

# Phonological Acquisition of First Language in a Child with Speech Difficulty

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**Abstract:** Phonological acquisition of the mother tongue is something that will never escape from human life. Phonological acquisition in children is strongly influenced by the surrounding environment. There are some children who have difficulty in this phase. Researchers conducted a study with the aim of knowing phonological acquisition of mother tongue in children aged seven years with speech difficulties or lisp. The method used in this research is qualitative research method with "case study" approach. The result of the research that the child has difficulty in reciting some consonant letters i.e d, g, k, q and t. She hasn't been able to pronounce well the letters that positioned at the beginning and middle of the word, whereas those consonants placed at the end of the word, he can pronounce well. For words that contain two consonant letters, the pronunciation becomes unclear and especially pronounced with a fast tempo, will make it more difficult for the listener to understand it.

## 1 INTRODUCTION

A process that will never be separated from human life is the acquisition of language. This process will take place continuously through several stages. Each of these stages will develop towards more complex language forms. What influences the process of acquiring a child's language is the situation and situation of the language in his environment, so that he can recognize the language.

A child will express his ideas directly without hindrance using language tools that are owned and used in his environment, this is commonly referred to as purposive child language. The child's language behavior departs from the adoption process by imitating the language model that has been obtained from the surrounding environment. There is a phenomenon that someone's language is not always the same, there are different elements and types of languages. It is influenced by who is the speaker, what language he uses, who he speaks to, the topic and purpose of the conversation, and when the conversation takes place.

Today research on language acquisition in children still requires exploitation given the higher cases of speech delays or language barriers. Barriers to language acquisition are very diverse, including obstacles to phonological acquisition. There are

phenomena experienced by some children who have difficulties in their acceptance and cause them to experience speech difficulties, especially in phonological acquisition. The existence of a phenomenon like this is one of the discourses of language disorders in children in Psycholinguistics.

A child can begin to distinguish sounds in the first half of the year, and then the role will be taken over by the child's interaction with his environment. If up to the age of seven years the child cannot speak phonology correctly, it means that there is an inability in language or commonly called language disorder. In this case, the difficulty of talking to children.

The subject of this study was a small daughter who had the initials ANG and was seven years old, grade 1 elementary school in Malang. Both of his parents in his daily life speak Javanese and Indonesian. ANG was a little troubled when pronouncing the alphabet letter, so when he spoke he often did not understand what word he was saying.

The urgency of this study is to map the maternal phonological acquisition of seven-year-olds who experience speech difficulties, describing phonological sequences that are difficult to pronounce and their location. Previous studies were conducted with a focus on phonological acquisition of eight-year-old children (Kepirianto, 2010). So in general, the mapping in this study is to elaborate on

the findings of phonological acquisition of speech impaired persons in the context of bilingual speakers, namely Javanese and Indonesian.

## 2 LITERATURE REVIEW

### 2.1 Phonological Acquisition of Language in Children

Phonology is part of grammar that analyzes the sound of language (Kridalaksana, 2007). One of the things that is considered very important in language learning is understanding sound. A language researcher will have difficulty researching language without mastering the sound of language properly. As in language learning, a language learner will master the language that will be learned if the said word is sounded well. Therefore, mastery of sound is a very important element in language learning and research (Samsuri, 1987).

A language is mastered by the language acquisition process. In language acquisition, the input (input) factor is the most important thing. Chomsky said that language also has a universal concept so that mentally, children already know the properties that are universal (Dardjowidjojo, 1991). Similar to a child is an entity whose entire body has a button and a cable attached, one of the buttons will cause a certain light bulb to light up. So the form of language is strongly influenced by input from the surrounding environment.

Phonological acquisition in children is part of the acquisition of a complete mother tongue. There are several theories that explain the acquisition of children's language phonology. One of them is the universal structure theory developed by Jakobson that distinguishes two separate periods in the acquisition and development of phonology, namely the period of ignoring (waging) and the acquisition of pure language. Jakobson tried to observe the baby's sounding at the babbling stage and he managed to find that a normal baby can emit sounds with vocalizations both vowel and consonant. Jakobson concluded that there are two stages in phonological acquisition, namely (1) the stage of pre-labeling and (2) the acquisition of pure language (Dardjowidjojo, 2005).

The opening phase occurs since a baby is five or six months old and will stop at around 12-18 months of age called pure language acquisition. At the stage of acquiring pure language, the child should be able to say a few easy sounds like consonants m, p, s, k and vowels a, i, u, e. There will be more letters he will

master as you get older. Agreeing with this, at around six months of age a child can issue consonant or vocal sounds (Indah, 2017).

The acquisition of the sounds is called the cooing process. A child usually begins to distinguish sounds between the first half of the year to the next so that it can be said that speech perception depends on the interaction of the child and the surrounding environment. For example, a deaf child cannot find sound patterns from audio stimuli such as from radio, tape or television. Effective auditory stimuli are sounds that children often hear at certain times, such as sounds when they are given milk, when bathed and when changing diapers. The visual stimuli are usually obtained when the baby is rocked by playing a doll in front of him. The consonants that come out in the babbling stage are bilabial nasal and vowel consonants thus will appear the structure C1 - V1 - C1 - V1 - C1 - V1 .... pa - pa - pa, ma - ma - ma, ba - ba - ba ... (Indah, 2017). From these words parents will associate with the mention of papa and mama. From the information above, if a child cannot say a few letters with the correct vocalization even after he is more than five years old then he can be sure to experience language disorders especially in phonological acquisition.

### 2.2 Study of Language Disorders

Speech and language disorders are often referred to as speech developmental disorders and expressive language. Language disorder is a type of disorder in communication and an indication of someone experiencing disruption in the symbolic process. Language disorders can occur in children or adults.

The causes of speech disorders are articulation, noise disorders, fluency problems, aphasia, and delay in speech due to environmental factors such as hearing loss or growth and development disorders. Meanwhile, the cause of hearing loss is conductive hearing loss caused by a disease related to ear function, hearing loss due to loss of nerve sensors, complex hearing loss due to damage to ear function, hearing loss due to nerve damage or brain tissue. And disorders due to other conditions, for example: learning difficulties, brain paralysis, mental retardation and cleft lip (Indah, 2017).

One example of interference faced by children when learning to speak specifically in the pronunciation of certain letters is "slurred". Slurredness is the inability to pronounce certain letters. Almost everyone has experienced the lisp phase. For example, as in a baby, it is normal to pronounce the letter "r" heard like "l" and so on.

However, there is also lisp caused by habit. The language commonly used in communication also contributes to causing slurry. For example Sundanese speakers replace the letters "v" and "f" which become the letter "p". And the letter "z" which tends to be "j" or a Balinese speaker who replaces the pronunciation of the letters "t" and "d" cleanly, and tends to change to "th" and "dh". In addition Japanese speakers replace the letter "l" with "r". Or there is also lisp that is caused by the habits of parents who speak slurred with children, for example, "*cini-cini main cama mama*".

There are various variations of lisp in children. Some say "r" becomes "l", "k" so "t", "k" so "d" or "s" with "t" is often reversed. Children who are three or four years old, their tongue muscles begin to mature. Basically the development of each child is different. If there is detecting kecadelan in children, parents should not allow it so that children do not continue to be in the lisp phase (Putra, 2009).

When children enter preschool age, children begin to face social consequences in the form of extended communication. Children begin to compare their pronunciation with other children of their age, and when faced with speakers other than their children, the exposure to language becomes wider. Language exposure is very diverse, one of the phonological exposures that makes children aware of how correct and acceptable pronunciation is. This phonological awareness is different in speed between normal children and children with speech difficulties (Hund-Reid & Schneider, 2013).

### 3 METHOD

This study was conducted to map phonological acquisition of persons with speech difficulties. For this reason, a scientific method is needed to obtain data with the purpose and usefulness according to the purpose of the study (Sugiyono, 2014). This type of research is qualitative research with a "case study" approach. Bogdan and Taylor argued that qualitative methods are research that produces descriptive data both written and oral from objects observed or examined (Moleong, 2014). In this study elaborated on how a person with speech difficulties has a pattern of phonological acquisition.

The approach used in this study is a case study in children who experience language disorders. Case studies aim to investigate phenomena that occur in real life and are more concerned with questions such as how and why and at some level also answer what questions (Bungin, 2005).

Subjects in this study were a daughter with the initials ANG, aged 7 years, grade 1 elementary school in Malang. He experienced some difficulties in pronouncing several letters of the alphabet, so often the spoken sentence was difficult to understand by listeners or opponents of his speech.

Data collection in this study was carried out in a participatory manner in recording data to get children's natural utterances. The researcher observes and conducts a conversation by giving a stimulus so that he can say a few words that are well targeted with a tempo that is fast or slow, because the difference in pronunciation tempo is expected to have an effect.

### 4 RESULTS AND DISCUSSION

Based on observations, it was found several letters that have not been properly pronounced. The list of words that are the target of the pronunciation is summarized in table 1 based on the position of the letter at the beginning, middle and end of the word.

Table 1. Word list

Letters	Initial	Middle	Final	Combined
d	danau, delima	madura, badai	Jilid, Mufid	detak, dekat
g	gusi, gajah	bagai, segar	ajeg, analog	gagak, anggrek
k	kompas ,	sikap, sukar	lemak, lobak	kakak
q	qiraah, quran	aqua, iqlab	infaq, akhlaq	
t	telur, tangan	satin, hitam	semut, rumit	tikus, tidak, tegar

In general there are five consonants which the subject is difficult to pronounce, among others: d, g, k, q, t. The five letters become less clear in pronunciation at the beginning of the word, in the middle of the word or at the end of the word. Difficulties also arise in combining several consonants in one word. The pronunciation difficulties are summarized in table 2.

Table 2. Difficult words

Letters	Initial	Mid	Final	Combined
d	Dhana u	Madhura	-	Dethak
	Dhelim a	Badhai	-	Dhekhat
g	Ghusi	Baghai	-	Ghaghak
	Ghajah	Seghar	-	Angkhrek

Letters	Initial	Mid	Final	Combined
<i>k</i>	Tkomp as	Sitkap	-	Tatak
	Tkoran	Sutar	-	Titus
<i>q</i>	Khiraa h	Akhua	-	Thidhak
	Khuran	Ikhlab	-	Theghar
<i>t</i>	Thelur	Sathin	-	
	Thanga n	Hitham	-	

In letter d, the subject cannot pronounce the letter correctly when it is at the beginning and middle of the word because there are vowels afterwards. So it sounds not like d but more on "dh". Whereas in the letter d at the end of the word he can pronounce well.

The second is the letter g, almost the same as the letter d, he also has difficulty in pronouncing g at the beginning and middle of the word. Does not sound like g but more on "gh". While at the end he can recite it well and precisely.

The third is the letter k, he cannot pronounce clearly the existence of k at the beginning and middle of the word. The pronounced k letter almost melts and approaches other letter vocalizations such as "t". Examples are "sukar" which sounds like "sutar". While the letter k which is at the end of the word, he can pronounce it well.

The fourth is the letter q, the subject can pronounce the letter q which is at the end of the word. However, when pronouncing the letter q which is at the beginning and middle of the word. It doesn't sound like q but more to the vocalization "kh". For example, the word "qiraah" .

The fifth is on the letter t, he cannot pronounce well if t is in front and center of the word. It's not like a t, but more on "th". But, he can say with the right vocalization t which is at the end of the word.

The last discussion is in words that have two consonants that are considered difficult to pronounce properly. As in the word "rat" will be "titus", "brother" to "tatak", "close" to "dhekhat", "beat" to "dethak", not to "thidhak", "crow" to "ghaghak", "Tough" becomes "theghar", "orchid" becomes "angkhrek". If the words are spoken at a faster tempo, it will sound even more obscure and more difficult for the listeners to understand.

Speech difficulties that are carried by the subject appear on the phonological level in saying several letters, so that the opponent's speech feels confused to understand the sentence he is saying. This causes the subject to feel inferior because many of his friends isolate him.

Phonological acquisition of subjects suspected of being associated with bilingual exposure obtained.

This is characterized by phoneme replacement into th and dh. In Javanese the two phonemes appear more than in Indonesian. Subjects have difficulty doing phonological distinction between d and dh or between t and th. Generally bilingual or bilingual children experience differences in language development patterns but in the interim period (Indah & Abdurrahman, 2008). In this case the subject experiences a difference in phonological patterns through the golden age where the child should have set the pronunciation ability. This is what causes the subject to be called to have a language disorder in the form of delayed maturation of phonological acquisition that causes speech difficulties.

Not only in the context of the Javanese-Indonesian bilingual language, phonological disturbances as experienced by the subject also occur in the context of the Turkish language. Phonological disorders detected during the phonological acquisition process include the reduplication of certain syllables, syllable removal, consonant removal, assimilation, sound deviations, and a number of other difficulties. Phonological difficulties in this mother tongue will affect the difficulty in learning other languages, especially in languages that have different phonological structures (Topbas, 1997).

Obstacles in phonological acquisition cannot be considered simple. This is because the findings that articulation skills greatly affect fluency in mother tongue which then affects the fluency of other languages (Jong & Mora, 2017). As for the subjects who received exposure to the Javanese language before then exposure to Indonesian, there was a phonological influence. When the subject was asked to recite the words in Indonesian, the phonological aspects of Javanese as a mother tongue helped dominate it. This shows that when reciting the second language there is an activity of motor sensory aspects that is heavier than when the subject recites the mother tongue (Simmonds, Wise, Dhanjal & Leech, 2011). This is because brain activity involves a wider area (Abutalebi, Annoni, Zimine, Pegna, Seghier, Lee-Jahnke, Lazeyras, Cappa & Khateb, 2008). As a consequence, subjects with speech barriers will encounter phonological difficulties.

One of the causes of this phenomenon is the lack of attention of parents in correcting their words early. He made several pronunciations but was rarely justified by parents. As a consequence, habituation is very influential on the acquisition of children's language, especially in the field of phonology. Early phonological correction is seen as significant to prevent the sustainability of speech barriers. Ideally,

from the age of four, children can be trained in phonological awareness in order to distinguish correct and clear pronunciation so that children try to imitate accurately (Grawburg & Rvachew, 2007).

What is experienced by the subject in this study included in the category of special speech disorders that is in the phonological aspects where the subject experienced delays in phonological acquisition compared to his peers. At the age of seven-year-old speakers, acoustic parameters have been formed according to phonological exposure to their mother tongue. Children should be able to do phonological perceptions including how to distinguish the pronunciation of all consonants correctly. This maturity is the basis of children's phonological awareness ability which results in normal phonological acquisition abilities (Nittrouer, 1996).

The lower the child's ability to recognize the phonological differences from the pronunciation of the word as the exposure gained, the lower the phonological awareness. This is as found from observations on the subject. Thus, children who are accustomed to obtaining accurate phonological exposure can develop phonological awareness or maximize their phonological gain. In this case, these findings corroborate the results of the study which states that children who have speech difficulties experience lack of phonological acquisition, more precisely in phonological awareness (Hesketh, Adams, Nightingale & Hall, 2000).

## 5 CONCLUSION

Based on the results of the research that has been done, it can be concluded that a 7-year-old child who experienced several obstacles in acquiring phonology, he had difficulty in pronouncing several consonants, including: d, g, k, q, and t. If the letters are at the beginning and the middle of the word, he has not been able to memorize properly and correctly. While at the end of the word, he can pronounce with the right vocalization.

And if two of the letters are in one word, he has more difficulty in pronunciation, especially if spoken at a faster tempo. So, it will cause pronunciation obscurity so the listener also has difficulty understanding the spoken word. If this phonological difficulty does not get treatment, it is possible other than experiencing social problems, the subject will experience learning problems, especially because of the difficulty of spelling correctly. In children with special language disorders such as those with phonological difficulties who are not trained in

phonological awareness, they will have the right reading ability (Warrick, Rubin & Rowe-Walsh, 1993).

The risk of phonological difficulties is also suspected to connect with phonological awareness and children's literacy abilities. The results show that children who experience phonological difficulties, will also have low phonological awareness because they are not able to distinguish correct and wrong pronunciation (Bird, Bishop & Freeman, 1995). The impact ends in spelling difficulties, and often also has difficulty writing correctly.

One of the causes of disfluency in children is the environmental factor with the biggest role being in parents. For children during language acquisition process, active exposure is badly needed (Aziez, 2016). If lisp is left to school age it can cause children to feel different from their friends. He will feel ashamed and feel alien from others, even he will not want to be told to speak in front of the class for fear of being laughed at. As a result the child becomes insecure and will affect the child's self-esteem. Keep in mind that ages 1-7 years are the golden age for child growth and development. Parents should pay more attention to children at this time.

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