A Case Study of Language Impairment (Stuttering): A Psycholinguistics Approach

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ABSTRACT
A language is a tool used by humans to communicate. However, due to several reasons, language disorders are often found. One of the language disorders experienced by humans is stuttering. Stuttering is often experienced by children to teenagers, and rarely is the phenomenon of stuttering found in adults. Therefore, this study aims to examine the phenomenon of stuttering experienced by an adult man in Petung village, Bondowoso district, East Java. The methodology used is descriptive qualitative by using observation and interview techniques to obtain data. The result of this study is that Mr. AG’s stuttering is categorized as severe because when he wants to speak, he has a pause of 2-6 seconds from the five forms of stuttering he performs. This condition depends on his emotional level. The factors that caused Mr. AG’s stuttering were genetic factor and a neurogenic disorder factor because the subject often had seizures due to high fever and epilepsy. With proper treatment, stuttering can be cured, but, in this case, the stuttering becomes permanent because Mr. AG never gets any treatment to treat language impairment. Stuttering drives a very big impact on Mr. AG’s life. Because of his stuttering, he fails in his education.

KEYWORDS
Psycholinguistics, speech impairment, Stuttering.

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1. Introduction
Communication is a means of exchanging information between individuals (Rizkiani, 2021). All living things must communicate, both animals and humans. The difference is that humans use language to communicate, while animals do not use language to communicate because animals do not have language. (Indah, 2017). Language is a tool of interaction or communication in society to convey thoughts, ideas, concepts and feelings (Chaer, 2015). In other words, through language, humans can carry out all their activities. In human life, verbal communication is known as an important part (Sakanti, 2019). However, there are some people who have limitations in conveying verbal language, as well as stutterers. Stutter is a speech fluency disorder that occurs as a result of feelings of very high worry or anxiety when talking to the opponent speech, so the person finds it difficult to express what he wants to say to his interlocutor. As a result, he speaks with stutter, repeats his words, and suddenly stops to finish what he wanted to say (Saragih, 2018). According to the Stuttering Foundation, 70 million people worldwide suffer from stuttering and men are 4 times more likely to stutter (Fadilah, 2021).

The phenomenon of stuttering is also experienced by an adult man in Petung Village, Curahdami District, Bondowoso Regency, East Java. Actually, the most at risk of experiencing stuttering are children to adolescents, and it rarely occurs in adults, but the phenomenon occurs that Mr. AG (a pseudonym) is still stuttering in adulthood. Mr. AG actually has a very complex condition; besides suffering from stuttering, he also suffers from dyslexia and epilepsy. This condition is attracted researchers to examine the phenomenon of stuttering experienced by Mr. AG.
In previous research, several articles related to stuttering were found. The first research is from (Daulay et al., 2021) entitled *Pengaruh Gangguan Berbicara Gagap Dalam Komunikasi Pada Wanita usia 16 Tahun* (The Effect of Stuttering Speech Disorders in Communication in 16-Year-Old Women). Daulay explains that the stuttering phenomenon happens in women, which are so rare because stuttering is mostly found in children, adolescents, and male. The second research is done by (Tomia, 2019). Tomia explains the stuttering phenomenon in elementary students. Stuttering in boys is not too rare because, according to research, stuttering mostly happens to males who are still children to adolescents. Therefore, this article finds the research gap from the previous articles that is the subject of the research, which is still rare. This article will analyze the stuttering phenomenon occurring in adult men.

So, from the explanation above, the researcher will discuss three problems. 1) What is the form of stuttering of Mr.AG as a stutterer? 2) Why does Mr. AG stutter? 3) What is the impact of stuttering towards the subject’s life?

2. Literature Review
2.1 Psycholinguistics
Psycholinguistics is a combination of two disciplines, namely psychology and linguistics. Psycholinguistics is a science that studies the mental processes that humans go through in language (Darjowidjojo, 2018). This term first appeared in 1954 when a book called Psycholinguistics: A Survey of Theory and Research Problems appeared by Charles E. Osgood and Thomas A. Sebeok in Bloomington, United States published (Chaer, 2015). Psycholinguistics applies knowledge of psychology and linguistics to social problems such as language teaching, language acquisition, aphasia, stuttering, dementia, autism, etc.

2.2 Language impairment
Language is a process of conveying thoughts and feelings (from the brain) verbally in the form of words or sentences. The process is complex because it requires the functioning of the various organs that affect the mechanics of speaking, thinking or processing thoughts into words, as well as mental modalities that are revealed when speaking that, are also determined by environmental factors. To achieve language skills, it is necessary fulfillment of the following elements:

- Complete sensing system
- Complete central nervous system
- Sufficient mental ability Language ability
- Emotional stability
- Exposure to language

If, since childhood, there is a deficiency or absence of at least one of the above elements, this can impact the emergence of various language impairments (Indah, 2017). One of the language impairments is stuttering.

2.3 Stuttering
Stuttering is speech that is chaotic because stutter often suddenly stops, then repeats the first syllable and the next words, and after successfully saying these words, the sentence can be completed. Often the speaker does not succeed in pronouncing the initial syllable, only with difficulty pronouncing the initial consonant or vowel. Then the speaker chooses another word and manages to finish the sentence even though with great difficulty. Speakers who experience this difficulty are characterized by repeating the first part of the spoken word or holding back a single sound in the middle of a word (Chaer, 2015). According to (Hikmah, 2022), People with stuttering have difficulty pronouncing a word or sentence when speaking. Some of the characteristics of people with stuttering are:

1) Extend the sound of a word, such as “iiiiiiiiiiiibu”
2) The repetition of a sound or syllable, for example, “ma-ma-ma-mama” or « a-a-a-a-apple. »
3) Having pauses, or holding back a word or words that cannot be spoken at all.
4) Interjection, for example: eh eh. i will go
5) Circumlocution or Barriers to speaking, example: apppaa,

In other words, the forms of stuttering are extending sound, repetition, pauses, interjection, and circumlocation.

There are three levels of stuttering: normal stuttering, mild to moderate stuttering and severe stuttering (Sekartini, 2015).

1) Normal stuttering happens when having pauses of no more than ½ second; sometimes, stop to add’ mmm, eeh’ when thinking. There is no facial reaction. This type of stuttering happens when the speaker appears when tired, excited, talking about something new or difficult sentences, asking or answering something, talking to people who are not paying attention and rushing to answer.
2. Mild to moderate stuttering happens when having pauses of $\frac{1}{2}$ - 1 second and repetition in sound and word. This stuttering is accompanied by blinking eyes, glancing, and lip movements that appear tense. This type of stuttering happens when the speaker appears when tired, excited, talking about something new or difficult sentences, asking or answering something, talking to people who are not paying attention and rushing to answer.

3. Severe stuttering happens when having pauses for more than 1 second. There is often the addition of sounds and missing words. This stuttering is accompanied by blinking eyes, glancing, and lip movements that appear tense and rising tone. This stuttering happens in any condition.

The various types of stuttering disorders consist of: three things, namely: (1) stuttering development, (2) temporary stuttering, and (3) persistent stuttering (Daulay et al., 2021). Developmental stuttering is common in children aged 2-4 years and adolescents who are entering puberty. The condition of stuttering in the age period of 2-4 years is a condition that is still normal because it is part of the child’s speech development process. While at puberty, stuttering occurs because of a lack of self-confidence and anxiety about physical, mental and social changes. Temporary stuttering is usually experienced by children aged 6-8 years due to psychological factors such as facing a new environment, and this stuttering will disappear in line with their ability to adapt. Persistent stuttering usually occurs in children aged 3-8 years, and usually, this type of stuttering is caused by physiological abnormalities. Patients with permanent stuttering are recommended to get speech therapy to cure their stuttering.

2.4 Stuttering factor
According to (Chaer, 2015), the following things play a role in causing stuttering:

1. Stress factors in family life.
2. Children’s education is carried out harshly and strictly by yelling and does not allow children to argue and argue.
3. There is damage to the dominant hemisphere of the brain
   Familial neurotic factor

The cause of stuttering is still something mysterious, but it has some clues. Experts say that the state of stuttering exists due to multifactorial that occur in people who suffer from stuttering. They are children’s growth problems, Neurogenic disorders, Genetic or hereditary factors, and Pressure from parents or family (Hikmah, 2022).

1. Children’s growth problem: Children who have growth problems or have other speech disorders are at greater risk for stuttering. This condition is closely related to the development of the child’s brain. When a child’s growth and development are disturbed, the child’s brain is also impaired. This is what causes the child’s speech motor system is also disturbed. At this age, stuttering is still quite normal and can be cured with the help of parents. However, sometimes this condition can become chronic and continue into adulthood.

2. Neurogenic disorder: This neurogenic disorder is a communication ability problem caused by a disturbance in the brain as the main control center that has an impact on signal delivery in the nervous and motor systems of the muscles. This disorder will have an impact on the ability to speak. Usually, this occurs due to impaired health conditions due to trauma, stroke or injury to the brain and nerves.

3. Genetic: If in a family there is a history of stuttering, chances are about 60% of a person can suffer from stuttering. This genetic disorder can affect the language center in the brain. According to a recent study conducted by a researcher from America, stuttering is a speech disorder caused by gene mutations.

4. Pressure from parents or family: when the child is under 5 years old, it is very natural for the child to stutter because the child is still learning the language by connecting one word to another, and the stuttering will disappear over time. However, if the expectations of parents for the fluency of the child’s language are very high and continue to put pressure on the child, it will cause the child to become a permanent stutterer.

3. Methodology
This study used a descriptive qualitative approach. This approach is used to describe the findings of the research in detail. This study was conducted on a man from the village of Petung who has language impairment that is stuttering. Before starting the research, the researcher asked permission from Mr. AG and his parent that the researcher was interested in studying the language impairment experienced by Mr. AG. Mr. AG verbally agreed to be studied for his stuttering. In addition, to maintain the privacy of the research subject, the researcher gave him the initials name ‘Mr. AG’. The data was obtained by participant observation. The researcher also used tapping techniques to record the conversation so that the subject would speak more natural. To support the data analysis, the researcher also conducted interviews with related parties who know the subject of research well such as parents, relatives and co-workers. After the data is collected, the researcher will transcribe the data and then describe, interpret and then explain the phenomenon of stuttering that occurs in adult men in Petung village, Bondowoso, East Java.
4. Results and Discussion

This study has a research subject with the initials Mr. AG who is 21 years old. Mr. AG has been stuttering since he was a child, besides he also has problems with not being able to read and write, and he also suffers from epilepsy. However, this study only focuses on the stuttering experienced by the research subjects.

4.1 Forms

Based on the results of interviews with several people closest to Mr. AG, it can be seen that Mr AG has been stuttering since he was a child, so his stuttering can be categorized as persistent stuttering. The stuttering disturbed Mr. AG's psychology because when he was still in elementary school, he got bullied by his friends then he didn’t want to go to school anymore.

The pattern of his communication can be seen from the data below:

4.1.1 Extending sound

Mr AG Mr. AG, in communicating, often extends speech to certain letters. The data are taken from the conversation, which is recorded in secret. This conversation is between researchers. AG, which takes place in a car. The conversation is very informal.

Data 1:  
Researcher: Mr. AG kamu sudah bilang mas mu kalau mau pergi sama kita? (hai Mr AG have you told your brother that you will go with us ?)
Mr AG iiiiiiiiya mbk sudah. (iiiiiiies sister i did)
Researcher: oh iya dah takut kamu dicariin(oh okay, i am afraid he looks for you)

This data shows that Mr AG extends the sound when he is speaking. He extends iiiiiiya after he can achieve success in his first word then his utterance becomes smoother.

4.1.2 Repetition

Mr AG is repeating sounds more than twice of sounds and syllables because he loses ideas, forgets, and is nervous, so he finds it difficult to talk to the interlocutor.

Data 2:  
Researcher : Mr AG kamu punya hape ga ?(Mr AG, do you have Hp ?)
Mr AG : eeenga mbk. Ssssaya mau beli hape mbak (no sister, i want to buy it).
Researcher : kamu emang bisa wa nan ? ( can you operate WA ?)
Mr AG : bbbbisa mbak ( I can sist)
Researcher : oh pakai suara ya ? ( oh, using voice not right ?)
Mr. AG : Sayayayay sering wa an sama cewek saya mbk. ( I often use Wa to chat my girlfriend)
Researcher : motormu mana? ( where is your motorcycle ?)
Mr.Ag : eeeenga ada mbak ( I dont have, sist)

This data shows that he repeats the sound ‘e’, ‘s’, ‘b’, and’ya’ when he wants to start speaking. When the researcher talks about his capability to operate the WhatsApp application, he turns panic because he cannot read and write, so his stuttering becomes worse by saying ‘sayayayaya.’

4.1.3 Having pauses

The subject is also having pauses when he speaks. It happens not only at the beginning of the utterance, but it occurs in the whole utterance. It occurs depending on his emotion: when he gets nervous, sad, too happy, too excited etc. He will get longer pause if his emotion is unstable. From the observation, the researcher finds that his pause is around 2-6 seconds, depending on his emotions.

Data 3:  
Researcher : eh keponakanmu sekolah dimana sih ? (where does your nephew go to school?)
Mr.AG :  ...........PAUSE 5 seconds.......ga tau mbk ( i dont know sist)

In the conversation above, when Mr AG Pauses his utterance, his facial expression turns, his lips seem hard to open, his eyes blink, and his head shakes. From the data above, it can be seen that Mr.AG pauses because he is confused about the question because
he does not know the answer. His pause is about 5 seconds. It indicates that he is panicking. But when he is relaxed, he only has to pause 2 seconds.

4.1.4 Interjection
Interjection happens when stutter gives insertion or addition of sounds that are not appropriate when speaking due to confusion, forgetfulness, and nervousness so that he is unable to express what he thinks to the other person clearly. In this case, the subject is also having interjection in his utterance.

Data 4 :
Mr AG : mmmbak kapan eh eh pergi ke pasir putih ? ( sist, when will we go to pasir putih ?)
Reseacher : ayo kapan.. kamu ikut ya ? ( ok lets go, will you join ?)
Mr AG : ....PAUSE 2 seconds... ayoo mbak. (let's go)
From the data above, it can be seen that Mr AG insert the sound 'eheheh' when he wants to ask about something that he likes. When he inserts a voice, his face changes, but his lips are a bit hard to open but not too tense.

4.1.5 Circumlocution
Words with certain sounds are replaced with others. This happens when a stutter feels panic so much that he cannot produce the words which exist in his mind. From the observation, circumlocution appears too in the subject’s utterance. It happens when Mr.AG feel very confused about how to tell the chronology of an event. He told about the accident that occurred in front of the Tamansari gas station, but the interlocutor was confused to listen to his explanation, then the interlocutor asked Mr. AG to repeat the story again. That’s when Mr. AG’s face turned tense. His mouth was difficult to open. His neck muscles tightened, and, in the end, Mr. AG gave up on telling stories and changed the topic.

Data 5 :
Mr AG : bbbbang kemarin ada kecelakan di pom bensin taman sari. (bbbbang, yesterday there was an accident at the Taman Sari gas station)
Lana : iya kah ? gimana ceritanya ? ( really? how's the story ?)
Mr AG : itu bang ada motor ....dari arah selatan kkenceng bang nabraak motor ....dari arah utara yang ditaabak ooorang tua bang. (There is a motor from the south. It was so fast bang then hit the motorcycle. from the north. Old man was hit bang)
Lana : gimana-gimana yang nabraak orang tua ?( how ? oldmen hit ?)
Mr AG : ...bbbukan bang abang kok ga ngerti-ngerti...(no bang... why you dont understand ?)
Lana : gimana tadi ? motor dari arah selatan nabraak orang tua ? ( how is that ? the motor from south hit old men ?)
Mr AG : aaah abang ini... bang saaya mau beli motor bang. ( aah abang... bang I want to buy motorcycle).

From the data above, it can be concluded that the subject has all forms of stuttering: extending sound, repetition, pause, interjection and circumlocution. This is because Mr.AG has a severe level of stuttering, so there are many obstacles when he tries to speak. In the beginning, he always repeats the first word and pauses for 2-6 seconds. Sometimes he inserts an appropriate sound in the middle of an utterance because his emotion is unstable. In addition, he will change the topic if he feels very hard to deliver his utterance. When he gets stuttering, his facial expression changes, his mouth seems hard to open, his eyes blink, his head little bit shakes, and his neck muscle tense up, but when he succeeds in uttering the sentence, everything is back to normal.

4.2 Factor
According to the results of the study, the cause of the stuttering experienced by Mr. AG is a genetic factor. After doing in-depth observations and interviews with family and co-workers, it was found that his father also stuttered but not as much as Mr. AG. Mr.AG’s father also experienced difficulty in conveying words. There is a pause at the beginning of each sentence, but not as long as Mr.AG. This is in line with the theory, which states that 60% of people who are related by blood experience stuttering; therefore, it is not surprising that Mr. AG experiences stuttering.

In addition, it turns out that the potential for stuttering experienced by Mr. AG is exacerbated by the presence of neurological disorders. When he was little, he often had high fevers and seizures, and this caused 2 major influences in Mr.AG’s life; the first is that he currently suffers from epilepsy caused by nerve damage in the brain due to seizures as a child, and the second is Mr.AG has a stuttering language disorder caused by damage to the language-regulating nerves. This is in line with the opinion of pediatricians who say that repeated seizures can cause the brain to lack oxygen so that, eventually, damage to nerves/brain cells occurs. Damage to certain areas can cause permanent symptoms. Post-inflammation of the brain can cause cerebral palsy and nerve paralysis and interfere with motor movement, language, IQ, etc. (Firmansyah, 2016).
Based on the explanation above. It can be concluded that the factors that cause Mr.AG become stutter are a genetic factor and a neurological disorder factor. In addition to the causes mentioned above, Mr. AG also experiences symptoms of stuttering. Symptoms of stuttering experienced by Mr. AG include:

- a. Eyes blink a lot.
- b. Trembling on the lips
- c. Face looks tense
- d. Twitching of facial muscles
- e. head shaking slightly

4.3 Psychological condition
Stuttering can cause psychological effects in sufferers. From the interview, the researcher concludes that his stuttering makes him feel inferior. He mentioned that he did not want to go to elementary school because he felt insecure. He often got bullied by his friends. His friends always imitated him, and he often fought with his friends because of it. Then he decided to go out of school.

This fact shows that people with stuttering are very vulnerable to experiencing psychological disorders because they get negative responses from the surrounding environment. By bullying someone who stutters, the person who stutters will feel more depressed, and the stuttering will get worse. This is because of not only physical and genetic factors that cause stuttering, but psychological factors also have the greatest influence on the occurrence of stuttering.

4.4 Treatment
There is a unique thing in the case of Mr. AG. When he meets new people, his stuttering will be much reduced and even tend to be invisible. This is different from stutterers in general, who will stutter when meeting new people because they feel nervous. But not for Mr. AG, he will control the speed of his speech, and it can decrease his stuttering level, and after he feels familiar with that new person, he will return to stuttering as usual. This is what researchers often find; just like the first time he met the researcher's brother-in-law, it was very surprising that Mr. AG spoke fluently and calmly, but after he was familiar with the researcher's brother-in-law, his way of speaking returned to stuttering again. This shows that he has a strong effort to hide his stutter in order to make a good impression on the other person.

This fact proves that stuttering can be reduced. There are several treatments that can help stuttering sufferers in controlling the symptoms of stuttering, including counselling, speech therapy, and doctor's medication. This treatment may not eliminate stuttering completely, but it can help to control the symptoms of stuttering experienced by people with stuttering. In this case, Mr.AG never did speech therapy treatment because of the family's lack of understanding of language disorders and family economic factors.

5. Conclusion
This study aims to examine the stuttering case in an adult man with a psycholinguistics approach. To keep the secret identity of the subject, the researcher gives a pseudonym, namely Mr.AG. This study wants to know and describe the stuttering form of the subject, the causative factor of his stuttering and the psychological impact due to his stuttering.

With reference to this study, first, AG, as the research subject, performed all forms of stuttering: repetition, sound extension, pause, interjection, and circumlocution. All forms of stuttering depend on the level of his emotions. Second, the things that cause stuttering in Mr.AG are genetic factors and neurological disorders. Third, stuttering brings a great impact on his life because he feels insecure about his stuttering. We, as people who do not experience language impairment, should provide a comfortable environment so that people with stuttering do not feel inferior. Stuttering is neither a curse nor a disgrace, so don't isolate or bully people who have a fluency disorder: stuttering.

The significance and impact of this study on society are demonstrated below. First, the result of this study can be used by the teacher to understand more about his/her student who has stuttering and how to treat his/her correctly. Second, society can use the result of this study to enlighten their understanding that stuttering can be cured.

This study only focuses on the adult man who has stuttering in Petung Village Bondowoso, East Java. With limitations in its form of stuttering, factor and the psychological impact of stuttering. One of the important ideas of future study is discussing the stuttering case in an adult woman because stuttering mostly happens in kids to young males, so adult woman stutter is still rare to discuss.
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