

VOCABULARY ACQUISITION FOR TODDLERS: IMPACTS OF INTERNAL AND EXTERNAL CIRCUMSTANCES

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Abstract

This qualitative research aimed to see the amount of vocabulary learned by four- and five-year-old children who were categorized based on the terms they used. The findings of this study revealed that four-year-olds acquire more vocabulary than five-year-olds do. On average, four- and five-year-olds acquire 100 more words in just eight minutes. Furthermore, the nouns that they occupied in the first sequence were the most typical words that four- and five-year-old children learned. Verb, adjective, and other words were the last terms they were able to master. Each child in this situation has a different level of vocabulary competence that varies greatly. Depending on the children's internal and external conditions, as well as the input they received, this may occur. Children therefore have particular characteristics and personalities.

Keywords: Psycholinguistics, Vocabulary, Acquisition

INTRODUCTION

A child should be prepared to study more before continuing their education (Elementary school). Compared to kids without preparedness, those who do have it have a better chance of continuing their schooling successfully at the next level. Given that people talk at a rate of four to five syllables per second on average, even small variations in spoken word recognition performance will favor certain children over others.¹ To improve the learning experience for kids, early childhood education must be implemented initially. It demonstrates that the foundation for higher education is really in its early infancy.

Early childhood education can facilitate the development of the potential of each child. Children are taught using a center approach and diverse learning through non-formal early childhood education in the form of a Playgroup of Inclusive Children. Via numerous centers and locations, the knowledge is done in a variety of fun ways that include both learning while playing and playing while learning. These kids are therefore not bored and have the opportunity to expand their knowledge. In this scenario, teachers merely serve as facilitators for the learning processes in the classroom by giving stimuli, supervising, and inspiring students. Students must actively investigate their own knowledge in order to develop it.

¹ Franzo Law II, et.al. "Vocabulary Size and Auditory Word Recognition in Preschool Children". Applied Psycholinguistics 38, no. 1 (2017): p. 89-125. Accessed October 18, 2018.
<http://dx.doi.org/10.1017/S0142716416000126>.

Teachers at Roudlotut Taaibin Malang (non-formal education) use learning while playing and playing while learning to encourage the children to have the spirit of learning and be active, and to make them participate in exploring the world. Since it focuses on laying the groundwork for intellectual development (thinking ability, creativity, emotional intelligence, and spiritual intelligence), social-emotional development (attitudes, behavior, and religion), and language and communication in accordance with the individuality and characteristics in the stages of childhood development, non-formal education is very beneficial to the development of self-potential of children.

The ability of children to learn languages comes from a brain organ that has been genetically preprogrammed.² Children begin to acquire a language as soon as they are born and exposed to linguistic settings. A kid imitates the words and phrases he hears by responding to the sensations and signals that reach his senses. Children eventually have the capacity to mimic the language that they hear in the speech of adults.

A child must go through a phase of competence and performance in order to acquire his first language. The ability to effectively employ syntax and lexicon of language to achieve communication goals is referred to as communication competence.³ This process of competence is a prerequisite for the performance process. It consists of two processes: 1) the understanding process, which requires the capacity to observe or comprehend the sentences spoken; and 2) the publishing process, which necessitates the capacity to conceive original sentences. If the child has mastered both of these procedures, they will both become linguistic skills.

Both internal and external influences might have an impact on the language acquisition process of the child. The playing environment, the familial environment, and the academic environment are examples of external variables. Humans require other people to engage with everything around them since they are social creatures. Children may explore their understanding of language development due to environmental variables. Also, the genetic ability of a child, which is an internal component, can aid in his acquisition of the language spoken around him. Every child learns language differently since people are living things with individual traits.

This study makes use of psycholinguistic theory, language learning, child language development, lexicon, and lexicon acquisition. A combination of psychology and linguistics, psycholinguistics studies language as a phenomenon that permeates all aspects of human life. Psycholinguistics, a subfield of linguistics, studies how language and the mind interact. In other words, it explores the processes by which the human mind acquires, interprets, and generates language.⁴ Language production occurs at several stages. They include the intended message, encoding the message to language, encoding language to speech (motor system), driving sound to the ears of hearer and mouth of speaker (auditory system), speech

² Noam Chomsky. "Knowledge of Language as a Focus of Inquiry". In Zulaia Johnston Da Cruz. *First Language Acquisition: Is Children's Knowledge of Language Innate?* B.A. Essay (University of Iceland: School of Humanities, Department of English, 2015): p.3.

³ Jianyun Zhang. "Necessity of Grammar Teaching". *International Education Studies* 2, No.2 (2009): p.184-187. Accessed November 5, 2018. <https://files.eric.ed.gov/fulltext/EJ1065690.pdf>.

⁴ John Field. "Psycholinguistics". In Yuliana Lineke Lumentut & Fergina Lengkoan. *The Relationships of Psycholinguistics in Acquisition and Language Learning*. Thesis (Journal of English Culture, Language, Literature and Education 9, no. 1 (2021): p. 17-29. Accessed August 10, 2021. https://www.researchgate.net/publication/354373935_THE_RELATIONSHIPS_OF_PSYCHOLINGUISTICS_IN_A_CQUISITION_AND_LANGUAGE_LEARNING.

that is decoded to language, and ultimately, decoding language to its meaning.⁵ As a result, the four major areas of study in psycholinguistics were language acquisition, biological basis, production, and understanding.

A child learns a language naturally as they learn their native tongue. This process is known as language acquisition. Language acquisition is concerned with how well speakers and listeners can understand one another. When a child learns their first language, the processes of competence and performance start.⁶

On how kids learn to speak, there are three different viewpoints.⁷ The three perspectives are cognitivist, behaviorist, and nativist. The lexicon and vocabulary have the same idea. Across a wide range of tasks, children have incredibly strong lexical acquisition skills. The placement of current words in the mental lexicon may affect which words are easier to learn because new words are always learned in relation to existing ones.⁸ Certain phonological patterns are more prevalent than others. As a result, the predictability of a phonological shape of the novel word may affect the rate of lexical acquisition. A word class is used to group vocabulary in Indonesian according to wordtype.

The ability of children to grow their lexicon or vocabulary depends on the stimuli they are exposed to. Moreover, Storkel and Rogers, who gathered children for their study from a local American public school, support it.⁹ According to study findings, children between the ages of 10 and 13 recognized more high-probability non-words than low-probability non-words. The probabilistic phonotactics did not, however, consistently affect lexical acquisition in 7-year-old children. So, during the early stages of word learning in older children, the sub-lexical level of processing predominates. This is because the lexical acquisition of young children is influenced by their mental representations of words and their phonological understanding.

⁵ John Field. "Psycholinguistics". In book: *Routledge Handbook of Applied Linguistics* (1st ed.), (New York, Routledge English Language Introductions, 2011), p. 472-486. Accessed March 20, 2021. https://www.researchgate.net/publication/348415435_Psycholinguistics.

⁶ HajjaKaru Ahmad Sheriff, et.al. "Competence and Performance". *Journal of Humanities and Social Science* 24, no. 11 (November, 2019): p. 52-54. Accessed March 3, 2020. <http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2024%20Issue11/Series-6/H2411065254.pdf>.

⁷ James Heather. "The Relevance of Chomsky in 21st Century Second Language Acquisition". *アカデミア. 文学・語学編= Academia. Literature and language*, no. 108 (2020): p. 241-255. Accessed February 10, 2023.

https://nanzanu.repo.nii.ac.jp/?action=repository_action_common_download&item_id=3045&item_no=1&attribute_id=22&file_no=1.

⁸ Holly L. Storkel & Margaret A. Rogers. "The Effect of Probabilistic Phonotactics on Lexical Acquisition". *Clinical Linguistics & Phonetics* 14, no. 6 (2000): p.407-425. Accessed January 20, 2019. <https://www.tandfonline.com/doi/abs/10.1080/026992000415859>.

⁹ Ibid.

METHOD

This study used a descriptive qualitative research design in which the description was used to guide the research process.¹⁰ Because this research sought to understand the diverse vocabularies gained by the subject, in this case, two children, as they learned to speak, it used descriptive qualitative research. Two kids, ages 4 and 5, participated in this small study. Both kids received the same informal schooling. The researcher chose the two kids because they got along well with kids their own age. They actively participated in learning and teaching, which is another factor.

This approach of gathering data refers to the researcher participating while listening, talking, and listening to the discourse. This is what is meant by participatory observation. The final phase is note-taking and audio-visual recording. In order to understand more about the internal elements that affect language acquisition, two teachers were subjected to a structured interview. Three open-ended inquiries about the aforementioned internal elements were made during the interview with the teachers. The most significant viewpoints were later transcriptions, categorized, and analysis. Observation checklists were also used to gather additional data from the lessons taught. Furthermore, the observation checklists comprised five sections, each with three items, where the researchers were required to record details pertaining to the attitudes of students in the classroom.

FINDING

The word kinds that subjects have learned are shown in this section. The researcher not only presents the results but also interprets them.

The Vocabulary of a Child at Age 4

Different vocabulary scores were given to 4-year-olds. This is because each child is unique and has distinctive qualities that rely on the information they get and their current state. In the learning activities, as well as when interacting with friends and the teacher, the child has been able to speak effectively and enthusiastically. He has not said the last syllable, used the suffix, used the Javanese dialect in Indonesian, expressed his emotions, and been able to analyze critically.

His mother has a significant part in his life because she frequently invites him to speak with her and reads him a picture book at home. Also, the boy communicates smoothly and easily due to his upbeat personality and love of reading stories. He can converse with the teacher and his other friends as a result. Also, the child enjoyed watching cartoons at home, so when he attended non-formal school, he was excited to share the movie sequences he had seen. He also displayed a vivid imagination by making up tales about various modes of transportation. The parent of the child supplies him with a gaming system at home, and his mother forbade him from playing with any other toys around the house. The mother of the child in this case preferred that her son plays with his siblings at home rather than play with the neighbors near the house. Because no one watched him when he played with the neighborhood kids near the house, this is the reason. Even though he did not engage with his surroundings, there were brothers who invited him to engage in conversation with their family. So, the participation of the child can help him to communicate effectively in school.

¹⁰ Donald Ary, et.al., Introduction to Research in Education Eight Edition (Wadsworth: Cengage Learning, February 12, 2009), p. 421-424.

Five-year-old Vocabulary

The various vocabulary numbers were picked up by the 5-year-olds. It is impossible to separate the traits of children and individuality from the input they get and their condition. In the same way that the 4-year-old child can participate actively and fluently in learning activities, the 5-year-old child was also able to interact with her friends and the teacher. She had the capacity to think critically, seek knowledge, and communicate her emotions.

A five-year-old child was more likely to watch and participate in numerous activities while independently roaming the school (non-formal education). Her condition required direction at first to get her to concentrate. But, if the instructor asks a question, she can immediately respond, and if something is unclear, the child will immediately ask. She can respond to the queries of teachers because informal educators frequently invite students to talk with their families and engage with their surroundings. She was therefore able to communicate properly and effectively with her teacher and other friends when she was in non-formal education. She also engaged in conversations with her teacher and friends, which improved the clarity and fluency of her speaking. Yet, the child has great motivation for studying and a high level of interest in watching cartoons. In this instance, she connected with her surroundings in a way that enabled a child to actively communicate with their teachers and other friends.

The Comparison Vocabulary Acquired by Four-year-old and Five-year-old Children

According to the data provided above, a four-year-old child learned 164 fewer words than a five-year-old child. But, in this case, the vocabulary gap between a 4-year-old and a 5-year-old child is not too great. Each child has acquired an additional 100 words on average during eight minutes. A 5-year-old child was different from a 4-year-old child in that she received fewer vocabulary words. This is due to the possibility that 5-year-olds may have encountered an overwhelming portion of the learning process in the playgroup. She also desired to enter a fresh learning environment in kindergarten.

The acquisition of vocabulary for the child will grow with age in accordance with the exposure to the language of a child. Yet because every child is different and has unique qualities, it affects how much language a child learns at a certain age. This explains why the number of vocabularies that 4- to 5-year-old children master varies. The ability of the child to master a given number of vocabularies depends on their age. This may happen as a result of internal elements like his own personal factors of the child with the inputs he got as well as external factors like the environment at school, in the family, or during play.

A 4-year-old vocabulary is 164 words. It was somewhat different from the 111 vocabulary a 5-year-old child had learned. Children as young as four and five have begun to stop using the final syllable. Both kids were able to speak effectively and fluidly. It demonstrated their capacity for open communication with both their teacher and other friends. The word "sepeda," which is pronounced "piseda," was said by a 4-year-old child, although it wasn't clear or fluid. Affixes such as -in, di-...kan, ber-, ke-...-an (buatin, dibukakan, berenang, kebanyakan). A four-year-old child was still using terms from his earlier years, such as the word "makan," which he continued to use as "maem," and he was using words other than "tidak," such as "engga" and "endak" in its place.

The average age of both children first mastered the type of nouns first, therefore there was little difference in the Indonesian word kinds that a four-year-old and a five-year-old child could master. Nouns were easier for both kids to acquire because they were more likely to remember something that was concrete and substantial. After mastering nouns, they learned a new word to announce an action, leading to the second sequence they obtained, which was of the verb type. Then both kids ask for adjectives, adverbs, and other words.

Moreover, the Javanese dialect was incorporated into the Indonesian language by the 4- and 5-year-old age groups. For instance, a 5-year-old child would say "tulis" in the Javanese dialect "tuliske" and a 4-year-old child would say "banyak" in the Javanese dialect "waakeh". The child who utilized the mingling language to communicate in daily life came from a family where the Javanese dialect was mixed with Indonesian. Both Indonesian and Javanese were spoken, and he also picked up other languages from the area around his home. Interacting with them revealed that most of the locals use Java or his playgroup to communicate.

Children as young as four and five can learn vocabulary from picture books, crossword puzzles, and educational games, as well as from their playgroup, family, and school environments. The vocabulary learning of children can also be influenced by television and video game scenes. The two kids' tendency to mimic the things they observed was the cause.

In this small study, other results showed that both kids developed into creative writers and had their own vocabulary that nobody else knew. A four-year-old child said the words "teng-teng" and "jrek-jrek," none of which the researcher understood. The toddler may be gesturing to demonstrate the word while speaking while simulating the motion of a helicopter propeller. A five-year-old child can, however, also invent terms like "balekutak" that researchers are unaware of. The investigation assumed that the word "balekutak" indicated a untidy drawing because the speaker used it to describe her messy painting.

Teachers' Interview and Observation

Table 1.1 compiles perspectives from teachers about internal elements that affect language development. The interview covered topics like what activities inspired students, whether it is challenging to inspire students in the classroom, anxiety-inducing scenarios in the classroom, learners' willingness to participate in class activities, whether learners overcame obstacles to learning, and how students memorize what they learn.

Most of the time, the replies revealed a consistent perception of the learners' motivation, willingness, self-efficacy, and memorization. The observation clearly supported the findings of the instructors' interview, since most of the observed lessons showed students to be eager and receptive to participating in the learning process. Actually, students were eager to take part in every activity the teacher had prepared; they showed that they felt competent and successful when completing tasks in the classroom. The fact that some students were unable to recollect the words they had previously acquired in the oral or writing tasks was one area where the observations and teachers' assessments partially disagreed.

Table 1.1 Answers to Teacher’s Interview

Factor	Opinions
Anxiety	Students are eager to speak in front of the class. Younger students seem to show more bravery.
Memorization	Students relate new language patterns they acquire to prior knowledge they have retained.
Motivation	Lessons are made more dynamic and have a good impact on younger students' motivation through activities like watching cartoon videos and reading picture books. Especially with toddlers aged 4-5, it might be challenging to inspire students in large classes.
Self-efficacy	The 5-year-old child was also able to communicate with her peers and the teacher in the same energetic and fluent manner as the 4-year-old child. She was capable of critical thought, knowledge acquisition, and emotional expression.
Willingness	Students conversed with their teachers and friends, which enhanced her speaking's clarity and fluency.

DISCUSSION

The study’s findings revealed that the four-year-olds were assigned different vocabulary scores. The child has been able to speak effectively and enthusiastically during learning activities, as well as when interacting with friends and the teacher. He also demonstrated his vivid imagination by inventing stories about different ways to get around. As a result, the child's participation can help him speak clearly in school. It suggested that the characteristics of a student who learns a variety of vocabulary depend on the knowledge he receives and his psychological state. While he has not yet employed the final syllable, the suffix, the Javanese dialect, conveyed his emotions, or been able to critically evaluate. The current discovery supports earlier research that suggests that phonotactic expectation contributes to perception by aligning sensory information with anticipation at the phonemic time scale. Exactly how our brain creates these priors is still a mystery.¹¹ The latter would affect how new and old lexical representations are combined at a later level, whereas the latter would specifically help speech perception by facilitating processing and triggering learning of new words at early pre-lexical stages.

Moreover, the previous researchers can contend that neighborhood activation behaves like distant neighbors by enlarging the target basin and assisting with word retrieval when the relative activation of the target's phonological features is higher than the activation of its neighbors' phonological features. While competing basins are produced and reaction times lengthen when neighbor activation surpasses (or approaches) that of the target.¹² It is impossible to separate children's characteristics and originality from the input they get and their circumstance. She was capable of critical thought, knowledge acquisition, and emotional expression. A five-year-old needed guidance at first to focus. In this case, she

¹¹ Giovanni M. Di Liberto, et.al. “Low-frequency Cortical Responses to Natural Speech reflect Probabilistic Phonotactics”. *Neuroimage*, no. 196 (2019): p.237-247. Accessed March 13, 2023. <https://www.sciencedirect.com/science/article/pii/S1053811919303234>.

¹² Hossein Karimi & Michele Diaz. “When Phonological Neighborhood Density Both Facilitates and Impedes: Age of Acquisition and Name Agreement Interact with Phonological Neighborhood during Word Production”. *Memory & Cognition*, no 48 (2020): p.1061-1072. Accessed March 8, 2023. <https://link.springer.com/article/10.3758/s13421-020-01042-4>.

interacted with her environment in a way that allowed a youngster to actively engage in conversation with their teachers and other peers.

Anxiety to master language skills is common, when studying a foreign language, according to previous research. Notwithstanding these assertions, students in our study did not generally show signs of anxiety while they were learning. However, student who is 5 years old typically worry more when they speak than students who is 4 years old. According to the teacher, as pupils become older, they tend to be more reluctant to express themselves verbally.¹³

In addition, it can be inferred from the results that both students find it simple to memorize vocabulary. Yet, five-year-old child is unable to recall the words they have previously acquired in oral or written activities. In that circumstance, it is vital to apply proper memorization-promoting activities. Memorization is one of the teaching techniques that helps language learners learn and use the language while also assisting them in internalizing what they have learned to use it in real-world situations.¹⁴

Reading and writing, which students are still learning in their mother tongue, are not taken into account in this study when examining students' motivation to learn the four language skills. Because the teacher employs activities like using cartoons and picture book stories to make the class more engaging, the students are really eager to learn to listen and talk. This result is similar with the findings of earlier research, which showed that animated eBooks can help kids acquire language effectively and also improve their attention spans through storytelling¹⁵.

Regarding self-efficacy, both students exhibit it when engaging in classroom activities to practice all language skills, according to the teacher's observations and observations from interviews with the students. There is a positive association between self-efficacy and academic performance, according to the findings of prior studies.¹⁶ Success is a result of self-efficacy. In other words, high self-efficacy forecasts better performance and success, which in turn serve as justifications for higher self-efficacy.

Finally, the students expressed a willingness to learn languages, did so because they thought that the activities in class would be simple to complete. They exhibit willingness and excitement to participate in the learning process. In fact, willingness is defined as a

¹³ Maria Nilsson. "Foreign Language Anxiety: The Case of Young Learners of English in Swedish Primary Classrooms". *Apples: Journal of Applied Language Studies* 13, no. 2 (2019): p.1-21. Accessed October 20, 2020. <https://jyx.jyu.fi/handle/123456789/63363>.

¹⁴ Khalid Al-Seghayer. "Characteristics of Saudi EFL Learners' Learning Styles". *English Language Teaching* 14, no. 7 (2021): p.84. Accessed July 14, 2022. <https://files.eric.ed.gov/fulltext/EJ1309586.pdf>.

¹⁵ He Sun, Jieying Loh, and Adam Charles Roberts. "Motion and Sound in Animated Storybooks for Preschoolers' Visual Attention and Mandarin Language Learning: An Eye-Tracking Study with Bilingual Children". *AERA Open* 5, no. 2 (April-June, 2019): pp. 1-19. Accessed April 19, 2021. <https://journals.sagepub.com/doi/pdf/10.1177/2332858419848431>.

¹⁶ Ehsan Namaziandost & Fidel Çakmak. "An Account of EFL Learners' Self-Efficacy and Gender in the Flipped Classroom Model". *Education and Information Technologies*, no. 25 (2020): p.4041-4055. Accessed August 18, 2022. <https://link.springer.com/article/10.1007/s10639-020-10167-7>.

learner's preference or choice to communicate, whereas willingness signifies a learner's readiness to communicate.¹⁷

CONCLUSION AND SUGGESTION

Many conclusions can be drawn from the research findings. First, a four-year-old child learned 164 words in eight minutes, while a five-year-old learned 111 words. It shows that a four-year-old child acquired vocabulary more quickly than a five-year-old. The averagesum of vocabulary acquired by both children was 100 greater, albeit the disparity in their vocabulary records was not terribly large. A five-year-old child had a lower vocabulary than a four-year-old, which was the difference. It is because a five-year-old might have felt overly educated at playgroup and desired to enter a different learning environment in kindergarten. Individual differences may also manifest themselves in vocabulary acquisition. The vocabulary acquisition of a child will increase with age. But, as each child is unique and has unique traits, there are individual differences in the vocabulary records that each child gained at a different age.

Secondly, there was little difference between the types of Indonesian words that children aged 4 and 5 had mastered because, at that age, the noun was the word type that was first learned. A new word to declare an activity was the second-word type acquired by the average age. Adjectives, adverbs, and other words were the last class of vocabulary that 4- and 5-year-old children learned.

Thirdly, the vocabulary acquired by a four-year-old child and a five-year-old child didnot differ noticeably. The use of prefixes was varied, there were modifications of other words from "tidak" that could be spoken as "endak" and "enggak," both children were also able to employ the Javanese dialect in Indonesian, and their expression was fluid and clear. One word, though, was still difficult to pronounce clearly and smoothly. The words that the two kids used when they were three years old were still being utilized today.

Fourthly, both kids were imaginative writers who coined terminology on their own that other people could not understand. When they said "teng-teng," "jrek-jrek," and "balekutak," the phenomena took place.

In this instance, the level of vocabulary mastery of each child is unique and varies substantially. Depending on the internal and external circumstances of the children and the inputs they got, this may happen. Consequently, kids have their own traits and personalities.

It should be noted that the findings from this study, which involved just two kids of different ages, cannot be applied to other situations. To find out what may be done to improve children's learning settings and processes, more study utilizing multiple techniques and tools with children of all ages and in big numbers should be conducted.

¹⁷ Pornapit Darasawang & Hayo Reinders. "Willingness to Communicate and Second Language Proficiency: A Correlational Study". *Education Sciences* 11, no. 9 (2021): p.517. Accessed June 7, 2022. <https://www.mdpi.com/2227-7102/11/9/517/htm>.

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