Psycholinguistic Studies: Language Acquisition and Learning in 2-5 Year Old Children

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Abstract

The main focus of this research is to find out how language learning and language acquisition of children aged 2 to 5 years using a psycholinguistic study approach. The purpose of this study can be seen from the analysis documentation, interviews, and observations conducted by researchers in Sidomukti village, West Kisaran sub-district, Asahan Regency, North Sumatra Province. This study found that children acquire language in four phases. First, they have a babbling level (0.0-1.0). Second, they experience the holophrase period (1.0-2.0). Third, they enter the sensorimotor stage (from birth to 2-3 years old) and fourth, they enter the preoperative stage (from 3-5 years old). The data source is 15 children in Sidomukti village, West Kisaran sub-district, Asahan Regency, North Sumatra Province, aged 0 to 5 years old. The data found in this study includes children's language acquisition and language learning. Data collection methods included observation, interviews and recordings. The results showed that psycholinguistics correlates with children's language acquisition and learning.

Keywords: language acquisition, learning, psycholinguistics

Introduction

Language is a means of communication that humans acquire from birth, starting with the mother tongue, which is a spoken language consisting of words or sentences heard from their family environment. As described by Manshur & Jannah, (2021); further according to Riyanti (2020). The first language a child speaks from birth is the mother tongue, which he uses when interacting with his family and people around him. Meanwhile, Helty et al, (2021) and Afuri et al, (2023) have the same opinion that every child born has a tool that helps them understand the mother tongue, and the language that is listened to and used every day causes the child to show a response.
Acquiring language is a remarkable phenomenon, especially when a child acquires his or her first language without formal learning. For example, a baby responds to words that it hears frequently around it, especially the speech of its mother which is often repeated and responded well by the child. Language acquisition is the mental process that occurs in children when they acquire their first language or mother tongue. Usually, language acquisition is distinguished from language learning, which includes the process of learning a second language after the child has mastered his or her first language.

Language development in early childhood is strongly influenced by the surrounding environment. This is because at this age, children tend to imitate what they hear and see around them. Therefore, the environment should be organised in such a way that children can acquire and develop their language optimally. According to the Behaviourist theory, children's first language acquisition process is controlled by stimuli they receive from the external environment. This theory argues that language is the result of response and imitation to the environment. Behaviourists consider that children learn basic language skills through repetition of what they see and hear from adults (Susanto, 2017).

As children grow and develop, the language they learn not only serves to express their desires or will, but also as a tool to communicate. When a child learns to speak, he or she will start listening to words or sentences spoken by parents or other people around him or her as the first step in the process of learning language. Children in the process of learning a second and first language do not have significant differences because they still use creative ways of thinking.

Language acquisition is part of the field of psycholinguistics. According to Chaer (2003:5) Psycholinguistics seeks to explain the nature of language structures and how they are acquired and used when speaking and when understanding sentences within the rules (Abdul, 2003); (Natsir, 2017). Children acquire their first language naturally from birth, without previously having a language. In contrast, second language acquisition occurs when children or adults have mastered their first language and then learn a second language in a formal and structured way (Fitriani, 2022); (Sundari, 2018); (Ryeo, 2019). Although they are the same age, language development in each child can be different from one another. (Ahmadi, W, et. al., 2024).

Several other factors also influence the speed or slowness of language development in children. Each child has different language development abilities. Therefore, appropriate stimulation is needed to develop language in early childhood so that its development can run well and in accordance with its growth stage. In addition, there are external factors that can stimulate children's language development, as Chan, D. M. (2020) states, children learn language from hearing, seeing, and imitating the people around them. The result of this interaction is then a stimulus that can be received by children in acquiring language. Children associate the words and sentences they hear with the processes, activities, objects, or situations they observe. This shows that they connect what they hear with the way they think. Pateda in (Candrasi, 2014). So the relationship between language acquisition and language learning is very important to investigate and improve.
The study of how children learn language includes aspects of phonology, morphology, syntax and semantic acquisition. The process of language acquisition in children takes place gradually. Specific research on phonological acquisition is an important focus because it has the potential to shape or influence linguistic theory. (Ahmadi, W, et al 2024). The study of phonology is an interesting research subject because the sounds of language that appear in children's language development are influenced by genetic factors. Therefore, the process of language acquisition in children shows significant variations.

This writing explores information from previous studies as a comparison material, both regarding the advantages and disadvantages that exist. In addition, information is also taken from scientific books and journals to gain an understanding of the theory relevant to the title, so that a strong scientific theoretical foundation can be obtained. One of the previous studies conducted by (Ahmadi, W. et. al., 2024) on "Psycholinguistic Studies: Language Acquisition in 3-4 Year Old Children" discusses that language acquisition is the process in which children master or develop language gradually, including the acquisition of phonology (language sounds), morphology (word structure), syntax (grammar), and semantics (language meaning). In addition, in research on language development in children, it can be analysed using Mean Length of Utterance (MLU). MLU looks at how children start using one-word, two-word, three-word sentences, and so on in the early stages of their development.

In the opinion of Rofiq (2021: 43), he suggests that language is a habit that is repeated many times. The more often children see and hear media, the greater the influence on their language development. This is because at the age of 2-5 years, children's brains develop very quickly so that any information or language can be absorbed quickly.

From the description above, the author can identify problems related to language acquisition in children aged 2-5 years in Sidomukti Village, West Kisaran District, Asahan Regency, North Sumatra Province. This research aims to understand the process of language acquisition and the factors that influence it in children in this age range.

**Literature Review**

Psycholinguistics is a field of study that explores the relationship between psychological processes and language skills. One of the main focuses in psycholinguistics is language acquisition and learning in children at an early age, especially in the age range of 2-5 years. During this phase, children experience rapid and significant language development. This study will review the literature relating to language acquisition and learning in children aged 2-5 years.

**Language Development in Children**

Chomsky (1965) states that universal grammar is a language ability acquired at birth. Social interaction is essential for language acquisition, according to recent research by Kuhl (2010). Direct interaction helps children learn more than passive exposure to media. According to Asrori (2020, : 44), language development is a process in which children begin to learn to recognise, use, and master various aspects of language at a higher level, as well as the ability
to speak. The purpose of developing language skills in children is so that they can communicate verbally well in their environment.

Understanding Language

Given that language is made up of several subsystems (phonology, morphology, syntax and lexicon) and is not a single system, its comprehension is quite complex. Word recognition, syntactic analysis and meaning interpretation are some of the cognitive processes that contribute to language comprehension. The way people decipher and process linguistic information is gradually described by the propositional processing model, according to Just and Carpenter (1992). According to fMRI research conducted by Hagoort et al. (2004), Broca's and Wernicke's brain areas play an important role in language comprehension. Complex neural networks contribute to this process.

Language Acquisition

It has been explained earlier that language skills in children do not appear suddenly or all at once, but develop gradually. Children's language development can be divided into several stages: (1) pralinguistic stage, (2) one-word stage, (3) two-word stage, and (4) multi-word stage (Xu & Li, 2020).

The characteristics of language acquisition according to Tarigan (2011) are: (a) takes place in informal situations, children learn language carefree, and outside of school; (b) language acquisition is not through formal learning in educational institutions such as schools or courses; (c) is done unconsciously or spontaneously; and (c) is experienced directly by the child and occurs in a language context that is meaningful to the child.

Theories of Language Acquisition

Language acquisition in children is usually studied through several main theories: behaviouristic theory, nativistic theory, and interactionistic theory.

1. Behaviouristic theory says that positive and negative reinforcement learning is how children learn language (Skinner, 1957).

2. Nativistic theory, pioneered by Noam Chomsky, states that the ability to speak is innate, and children are born with an innate language device (LAD), which allows them to naturally acquire language (Chomsky, 1965).


Stages of Language Acquisition

Language acquisition in children aged 2-5 years usually includes several stages:

1. Pralinguistic Stage (0-12 months): Although this stage is before the age of 2, it is important to understand that at this stage, babies begin to develop basic communication skills through cries, sounds and gestures.
2. Holophrastic Stage (12-18 months): The child starts using single words to express sentences or ideas.

3. Two-Word Stage (18-24 months): The child begins to combine two words to make simple sentences such as "want milk" or "go for a walk".

4. Complete Sentence Stage (24-36 months): The child begins to use more complete and complex sentences, and begins to master basic grammar.

Research Method

To analyse Language Structure and Language Acquisition in Early Childhood, i.e. children aged 2 - 5 years, the research method used is qualitative. According to Srivastava and Thomson (2009), qualitative research begins with ideas expressed in research questions. The main purpose of this study is to investigate how the understanding of Indonesian language structures and language acquisition in early childhood correlate with each other. It also aims to explain the role of the environment in early childhood language acquisition. It is hoped that this research will help the development of early childhood language acquisition and provide a basis for building better methods to help children's language acquisition at this important stage of development.

Result and Discussion

Results of analyses in the field of psycholinguistics regarding language acquisition in children

There are two theories about language acquisition, namely: (a) The theory of Behaviourism, which suggests that children's language development occurs gradually through slow addition. In this view, the language acquisition process is seen as linear or moving in a straight line, with continuous improvement until it reaches a level of perfection like adult language. Another theory, (b) Rationalism, indicates that children's language development follows a certain developmental pattern.

Each stage of language development has its own distinctive grammar rules, which may differ from the grammar rules used by adults (which are more formalised). As development progresses to the next stage, those inappropriate grammar rules are gradually corrected towards adherence to correct grammar rules.

The level of language acquisition observed in this study consists of four phases, as described below:

1. Early stage of learning to speak or babble/babble (0;0-1;0)

The term "babbling" comes from the English word "babbling". Some interpret it as babbling, while others refer to it as babbling. In principle, the babbling period is divided into two parts, namely (a) cooing or snoring, and (b) babbling or babbling. The cooing stage occurs
from 0-6 months of age, during which babies make language sounds that are common around the world. In the second stage called babbling, which takes place from 6-12 months of age, the child begins to orientate themselves to pronounce KV (consonant and vowel) syllable patterns. The study found that in toddlers aged 7-12 months, sounds such as "aaaa", "emmmm", "taaa", "uauaua", and "haaaa" appear as a form of babbling.

2. Holophrase Stage (1.0 - 2.0)

The holophrase period, which occurs in children aged one to two years old, is used to convey their intentions to others by saying a single word that actually wants to say a sentence. At this stage, the functions of words are as follows: (1) to connect words with the child's own behaviour, (2) to express feelings or expressions that are being felt, and (3) to name certain situations.

Through the recordings that have been obtained, it shows some of the speech functions of children in the holophrase phase, as shown in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Delivery Function</th>
<th>Frequency Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Request</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Declare</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Conveying information</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Through some discourses there are found functions, among others:

1. Showing as a Requesting function

In some of the utterances delivered by children aged 2-5 years old, the request function is shown in dialects that are still phomemically changed, for example: "au jan" (want snacks), "ma mik cucu" (mama drink milk), "mam aco" (eat meatballs), "de au ndong" (sister want to be carried), "mam acik ma" (eat rice ma).

2. Showing as a function Stating

In some of the utterances delivered by 2-5 year old children, the request function is shown in dialects that are still phomemically altered, for example: "cem" (sour), "de atut elap" (sister is afraid of the dark), "ncis" (pee), "pip" (poop/defecation), "e das" (spicy), "no, no" (don't/no).

3. Showing in conveying information

In some of the utterances delivered by children aged 2-5 years old, the request function is shown in dialects that are still phonemically changed, for example: "iyut de atit" (my
brother's stomach hurts), "ma kak ra" (my brother is angry), "baba num eh" (brother drinks ice), "ma de tuh" (my brother fell).

In addition to some of the functions that provide information mentioned earlier, researchers also found other functions through the five senses as in the following examples:

1. When a child nods their head, it means they agree with something.
2. When the child points to something, it serves to tell about something, either what they want or what they are afraid of.
3. When the child pulls the hand of the mother, sister, brother, grandmother, or anyone else in the vicinity, this can serve to ask or tell something.
4. When the child asks to be carried, it is to express a desire to come along and not to be left behind.
5. When a child shakes their head, it means they are refusing something.
6. When the child cries indefinitely, this indicates that the child is sleepy and wants to be put to sleep.
7. When the child laughs happily and jumps up and down, this indicates that he/she is happy about something.

At the holophrase stage, the child utters single words, but this does not mean that the spoken words are complete. It should be noted that children's language is still far from perfection like adult language. Bambang Kaswanti Purwo (1990) explains that when children learn to speak, they may say words that resemble words without meaning. For example, children may say "embok" to refer to a cow, "maung" for a cat, and "mbeeek" for a goat. These words may not exist in any language, but children try to use onomatopoeia or words that imitate sounds they hear.

3. Sensorimotor Phase (birth to 2-3 years old)

The study showed that Irfan, a 7-month-old baby boy, and Bicha, a 9-month-old baby girl, were very enthusiastic when given toy props that had bright contrasting colours such as red and yellow. They both tried to reach for the toy as well as other toys around them with the same fervour as they reached for other new toys. Thus, Irfan and Bicha had developed a grabbing and holding scheme that they applied to the new object. When they drop the toy they are holding and observe it as it falls to the floor, they are applying the "letting go" scheme as well as the "visually following the object's movement" scheme. When parents or other family members put the toy that Irfan or Bicha was holding into the box or toy storage, they could not see the toy anymore. The children also seemed to forget the brightly coloured 'red and yellow' toys they were holding earlier, and they moved on to other toys without showing any attention to or thinking back to the toys they were holding. In the sensorimotor stage, children are focused on the immediate activities and experiences they are having at the time. Fundamentally, their mental patterns are organised around their physical actions and perceptions.
4. Preoperational Phase (age 3-5 years)

In this preoperational stage, the development of children's language skills increases, with increased vocabulary acquisition that allows them to express and consider various objects and events. These language skills also form the basis for new social interactions, such as verbal communication. At this stage, children are able to express their opinions, state expressions, and receive information that was previously unknown to them. As found by researchers in the case of Hamdi, a 3-year-old child who is often called Di di by his family. Hamdi told his mother about the puzzle bought by Buk De and taken by his older sister, Mariska, while crying and pointing to the puzzle toy held by his sister. On the other hand, in the case of Zidan, a 4-year-old boy, he expressed his opinion about his brother's treatment of his sister, Namira, in simple language, "don't get angry with my sister, she will cry." Zidan has also started to tell stories that he has heard from people around him, such as the story of Noah and his son that he has heard and seen on television. Zidan asked his mother if she knew about the story of Noah's son, and she replied that she did, then Zidan nodded his head in agreement with his mother's words.

Then, he immediately narrated the story related to the son of Noah. Kan 'An was the son of Noah who often defied and did not want to listen to his father's commands and invitations to go to the path of Allah, did not respect or show affection for him, and never even prayed or prayed. When God sent down his anger, Noah invited his son and wife to board the ark that he had prepared, but his son Kan 'An said "I don't want to go with you. I will climb to the top of the mountain. There I will be spared from this annoying rain". God then became angry at the bad behaviour of his people Noah including his son and wife, and finally Kan 'An drowned with the rest of the people in the fierce water sent down by God. Hearing this story, his mother immediately emphasised that children must be good, so as not to suffer the fate of Kan'An. Zidan quickly said that he would be a good and virtuous child, while hugging his mother.

Another 5-year-old, Azkadina, was able to comment on her father's birthday present. She said, "It's a bag with Barbie's picture, yeah. So later Azka can change and become beautiful like Barbie in the picture of this bag like I saw on television."

A number of examples observed by researchers show that at the preoperational stage, children are able to express their thoughts through language. However, at this stage egocentric behaviour is often seen where children tend to speak without considering the listener's knowledge or perspective on the topic they are talking about. As when Alif (4.5 years old) expressed when he saw someone he knew, "it's not that koko, but it looks like Oom Indra".

Results of Psycholinguistic Analysis in Language Learning

Learning is a deliberate effort to master the rules of language use or language use, while language learning is the formal knowledge of a language (Suwarno, 2002: 18). Students are the subjects in this learning process, where they are seen as active individuals in achieving psychological goals in the cognitive, affective, and psychomotor domains (Nababan, 1992: 60-61). The ability to use language, both receptively (listening and reading) and productively (speaking and writing), involves these three aspects.
The results show that there are several factors that cause errors made by children when speaking. Some of them are overloading when talking to strangers, emotional worries when communicating, lack of understanding of the topic, and difficulty in pronouncing words. These causes can be classified based on different psychological domains. Emotional worries are part of the affective domain, lack of understanding of the topic of conversation is related to the cognitive domain, and difficulty in pronouncing words is related to the psychomotor domain.

These causes of errors show the important role of psycholinguistics in language learning. The general goal of language learning is for students to be able to master the effective use of Indonesian, both in oral and written form. To achieve this ability, students need to understand and master the rules of the language. Language rules are learnt through the study of linguistics.

Conclusion

From the observations made by the author on the psycholinguistic relationship in language acquisition and learning in children aged 0-5 years, especially in the Sidomukti Village environment in Asahan Regency, the general result is that children basically have a good ability to produce language. This is supported by environmental factors (behaviorism), cognitive factors (knowledge), and normal innate child factors (nativism), all of which play an important role in language development.

Children tend to learn language by imitating sounds, words or sentences they hear. They are able to repeat back what they are taught well, but they are more likely to imitate rather than deeply understand what they say.

At this stage, children begin to develop their language by improving grammar, lengthening sentences, producing increasingly complex utterances, and using words in the plural. The process of adding vocabulary and variety of words is in line with the child's psycholinguistic development. Their ability to master their first language is seen as a natural part of their cognitive and motor development, as well as their emotional and social maturity. In other words, the researcher's observations show that children's language development is closely related to their emotional development and social environment, influencing each other.

The role of psycholinguistics in language acquisition and learning is crucial as it allows a teacher to understand the internal processes that occur in students when they listen, speak, read or write. Thus, when students experience difficulties in language skills, teachers can seek solutions from a psychological perspective as an effective alternative.

References


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