by examining consonant and vowel phonemes in psycholinguistic research.

## **1. Theories and Methods**

Descriptive data in the form of written or spoken words from individuals illustrates the behaviors experienced. This qualitative research is a method used to study the conditions of natural objects, where the researcher acts as the primary instrument (Rosita, 2017). The aim of qualitative research is to obtain a comprehensive picture of a phenomenon according to the perspectives of the individuals studied. The quality of research relates to the ideas, perceptions, opinions, or beliefs of the participants, which cannot be measured numerically. Researchers choose this method because empirical observation shows that most research reports are presented in descriptive form. Qualitative descriptive research is very useful for understanding various issues related to human behavior and the sensitivity in describing what informants feel. The focus of this research is on the phonological aspects (sounds) in children's language acquisition.

The subject of this study was a 1 year 8 month old child, Kamari Sky Wassink, born in Denpasar, Bali. Kamari Sky Wassing is the child of famous artist Jennifer Coffen who is very famous for being cute and adorable. The data collection method in this study was online observation, where researchers collected videos and recorded each utterance, pronunciation, and meaning contained therein. Kamari Sky Wassink was studied through several videos, and researchers provided additional notes based on the context of the child's activities. Furthermore, each utterance was analyzed to determine its meaning, taking into account the child's knowledge and daily life.

The third stage involves using this data to draw conclusions about the process of language acquisition through children's speech. This study also investigated the cognitive and social development of children. The listening method was used to collect data, where researchers listened

to the language used. The note-taking technique is a follow-up technique applied after using the listening method. This technique is used to identify the forms of words and sentences obtained by children aged 1 year 8 months when talking to parents, family, playmates, or the surrounding environment.

In data analysis, researchers analyzed the data online. After the data was collected, a discussion was conducted using the distribution method. The distribution method was applied to analyze the existing elements. Data were analyzed based on the form and function in the language of children aged 1 year 8 months. Indicators that show form and function were collected and analyzed. The data analysis technique used qualitative descriptive analysis.

## 2. Results and Discussion

The purpose of this study was to determine the acquisition of phonological language acquisition in children aged 1 year 8 months. Kamari Sky Wassink has very good physical development and health, but still has a little difficulty in pronouncing the actual phonemic consonants such as [r], [s], [f] and [b]. This is normal for a child aged 1 year 8 months. However, on the other hand, Kamari Sky Wassing has mastered vowel phonemes such as [a], [i], [u], [e], and [o]. The phonemes [a] and [o] are more often used such as the phoneme [a] for pronouncing the word "mama" and [o] for pronouncing the word "wow". In addition to mastering vowel phonemes, Kamari Sky Wassink has mastered several consonant phonemes such as [d], [g], [k], [l], [m], [n], [t], [p], and [w]. In this case, Kamari Sky Wassink is classified as a child who has significant development, the main factor of significant development is generated from the surrounding environment so that the child achieves fluent mastery of the "mother tongue". The child's ability to produce language sounds is seen when the child experiences the development stage of his articulation. Kamari Sky Wassing has been able to pronounce several existing language sounds, especially the vowel sounds /a/, /i/, /u/, /e/, /o/. The child has been able to pronounce the vowel sounds very clearly even though the sound is at the beginning, in the middle, or at the end of the word in the sentence the child says. The results of the analysis are presented in [Table 1](#).

[Table 1](#).Vocal phoneme acquisition.

No.	Vocal phonemes	words obtained	explanation
1	[a]	"Mama"	The pronunciation of the vowel [a] in the middle and at the end is already fluent. The word is often said when calling his mother.
2	[i]	"duit" (money)	The pronunciation of the vowel [i] is already fluent. The word was pronounced when Kamari pretended to call someone.
3	[u]	"duit" (money)	The pronunciation of the vowel [u] in the middle is already fluent. The word is said when Kamari pretends to call someone.
4	[e]	"mekap" (make up)	The pronunciation of the vowel [e] is already fluent. This word is pronounced when seeing his mother putting on make up..

5	[o]	“Wow”	The pronunciation of the vowel [o] in the middle is already fluent. The word is often said when Kamari sees something interesting.
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There are two processes in the acquisition of phonology experienced, namely the process of removing language sounds in a word and the process of changing language sounds in a spoken word. In pronouncing a word, Kamari Sky Wassink still often removes or replaces one of the language sounds in the word with another sound. The results of the analysis are presented in [Table 2](#).

[Table 2](#). Consonant acquisition

No.	Original Word	Child	explanation
1	Telur (egg)	“telul”	There is a change in the consonant sound [r] at the end to the sound [l].
2	Sini (come here)	“nini”	There is a change in the consonant sound [s] at the beginning to the sound [n].
3	Five	“fike”	There is a change in the consonant sound [v] to the consonant sound [k].
4	Duduk (sit)	“dudu”	There is a deletion of the consonant sound [k] at the end.
5	Plis	“pis”	There is a deletion of the consonant [l] in the middle.

From the results of the table above, it can be seen that there is a process of changing the sound of the consonant phoneme in [r] to [l], this is normal for children aged 1 year 8 months because they are still in the process of acquiring sounds. Consonant changes are a form of effort to simplify sounds that are difficult to pronounce, because basically the consonant sound [l] is easier to pronounce than the consonant sound [r]. The sound [r] is a vibrating sound, namely a sound that is produced by closing and opening the air flow repeatedly quickly, while the sound [l] is a lateral sound. Lateral sounds are sounds that are produced by closing the air flow in such a way that air can still escape through one or both sides. In addition to the process of changing consonant sounds, the table above can also show the process of removing consonant sounds at the beginning and end. At an early age, the process of removing consonant sounds is normal, one of the factors is because children have limited articulation abilities.

## Discussion

Phonology at the linguistic level is divided into two parts: phonetics and phonemics (Andrade et al., 2014; Barus et al., 2018). Phonetics is the study of speech sounds used in communication and how these sounds are produced by human speech organs. Phonemics, on the other hand, is the study of sounds in language that serve to differentiate meanings or phonemes. A phoneme consists of two phonetically different sounds in different environments that have the effect of distinguishing different words.

Language acquisition is the process that occurs when a child learns to master their first language or mother tongue, while language learning refers to the acquisition of a second language, which is taught formally to children (Carter et al., 2020; Piper et al., 2018; Risnawati & Nuraeni, 2019).

The stage of mastering the first language is related to a child's language development (Knauer et al., 2020; Kostyrka-Allchorne et al., 2017). This is because the first language is acquired during childhood. The stages of acquiring the first language are divided into four phases: acquisition of content and performance, acquisition of semantics, acquisition of syntax, and acquisition of phonology. Language acquisition in children is certainly an important concern (Mak et al., 2023; Meinzen-Derr et al., 2014).

Babies who cry when they are hungry (wanting to ask for milk) or children who can say [milk] when they are hungry go through a process. This process requires guidance to achieve the perfect goal, meaning being able to pronounce and articulate words, sentences, and be able to speak. The first language in children will influence subsequent processes in language. This first language is often referred to as the mother tongue.

Based on observations, Kamari Sky Wassink has difficulty pronouncing original phonemes or real phonemes, such as the phoneme [r] becomes the phoneme [l], the phoneme [s] becomes the phoneme [n], and the phoneme [v] becomes [k]. This is normal for children aged 1 year and 8 months because their speech organs are not yet perfect. If this continues into adulthood, it can be said that the child has difficulty pronouncing these phonemes. Disorders can occur due to medical and social factors. In general, children in Indonesia receive formal education after the age of 6, and that is when the language learning process begins. Between the ages of 0 and 5, children interact more with their families and their environment, and the language acquisition process occurs during this period. In the process of learning a language, children become familiar with a second language after learning their first language.

### 3. Conclusions

This study highlights the phonological acquisition of Kamari Sky Wassink, a child aged 1 year and 8 months, who exhibits notable progress in mastering vowel phonemes such as [a], [i], [u], [e], and [o], along with several consonant phonemes. While he faces challenges in pronouncing certain consonants like [r], [s], and [v], these difficulties are typical for his developmental stage. The observed processes of sound deletion and substitution reflect a natural effort to simplify pronunciation. Furthermore, the influence of the surrounding environment is critical in facilitating language development, with the first language acquisition laying a strong foundation for future linguistic growth. Overall, Kamari's phonological development indicates a positive trajectory in his language acquisition journey.

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