

## The Differences Between Aphasia Broca's In Adults and Children

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### Abstrak

Humans are social beings who need interaction with each other. The most important thing in interaction is communication. Communication is a form of conveying information in the form of ideas or messages orally or verbally. Communication will run smoothly if the message conveyed by the speaker can be understood by the other person. If communication does not run smoothly then there is a disturbance in communication. An example of a language disorder is Broca's aphasia. According to the theory (Saputri, 2018) Aphasia is a type of language disorder caused by damage to the brain's function as a language processor. Language disorders are disorders that affect a person's ability to produce abnormal speech. The purpose of this study was to determine the differences between Broca's aphasia in children and adults. The method of data collection in this study was to analyze two YouTube videos about the differences between patients with Broca's aphasia in children and adults. The two videos were used as research samples by the researchers. Children with children have difficulty following the words that have been mentioned in children aged 5 years. In adults, they have difficulty communicating, such as too many pauses and repetitions when speaking.

**Keywords:** Broca's aphasia, Broca's aphasia sufferers, language disorder

### Abstract

Manusia adalah makhluk sosial yang membutuhkan interaksi antara satu sama lain. Hal terpenting dalam interaksi adalah komunikasi. Komunikasi adalah suatu bentuk penyampaian informasi berupa gagasan atau pesan secara lisan atau lisan. Komunikasi akan berjalan lancar jika pesan yang disampaikan oleh pembicara dapat dipahami oleh lawan bicara. Jika komunikasi tidak berjalan lancar maka terjadi gangguan pada komunikasi. Contoh gangguan kebahasaan adalah aphasia Broca. Menurut teori (Saputri, 2018) Afasia adalah salah satu jenis gangguan berbahasa yang disebabkan oleh rusaknya fungsi otak sebagai pengolah bahasa. Gangguan bahasa adalah gangguan yang mempengaruhi kemampuan seseorang untuk menghasilkan ucapan yang tidak normal. Tujuan penelitian ini adalah untuk mengetahui perbedaan aphasia Broca yang terjadi pada anak-anak dan orang dewasa. Metode pengumpulan data penelitian ini adalah dengan menganalisis dua video YouTube tentang perbedaan penderita aphasia Broca pada anak-anak dan dewasa. Kedua video tersebut dijadikan sebagai sampel penelitian oleh peneliti. Pada penderita anak-anak mengalami kesulitan mengikuti kata-kata yang telah disebutkan pada anak usia 5 tahun. Pada penderita orang dewasa mengalami kesulitan saat berkomunikasi seperti terlalu banyak jeda dan pengulangan ketika berbicara.

**Kata Kunci:** aphasia Broca, penderita aphasia Broca, gangguan bahasa

## INTRODUCTION

Humans are social creatures who need interaction between each other. A person will know his potential when he gathers with his social environment. When people meet in a community or group, social interaction will occur. The most important thing in interaction is communication. The success or failure of the communication will affect the social interactions that are formed. Communication is a form of conveying information in the form of ideas or messages orally or verbally. Sometimes, communication can be through gestures or hand movements, body language or body cues, and writing. There is also communication that is conveyed in several ways, such as those that are combined in the delivery. Of course the tool used in communication is language.

Communication will run smoothly if the message conveyed by the speaker can be understood by the interlocutor. If the communication does not run smoothly then there is a disturbance in the communication. Communication disorders are things that hinder communication so that the recipient misinterprets the message he receives. This can happen because the language used is not clear so that it has more than one meaning, and the language used is too difficult to accept.

Therefore, language as a communication tool has a very important role in everyday life. If there is a language disorder, communication will not work as expected. Language disorder can be predicted to happen if there is lesion in one's language zone caused by traumatic brain injury (TBI) or cerebral vascular accident (CVA) (Wardana, 2019). A language disorder is a disorder that affects a person's ability to produce abnormal speech. Impaired language skills include reading, writing, listening, and speaking. If there is damage to one of these language skills, other language activities will also be disrupted. According to the theory (Saputri, 2018) Aphasia is a type of language disorder caused by damage to the brain's function as a language processor. Lesser (2014) states that aphasia is a brain injury that impairs the language, how people processes and comprehends the language itself. People with aphasia will have difficulty remembering a few words or even remembering most of the letters (Syarifah, 2020). This term shows some identical features, such as decreasing verbal expression and language modality disorder (Wardana, Suparwa, Budiarsa, & Putra, 2019). Therefore it can be predicted that they will lose some of their vocabulary and memory (Blumstein, 2016). They know what they want to say, but they have a hard time finding and expressing it in one word. When they try to convey what they mean, the words they use frequently cannot be recognized (Khanum, 2014). The cause of aphasia is due to injury to the brain. Brain injury can be due to disruption of cerebral blood flow, thrombotic trauma, cerebral hemorrhage, brain tumors, and infection. Aphasia is known from the damage of the left hemisphere, which are classified into classic types, namely fluent or non-fluent (Code, 2019), anterior or posterior, and expressive or receptive aphasias (Hallowell, 2017) or in other terms Wernicke or Broca Aphasia. Broca's aphasia is located in the frontal lobe or more commonly known as Broca's area. Broca's aphasia shows symptoms of spontaneous speech that are not fluent, understanding of the medium of sound is usually normal but sometimes poor if the sentence contains more than one message. Some patients with Broca's aphasia have no sentence rehearsal disorder, in other words, their retelling ability is intact, their oral comprehension is good, but there could be severe dyspraxia, anomia, and writing defects (Lau, 2021). Septianto (2020) found that people with Broca's aphasia have several characteristics: agrammatism, non-fluent, repetition, naming, phonetic, deviation, phonological literal paraphasia, and verbal paraphasia.

## **METHODS**

This study uses a qualitative descriptive method based on observation through video because the data is in the form of sentences produced by Cynthia M's Youtube Channel and tactustherapy. Qualitative research involves collecting and analyzing non-numeric data to understand concepts, opinions, and experiences. The purpose of this research is to understand the reality of phenomena in depth and detail. By using this method, this research tries to describe and interpret the speech of Brocas aphasia which agrees with reality.

## **FINDINGS AND DISCUSSION**

Data on differences between people affected by broca's aphasia in children and adults. The conversation that have been carried out between people affected by broca's aphasia with the questioner can find out the person's speaking ability. Although the questioner asked by the asker are not the same.

**Video 1 (<https://youtu.be/INCTApcX1Iy>)**



Based on the Youtube Channel video of Cynthia M, a 5 years old child named Gabriella is suffering from Aphasia Broca and Apraxia. Gabriella had a left MCA stroke Sept 25, 2009 which caused severe damage to the speech center of her brain. The videos were taken at different times, 5 months Post-Onset and 10 months Post-Onset. At 5 months Post-Onset, Gabriella can hear people's words well, but it's hard to pronounce them again. She has difficulty following what has been mentioned, in contrast to children in her age. At 10 months Post-Onset, Gabriella was able to memorize words well, but her pronunciation was still not clear, the same as 5 months ago.

**Video 2 (<https://youtu.be/JWC-cVQmEmY>)**



Based on the YouTube channel tactustherapy video, a man named Mike Caputo suffered a stroke with Broca's Aphasia. He had a stroke about 7 years ago. According to Rohde, Worrall, Godecke, O'Halloran, Farrell, Massey (2018) Aphasia affects up to 42% of stroke survivors and impacts on a person's verbal expression, auditory comprehension, reading and/or writing. In the interview, Mike spoke with the help of his wife. Mike could understand what his wife was saying

and all the questions from the interviewer. However, to answer, he struggled to find the right words. He often uses the word “um...” while contemplating the words to get out of it, he also pronounces sentences with few pauses, repetitions and fillers. On some questions, he also answered with inappropriate answers. At the end of the interview, he said that his brain understands what other people are saying and doing, but it is very difficult to find the right words to speak to people.

In this regard, there is a significant difference between people affected by Broca’s aphasia in children and adults. Speech therapy has a great their speaking ability, especially in producing words and sentences.

Based on the video observation and summary above, support from parents and family is very important. Parents can take their children to a speech therapist or often invite their children to communicate so that they are trained in producing language, words or sentences. And the same for adults they also have to communicate often.

## **CONCLUSION AND SUGGESTION**

Communication is the oral or verbal transmission of information in the form of ideas or messages. Communication will be smooth if the speaker's message is understood by the interlocutor. There is a disruption in communication if the communication does not run smoothly. Broca's aphasia is one of the problems associated with language disorders. The injury to the brain is the cause of aphasia. Impaired cerebral blood flow, thrombotic trauma, cerebral hemorrhage, brain tumors, and infections are all causes. Some words used in communication will be difficult for people with aphasia to remember.

Based on two youtube channels, the writers concluded that Broca’s Aphasia that occurs in children and adults have the same cause, stroke. In children, Gabriella can remember words well after 10 months Post-Onset. It means, Aphasia can be cured by practicing communication. Meanwhile, for adults, Mike have difficulty remembering the words he want to say, he often use the word “um...” to remember the words.

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