

## ACQUISITION OF EARLY CHILDHOOD PHONOLOGY : A CASE STUDY OF A 24 MONTHS TODDLER IN PALEMBANG

Fitria Aprilia

English Literature Study Program, Faculty of Teacher Training, Education, and Language  
Universitas Bina Darma, Indonesia  
[fitria\\_aprilia@binadarma.ac.id](mailto:fitria_aprilia@binadarma.ac.id)

### Abstract

This research aimed to describe the language acquisition of a toddler at the age of 24 months, seen from the phonological aspects, such as consonants, vowels, and diphthongs. This research was conducted in Palembang, on November – December 2021. The method used in this research was qualitative method through case study approach. The data were obtained from a toddler whose initial name was “MSM” as the respondent. The techniques for collecting the data were through observation and recording. The results of the analysis showed that the respondent was able to pronounce various phonemes existed in *Bahasa Indonesia* and *Bahasa Palembang* (Indonesian and Palembang Language). These phonemes consisted of 14 consonants which were /p/, /b/, /m/, /t/, /d/, /s/, /n/, /l/, /ʒ/, /tʃ/, /j/, /g/, /k/, and /ŋ/. The respondent also has been able to produce the vowels phonemes such as /a/, /i/, /u/, /e/, /ə/ and /ɔ/ and some kinds of diphthongs which were /aʊ/, /eɪ/, /aɪ/, and /oʊ/.

**Keywords:** language acquisition, phonology, phonemes (consonants, vowels, and diphthongs)

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### Introduction

The most significant thing in communication is using a language. Chaer (2003) states that language refers to an arbitrary symbol system used by members of social groups to cooperate, communicate, and identify themselves. Another definition of language is an effective communication tool between humans in various situations. Language can be used to convey ideas from speaker to listener or writer to reader. Language is an intermediary tool in the process of human interaction with other humans. Although language is never separated from humans, there are no exact figures for the number of languages in the world.

According to Sumarsono (2002) language is a forum for social aspirations, community behavior, and a forum for cultural disclosure, including technology created by the language user community.

Basically, there are two basic skills in communication, namely the

development of the ability to understand the language used by others (receptive language) and the development of the ability to produce language (production language) (Hetherington & Parke, 1986).

The development of language that occurs in children is always fascinating. According to Mukalel (2003) a child is born equipped with the basic ability to speak from biological organs to make speech. The function of biological and mental abilities is babbling sound which is characterized by two sound systems, this stage is called echolia / speech produced by the baby by following the mother's initial speech and ending with the addition of the baby itself. The second stage is conditioning the articulation elements by objects and situations. The last stage is children begin to be able to answer questions and use their language better.

Language acquisition process will start just days after being born. Babies are going to hear voices of the people around them, especially the voice of

their mother. A baby will grow up along with the development of his/her language. Parents are the most important factor as an input which can help a baby to acquire the first language. When a mother communicates to her baby, the baby will listen to her voices and try to produce single syllable, vowel-like sounds that are called as cooing.

The capacity of each child to acquire or absorb a language is not the same. There are children whose language development is relatively fast, but there are also children whose language development is classified as moderate or even quite slow, as in the case of children who have not been able to speak clearly even though they are 3 years old or older (Aprilia, 2021).

Furthermore, children acquire their first language from the people around them. There are several stages that must be passed by the babies during the process of language acquisition; the babies try to produce sounds, such as cooing stage, babbling stage, holophrastic stage, telegraphic stage, and multiword stage. All of those stages are the same for other babies in the world during the process of language acquisition. Language acquisition is a process that takes place in the child's brain when they acquire the first language. Human being had faculties of the mind when they were born. Chomsky called the faculties of the mind as Language Acquisition Devices (LAD) that makes children can develop their language.

Following Pateda (1990) the development of children's language consists of 4 stages. Stage 1 is babbling (6 months), stage 2 is one word (1 year), stage 3 is two words (2 years), and stage 4 resembles a telegram. In addition, by the age of 2-3 years old, children in particular have acquired thousands of vocabularies, complex phonological and grammatical systems, and the same

complex rules for how to use their language properly in many social settings.

Language acquisition by children can be identified by conducting research on the child's own language. This kind of research is crucial because children's language is interesting to study. In addition, the results of such research may offer or find solutions to various problems. Later, from the results of the research, it is also clear that the phenomenon of language acquisition is relevant for the development of linguistic theory.

Language development or communication in children is one aspect of the stages of child development that should not escape the attention of educators in general and parents in particular. Language acquisition in children is the greatest and most amazing human achievement. That is why this issue received great attention. By that time, we had learned a great deal about how children speak, understand, and use language, but very little we know about the actual process of language development.

Phonology itself is one of the fields of linguistics that discusses the sounds of a particular language according to its function to distinguish lexical meanings in that language. Alduais (2015) suggests that phonology is related to the system and sound patterns that exist in a particular language. A focus for phonological as well as lexical studies is on how to assign children's words to become language specific (Johnson & Wilson, 2002).

Aprilia (2021) argues that the acquisition of phonology is an important research domain because it is able to determine or influence linguistic theories. Phonological studies that discuss the complexity, regularity, and limitations of the sound system can

generally be a supporter and determinant of linguistic theories produced by experts. This phonological realm is also interesting to study in children's language acquisition because the appearance of this sound is genetic. In other words, the appearance of a sound cannot be measured by the number of years or months on the calendar because human biological development is not the same. Thus, each child's language acquisition must have variations.

In relation to these phenomena, there are some previous studies that have examined various aspects of language acquisition in children. These previous studies are considered quite relevant to the study which was also conducted by the researcher in this research.

Previous study from Amaro dan Wrembel (2016) which was published in *International Journal of Multilingualism* entitled *Investigating the acquisition of phonology in a third language – a state of the science and an outlook for the future*, tries to investigate the third language acquisition of children, especially in the phonological aspects.

Sypianska (2016) in his study published in the *International Journal of Multilingualism* entitled *Multilingual acquisition of vowels in L1 Polish, L2 Danish and L3 English*, aims to determine whether all languages in the linguistic repertoire of multilingual speakers exhibited cross-language influences and to determine the direction of cross-language influence based on selected vowels from the linguistic repertoire of two groups: the Bilingual group (L1 Polish/ L2 Danish) and the Multilingual group (L1 Polish/L2. Danish / L3 English). The results show that the Polish L1 vowels are higher and thinner due to the influence of English L2 Danish and L3.

Then, the last relevant research belongs to Sams (2015) entitled *T/V pronouns in L2 acquisition of Spanish*.

The research was published in the *International Journal of Language and Linguistics*. The aim of the study is to show that while general rules governing the use of T/V in L2 Spanish are sufficient, exposure to natural languages, explicit awareness of teaching phenomena, and studying abroad can all increase students' mastery of these pragmatic phenomena.

Unlike those previous studies, this study tries to reveal the various sounds produced by a young boy at the age of 2 years and the phonological problems that arise in producing language in the form of words. Finally, this research is expected to provide knowledge to the general public, especially educators and mothers who have young children regarding the development of children's language acquisition.

### Methodology

This study was a descriptive study. The data obtained from this study were analyzed by using qualitative methods since they were not in the form of numerical data. So, this study as a whole was a qualitative descriptive study. The approach used in this study was a case study. The focus of this case study was a young boy hereinafter referred to as the respondent. The data in the form of speech sounds which were taken in November - December 2021 were transcribed into the form of phonetic transcription. At the time of the data collection, the respondent was at the age of 24 months or about 2 years old.

The following is the respondent's data:

Initials : MSM  
Age : 24 months / 2 years old

Place of birth : Palembang  
Date of birth : 13<sup>th</sup> of November 2019  
Address : Merintis 1 Street,  
Sako, Palembang.

Respondent was born in Palembang and live in a Palembang-Javanese family. However, the first language and the most dominant language that the respondent uses in his daily communication is *Bahasa Palembang* (Palembang Language) which is also the respondent's mother tongue. The people around the respondent's environment also played a role in the acquisition of the respondent's first language. Several times, the respondent also used Javanese language (such as “*emoh*” which means ‘no’ in English), but the respondent rarely used that language. During the data collection through observation and recording, the respondent used *Bahasa Indonesia* and *Bahasa Palembang* (Indonesian and Palembang Language) which are the languages the respondent hears and uses every day.

This data collection technique used in this study were three successive strategic stages, which were:

1. Providing Data Method, is a method that describes how research data is obtained.
2. Data Analysis Method, is the peak stage of a research.
3. Analysis Result Presentation Method, is the last stage that presents the results of the peak stage.

In providing the data, techniques applied in this research was an observation technique followed by recording technique. Data in the form of speech were transcribed into phonetic transcription. Furthermore, the transcription was used as the bodies to be separated as needed. Corpus are classified into the form of phonemes and words. Furthermore, all corpus which shaped phonemes were recorded and grouped into vowels phonemes and consonants phonemes.

## Findings and Discussion

Based on the results of the analysis, MSM (respondent) could be classified as a brilliant young boy. He was very active, smart, and fun. For the children at his age, the acquisition of the language obtained by the respondent was plenteous. The following data were phonemes produced by the respondent :

### a) Consonants

There were 14 consonants phonemes that appeared during the research, which were /p/, /b/, /m/, /t/, /d/, /s/, /n/, /l/, /ʒ/, /tʃ/, /j/, /g/, /k/, and /ŋ/.

- **Bilabial sounds** such as /p/, /b/, and /m/ have begun to be clearly pronounced. Such as:

[p] [apat] ‘dapat’, [bibip] ‘bibip’ (*klaxon sound*), [ampak] ‘nyampak’ (which means ‘jatuh’ in *Bahasa Indonesia*), [bapak] ‘bapak’.

[b] [ambek] ‘ ambek’ (which means ‘ambil’ in *Bahasa Indonesia*), [mbil] ‘mobil’, [bapak] ‘bapak’, [ombol] ‘nombor’ (which means ‘menabrak’ in *Bahasa Indonesia*), [bibip] ‘bibip’ (*klaxon sound*)

[m] [lima] ‘lima’, [enam] ‘enam’, [ambek] ‘ ambek’ (which means ‘ambil’ in *Bahasa Indonesia*), [mbil] ‘mobil’, [ombol] ‘nombor’ (which means ‘menabrak’ in *Bahasa Indonesia*), [mau] ‘mau’, [muwat] ‘muat’

- **The alveolar sounds** such as /t/, /d/, /s/, /n/, and /l/ were also very clear. Such as:

[t] [tiga] ‘tiga’, [satu] ‘satu’, [apat] ‘dapat’, [tas] ‘atas’, [atu] ‘jatuh’, [ute] ‘muter’ (which means ‘memutar’ in *Bahasa Indonesia*), [muwat] ‘muat’

[d] [dua] ‘dua’

[s] [satu] ‘satu’, [tas] ‘atas’

[n] [enam] ‘enam’, [ini] ‘sini’, [alan] ‘jalan’, [naik] ‘naik’, [ano] ‘sano’ (which means ‘sana’ in *Bahasa Indonesia*), [uning] ‘kuning’, [ain] ‘main’, [ikan] ‘ikan’

[l] [mbil] ‘mobil’, [lima] ‘lima’, [alan] ‘jalan’, [ela] ‘bola’ and ‘merah’

- **The vibrating sound /r/** hasn’t appeared so that the sound was pronounced with /l/. For example:

[r l] [olang] ‘→ orang’, [bilu] ‘biru’, [alok] ‘tarok’ (which means ‘menaruh’ in *Bahasa Indonesia*), [ombol] ‘nombor’ (which means ‘menabrak’ in *Bahasa Indonesia*), [ela] ‘merah’, [olen] ‘oren’ (refers to ‘orange color’ in English)

- Many **palatal sounds** such as /ʒ/, /tʃ/, and /j/ have been produced by the respondent. For instance:

[ʒ] [ʒiʒi] ‘gigi’, [enzau] ‘hijau’

[tʃ] [atʃok] ‘masuk’, [atʃing] ‘pancing’, [atʃi] ‘mati’

[j] [jei] ‘yey’ (refers to ‘yeay’ in English), [j] ‘iya’, [iju] ‘hiu’

- Many **velar sounds** such as /g/, /k/, and /ŋ/ also have been produced clearly by the respondent. For example:

[g] [tiga] ‘tiga’

[k] [ambek] ‘ambek’ (which means ‘ambil’ in *Bahasa Indonesia*), [naik] ‘naik’, [apak] ‘nyampak’ (which means ‘jatuh’ in *Bahasa Indonesia*), [alok]

‘tarok’ (which means ‘menaruh’ in *Bahasa Indonesia*), [bapak] ‘bapak’

[ŋ] [olanŋ] ‘orang’, [niŋ] ‘kuning’, [anciŋ] ‘pancing’, [ŋeŋ] ‘ngeng’ (car buzzing sound)

## b) Vowels

**Vowels** are phonemes that are very important to learn in language. Respondent pronounced the phonemes very fluently. There were 6 vowels phonemes that have appeared during the observation. They were /a/, /i/, /u/, /e/, /ə/ and /ɔ/.

[a] [ambek] ‘ambek’ (which means ‘ambil’ in *Bahasa Indonesia*), [ikan] ‘ikan’, [tiga] ‘tiga’, [lima] ‘lima’, [enam] ‘enam’, [satu] ‘satu’, [apat] ‘dapat’, [olang] ‘orang’, [acok] ‘masuk’, [ela] ‘bola’ and ‘merah’, [ancing] ‘pancing’, [naik] ‘naik’, [tas] ‘atas’, [ano] ‘sano’ (which means ‘sana’ in *Bahasa Indonesia*), [aci] ‘mati’, [awas] ‘awas’, [atu] ‘jatuh’, [apak] ‘nyampak’ (which means ‘jatuh’ in *Bahasa Indonesia*), [alok] ‘tarok’ (which means ‘menaruh’ in *Bahasa Indonesia*), [enjau] ‘hijau’, [bapak] ‘bapak’

[i] [mbil] ‘mobil’, [ikan] ‘ikan’, [iyu] ‘hiu’, [tiga] ‘tiga’, [lima] ‘lima’, [jiji] ‘gigi’, [bibip] ‘bibip’ (*klaxon sound*), [niŋ] ‘kuning’, [bilu] ‘biru’, [ini] ‘sini’, [ancing] ‘pancing’, [naik] ‘naik’, [aci] ‘mati’

[u] [iyu] ‘hiu’, [satu] ‘satu’, [bilu] ‘biru’, [atu] ‘jatuh’, [ute] ‘muter’ (which means ‘memutar’ in *Bahasa Indonesia*)

[e] [ambek] ‘ambek’ (which means ‘ambil’ in *Bahasa Indonesia*), [ngeng] ‘ngeng’ (car buzzing sound), [olen] ‘oren’ (refers to ‘orange color’ in English)

[ə] [ənam] ‘enam’, [əla] ‘bola’ and ‘merah’, [ənjaʊ] ‘hijau’

[ɔ] [ɔlang] ‘orang’, [acək] ‘masuk’, [anɔ] ‘sano’ (which means ‘sana’ in Bahasa Indonesia), [alək] ‘tarok’ (which means ‘menaruh’ in Bahasa Indonesia), [ɔmbol] ‘nombor’ (which means ‘menabrak’ in Bahasa Indonesia), [ɔlen] ‘oren’ (refers to ‘orange color’ in English)

### c) Diphthongs

Some **diphthongs** were also often pronounced by the respondent. They were /aʊ/, /eɪ/, /aɪ/, and /oə/ :

[aʊ] [enjaʊ] ‘hijau’, [maʊ] ‘mau’

[eɪ] [yeɪ] ‘yey’ (refers to ‘yeay’ in English)

[aɪ] [am] ‘main’

[oə] [dʊə] ‘dua’, [ʊə] ‘keluar’, [mʊət] ‘muat’

### Conclusion

Based on the results of the data analysis, it can be concluded that the respondent has been able to pronounce sounds or phonemes in *Bahasa Indonesia* and *Bahasa Palembang* (Indonesian and Palembang Language). These phonemes consisted of consonants, vowels, and diphthongs. For consonant phonemes, the respondent has already mastered 14 phonemes, they are /p/, /b/, /m/, /t/, /d/, /s/, /n/, /l/, /ʒ/, /tʃ/, /j/, /g/, /k/, and /ŋ/. There have been 6 phonemes for vowel phonemes, which were /a/, /i/, /u/, /e/, /ə/ and /ɔ/. Then, for the diphthong phonemes, there have been 4 phonemes, which were /aʊ/, /eɪ/, /aɪ/, and /oə/.

Children's diction begins to be very prominent when they are around 3 years old. In the age of 0-2 years old,

children tend to listen more and imitate the words spoken in their daily lives and indirectly have acquired a large vocabulary to communicate in the next stage. When children use the dictions, it means that the children are able to convey the ideas that they want to convey when they communicate with others.

It can also be concluded that children's language acquisition is determined by the stimulus from the family and the environment. Therefore, it is suggested for parents who expect their children's language acquisition to be in line with their physical growth, especially beyond the obligation to always be given a stimulus by parents and the environment. Future study hopefully can carry out more in-depth research on language acquisition of children, because each child's language acquisition has their own uniqueness.

### References

- Alduais. A.M.S. (2015). An account of phonetics and phonology as similar identical or different. *The International Journal of Indian Psychology*, 3(1), 157-165.
- Amaro, J. C., & Wrembel, M. (2016). Investigating the acquisition of phonology in a third language – a state of the science and an outlook for the future. *International Journal of Multilingualism*, 13(4), 395-409.
- Aprilia, F. (2021). Akuisisi Fonologi Anak Usia 20 Bulan dalam Konteks Percakapan Sehari-Hari: Sebuah Tinjauan Psikolinguistik. *FON: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 17 (2), 247-254.

- Chaer, A. (2003). *Psikolinguistik: kajian teoretik*. Jakarta: Rineka Cipta.
- Hetherington, M.E & Parke, R.D. (1986). *Child psychology: a contemporary viewpoint*. New York: McGraw-Hill.
- Johson, C. E., & Wilson, I. L. (2002). Phonetic evidence for early language differentiation: Research issues and some preliminary data. *The International Journal of Bilingualism*, 6(3), 271-289.
- Mukalel, J. C. (2003). *Psychology of Language Learning*. New Delhi: Discovery Publishing House.
- Pateda, M. (1990). *Linguistik (sebuah pengantar)*. Bandung: Angkasa.
- Sumarsono. (2002). *Sosiolinguistik*. Yogyakarta: Sabda bekerjasama dengan Pustaka Belajar.
- Sypianska, J. (2016). Multilingual acquisition of vowels in L1 Polish, L2 Danish and L3 English. *International Journal of Multilingualism*, 13(4), 476-495.