Expressive Language Disorder in Apraxia Sufferers

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ABSTRACT

People with apraxia face challenges when communicating with other people. They have difficulties in expressing information in speech or writing. This research examines the expressive language disorder in individuals with apraxia and the verbal communication strategies used by interlocutors when interacting with them as depicted in the "Special Books by Special Kids" YouTube channel. A descriptive qualitative method was used to analyze the data. The findings reveal that five characteristics of the disorder are found, including difficulty in coming to the point, limited vocabulary, difficulty in finding words, overuse of nonspecific words, and omitting certain words. Furthermore, this research also finds that the verbal communication strategies applied by interlocutors when talking with the apraxia sufferers include using Yes/No questions, using simple sentences, praising, and offering specific choices. It can be concluded that the apraxia sufferers understand what their interlocutors say. However, as they have problem in their motoric system, it is not easy for them to produce a speech. Moreover, the strategies used to communicate with the apraxia sufferers do help them to speak. Despite the difficulties, these strategies mostly can help the apraxia sufferers to answer the questions given.

Keywords: apraxia, communication strategy, expressive language disorder, speech

INTRODUCTION

Language is a type of verbal communication which is used to convey certain message. Verbal communication allows humans to express their feelings. Verbal communication is divided into two, namely spoken and written form. Speaking is a complex cognitive process that allows people to communicate their wants and needs (Binambuni & Setyaningsih, 2023). In speaking, there is a process of expressing thoughts and feelings (from the brain) verbally, in the form of words or sentences. The brain receives and understands language input through the ear. Good brain function and speech organs will make it easier for human to speak well. However, those who have disorders of brain function and speech organs certainly have

difficulty processing and producing language. This is why there are people who are born or develop speech disfluency that disallows them to deliver their utterances properly.

According to Algozinne & Ysseldyke (2006), speech and language disorders refer to problems in communication and related areas such as oral motor function. These delays and disorders range from simple sound substitutions to the inability to understand or use language or use the oral-motor mechanism for functional speech and feeding. Some causes of speech and language disorders include hearing loss, neurological disorders, brain injury, intellectual disabilities, drug abuse, physical impairments such as cleft lip or palate and vocal abuse or misuse.

Speech disorder usually means there are difficulties and challenges related to producing certain sounds or sound combinations. A speech disorder can affect the fluency and accuracy of speech, such as a lisp or stutter. Meanwhile, language disorders relate to challenges around the comprehension of the meaning of words or phrases, and someone affected by a language disorder may also struggle to express themselves appropriately and correctly through language. Speech disorders and language disorders can happen separately or together. As an instance, an individual may have a speech disorder such as a very poor articulation, but s/he has complete language skills. Another might have a language disorder such as very poor comprehension, but s/he is be able to produce speech sounds normally. However, an individual may have both kinds of disorders at the same time (https://www.ncbi.nlm.nih.gov/books/NBK356270/).

One example of a speech disorder is apraxia. Liepmann in 1908 (Ogar, et al, 2005) introduced the general term of "apraxia" and defined it as an inability to perform voluntary acts despite preserved muscle strength. Furthermore, apraxia is a neurological disorder that attacks motoric system which causes the muscles to be unable to receive brain commands properly, so that sufferers are unable to carry out certain movements. Generally, apraxia attacks the muscles around the face and mouth area. This disorder will make it difficult for sufferers to carry out certain movements, such as whistling, coughing, licking their lips, sticking out their tongue, or even speaking. Meanwhile, the apraxia of speech, as Petreska et al (2007) explains, refers to a selective disturbance of the articulation of words.

Apraxia, as cited from Wertz et al. (1984), has appeared as the term to describe a motor speech disorder characterized by an impaired ability to coordinate the sequential, articulatory movements necessary to produce speech sounds. According to Darley et al. (1975), apraxia results from an impaired ability to program the positioning of the speech muscle system and the sequencing of the system. A person with this disorder has difficulty saying what s/he wants correctly and consistently. The brain knows what it wants to say, but cannot plan and sequence the necessary speech sound movements exactly.

A case of individuals with apraxia can be seen in the YouTube

account called "Special Books by Special Kids". The videos demonstrate conversations between people who do not have speech and language disorders and those who have apraxia. It can be observed that in the videos, people who do not have a disorder seem to use certain strategies to help people with apraxia to express their opinions.

Kirk et al (in Mu'awwanah and Supena, 2021) explain that speech or language disorder is the inability to code information, which can be in the form of delay in receptive, expressive language, or both. Nearly in the same sense, Bansal (2018) divides language disorder into three types, namely expressive, receptive, and mixed receptive-expressive. Expressive disorder means difficulty in conveying information in speech, writing, or communication. Further, it can be said that a person with this disorder can recognize the language well, but they can not express it. In short, people with the disorder have difficulties in speaking. Further, as described by Hasiana (2020), expressive disorder is characterized by:

1. Word finding difficulties
2. Limited vocabulary
3. Overuse of nonspecific words
4. Difficulties coming to the point
5. Over-reliance on stock phrases

Studies on speech and language disorders have been carried out by several researchers. Setiyadi et al. (2021) conduct a neurolinguistic study by focusing on error analysis in apraxia of speech among three sisters in East Java, Indonesia. The findings show that the participants have inconsistent errors, but are aware of the them. Also they do not experience not interrupting the process of communication. Yuniari & Sudarmawan (2022) analyze teaching strategies for children with expressive language disorder. The result shows that teaching strategies that could improve expressive language are modelling, expansion, choices, waiting or withholding, imitation, parallel talk, picture communication, paraphrase, and place things out of the child's reach. Ersam et al. (2023) conduct a research on language disorder in *Tyson's Run* movie. The study finds expressive language disorders in the main character who has autistic spectrum disorder, namely overreliance on the stock phrase, word finding difficulties, difficulty coming to the point, and limited vocabulary. This research will fill the gap of the previous studies as it aims to analyze expressive communication disorder in persons with apraxia and communication strategies used by interlocutors to help them speak.

METHOD
This research employed a qualitative descriptive method. The data for were collected from the speakers' utterances in the video taken from YouTube videos from channels "Special Books by Special Kids". Two videos with two individuals with apraxia were examined. The first is 'My Friend with Speech

Apraxia (Difficulty Communicating but Understanding Everything)' (https://www.youtube.com/watch?v=un3jpgooYAc), and the second is "Living with Speech Apraxia (Achieving Independence)" (https://www.youtube.com/watch?v=HvZeQ4qiY08). The videos were then transcribed. After that, the characteristics of expressive disorders and strategies used by the interlocutor while speaking with the apraxia sufferers were categorized. Last, conclusion was drawn.

FINDINGS AND DISCUSSION

In this section, answers to the research questions are covered. They are characteristics of expressive language disorder and verbal communication strategies used by the interlocutors to communicate with the apraxia sufferers. The speakers consist of two persons who have apraxia, a 20-year-old girl named Katherine (Kath) and a girl approximately of the same age named Emma; mothers of Katherine and Emma respectively; and Chris, who is a teacher for students with disabilities and also the owner of YouTube channel "Special Books by Special Kids".

1. Characteristics of Expressive Disorder

This section presents the findings of the characteristics of expressive disorder. Table 1 shows the expressive disorder found in the utterances of the apraxia sufferers in the data.

Table 1: Expressive Disorder

No	Characteristics	Frequency	Percentage
1	Difficulty coming to the point	27	65.8%
2	Limited vocabulary	4	9.7%
3	Word finding difficulties	4	9.7%
4	Overuse of nonspecific words	4	9.7%
5	Omitting certain words	2	4.8%
	Total	41	100%

Following Hasiana (2022), this research finds four characteristics of expressive language disorder. The findings indicate that difficulty in coming to the point is the most frequent characteristic found in the data, followed by limited vocabulary, word finding difficulty, and overuse of nonspecific words. The characteristic of over-reliance on stock phrases is not present in the data; however, another characteristic not mentioned by Hasiana (2022) is found, namely omitting certain word. These characteristics are possibly due to the difficulty in coordinating the speech organ muscles to produce speech. The brain is in charge in directing the movements that are needed for speech. In apraxia, the brain has trouble in planning the speech movement as the muscles do not form the words correctly.

1. Difficulty coming to the point

In the data, Katherine and Emma find it difficult to express their points directly. Their family or people who are talking with them will help them explain what they want to say. It can be seen in Excerpt 1 and 2.

Excerpt 1

Chris	: That's really exciting what do you do there?
Emma	: Feed animals…play with them…dishes…
Emma's mom	: Do the dishes
Emma	: *Laundry…*
Emma's mom	: What's the thing you always want to do in our kitchen that i never let you do but you have to do it at work?
Emma	: *Mop*
Emma's mom	: Yeah you mop the lunch room

Excerpt 2

Kath	: *Mmm- me- me mom dad go to my school. Mmm- my mom helps me pp- pack e- e- pp- pac-*
Kath's mom	: And I think that she understands that we love her and that we're doing these things because we love her.
Chris (to Kath)	: Do you understand that?
Kath	: Yes

From Excerpt 1 and 2, it can be assumed that both Katherine and Emma know what they want to say, but they have difficulties in trying to express it in the right word. In Excerpt 2, it takes a while for Emma to finish her utterances as she stutters. When they are unable to continue, their mothers help to explain what Katherine and Emma want to say to Chris.

2. Limited vocabulary

Katherine and Emma show limited vocabulary when responding to the interlocutor's questions. Some examples can be seen in the following excerpts.

Excerpt 3

Chris	: All right the camera's ready, are you ready for your big interview. Yeah, what's up?
Emma	: (*silence*)
Emma	: *Good*
Chris	: How are you doing?
Emma	: *Good*

Excerpt 3 shows that Chris asks two different questions to Emma. These questions are those that are commonly asked when an individual wants to start a conversation and it can be answer in many ways and words, but for Emma, she just answers both questions by just one word "good" .

Excerpt 4

Chris	: How do you feel when you're riding a horse?
Emma	: *Great*

Excerpt 5
Chris   : When you think about the old video we make how do you feel?
Emma   : *Great*

Excerpt 4 and 5 show that Emma answers the question by saying only the word "great". Those two questions are quite similar and Emma's answers, despite being very short, are actually not wrong.

3. Word finding difficulties
        As found in the data, the apraxia sufferers also have difficulties in finding words to say. This is demonstrated in the following examples:

Excerpt 6
Chris   : All right the camera's ready, are you ready for your big interview. Yeah what's up
Emma   : (*silence*)
Emma   : *Good*

In Excerpt 6, it can be assumed that it takes some time for Emma to think the right word that can answer Chris question. She is silent before answering the question due to the difficulties in finding the right word.

Excerpt 7
Chris   : What's your biggest wish?
Emma   :*(silence)*
Emma   : Water...
Emma   :(laugh)
Chris   : Are you laughing at yourself?
Emma   : Yeah
Chris   : That's a good wish
Emma   : Yeah
Chris   : I get thirsty sometimes too
Emma   : Yeah
Chris   : Hey why were you laughing at yourself?
Emma   : *I said water*

Excerpt 7 shows that Emma answered "water" to Chris' question. Her answer is not in line with Chris question. Because of Emma difficulties in finding the right word, sometimes she needs more time to think to answer and somehow her answer is not in line with Chris question.

4. Overuse of nonspecific words
        In the data, the apraxia sufferer also uses nonspecific words that are sometimes unrelated to the question. In Excerpt 8 and 9, Emma replies Chris without clear meanings.

Excerpt 8
Chris   : What's your biggest wish?
Emma   : (silence)

Emma   : *Water*
Emma   : (laugh)
Chris   : Are you laughing at yourself?
Emma   : yeah
Chris   : That's a good wish
Emma   : yeah
Chris   : I get thirsty sometimes too
Emma   : Yeah
Chris   : Hey why were you laughing at yourself?
Emma   : *I said water*

Excerpt 8 shows that Emma can answer Chris' question, but it does not actually relate with the question. In this conversation, Emma is unable to explain more about why she laughs and answers the question that way.

Excerpt 9
Chris   : What is your favorite movie?
Emma   : Umm...
Emma   : (silence)
Emma   : *Pinchies*
Chris   : Is that something that's in the movie?
Emma   : Yeah
Chris   : What movie is that in?
Emma   : *Mr. Krabs*
Chris   : You love SpongeBob?
Emma   : Yeah

In Excerpt 9, giving a little bit out of the proper answer, Emma says *pinchies* and further *Mr. Krabs*. They are not completely wrong answer, but Emma does not give further information about those answers so it is little bit hard for the listener to connect her answers with the questions.

5. Omitting certain words
    In the data, it is also found that apraxia sufferer omits a word while speaking. In Excerpt 10, Kath omits a word that makes her sentence grammatically incorrect.

Excerpt 10
Chris   : What do you pray about?
Kath   *: I- I pr- pray for I not- I not scared- scared anymore*
Chris   : Kath, can you use your app for me?
Kath   : (typing "*Pray for I not scared anymore*")

In Excerpt 10, what Kath says and what she types are consistent, that is omitting *am*. The correct sentence should be *I **am** not scared anymore*, but in here, it can be seen that Kath omits the verb *am* which makes her sentence grammatically incorrect.

2. Verbal Communication Strategies

Based on the characteristics of expressive disorder in the previous section, there are some verbal communication strategies used by the speakers while communicating with Emma and Katherine. According to Faerch & Kasper (1983), the term "communication strategies" usually refers to the tools used by language learners to cope with their oral communication problems in order to achieve their communicative goals. While in speech or language disorder term, communication strategy is used by a person to communicate with speech or language disorder sufferers to achieve communicative goals. In this research, the focus is on analyzing verbal communication strategies that are found in the data.

Table 2: Verbal Communication Strategies

No.	Verbal Communication Strategies	Frequency	Percentage
1	Using Yes/No Question	35	46 %
2	Using simple sentence	23	30.2%
3	Praising	11	14.4%
4	Offering specific choices	7	9.2%
	Total	76	100%

Table 2 shows the strategies used by the speakers when communicating with the apraxia sufferers in the data. The table indicates that Yes/No question is most frequently used by the speaker. This may be caused by the difficulties faced by the Katherine and Emma to express their ideas in long sentences. Therefore, Chris uses his turns to give questions that can be directly replied and do not require elaborate explanations.

1. Using Yes/No question

In this type of question, the expected answer is either yes or no, that is, whether Katherine and Emma provide an affirmative answer to the question or give negative answer to the question. Yes/No question is characterized by an auxiliary verb followed by subject and verb. The use of Yes/No question by Chris can be seen below.

Excerpt 11
Chris   : *Do you remember music Fridays?*
Emma   : Yes
Chris   : What would happen on music Fridays?
Emma   : (silence)
Emma   : Great
Chris   : *Did you say great? Is that how you felt?*
Emma   : Uum…yes

Excerpt 12
Chris   : *Do you like telling your story?*
Emma   : Yes
Chris   : *Do you like people seeing you?*
Emma   : Yes

Chris   : *Do you like people hearing you?*
Emma   : Yes
Chris   : *Do you want everybody to know who you are?*
Emma   : Yes

In Excerpt 11 and 12, Chris uses this type of question to make it easier for Emma to respond to his questions and sometimes, he also uses this to confirm Emma's answer. Further, using yes/no questions apparently becomes a helpful technique for Chris to communicate with Emma as she does not have to say long sentences. It can also be seen that when Chris asks "What would happen on music Fridays?" Emma is only silent and unable to explain further. Therefore, Yes/No question is used to delve into Emma's feelings and needs.

2. Using simple sentence

Simple sentence is the type of sentence that consists of only one clause with a single subject and predicate. Simple sentences are used by Chris and Emma's mother because they are easier to understand. The use of simple sentence is shown below.

Excerpt 13
Chris   : *What's your biggest wish?*
Emma   : (silence)
Emma   : Water
Emma   : (laugh)
Chris   : *Are you laughing at yourself?*
Emma   : Yeah
Chris   : *That's a good wish*
Emma   : Yeah
Chris   : *I get thirsty sometimes too*
Emma   : Yeah

Excerpt 14
Chris   : *What's your name?*
Emma   : Emma
Emma's mom : *Do you tell Mr. Chris about your job?*
Emma   : Yeah
Chris   : *Where do you work?*
Emma   : Pet Paradise

Excerpt 13 and 14 show that Chris and Emma's mother use simple sentences when asking and responding to Emma. It can also be seen that Emma is able to respond to Chris and her mother's questions and statement although she mostly just affirms by saying yes.

3. Praising

When talking to Emma and Katherine, Chris expresses his approval of what they have said or done. He uses positive words such as *great, good,*

proud, and *cool* when responding to Emma and Katherine. The examples are provided in Excerpt 15 and 16.

Excerpt 15

Chris	: Would you like to talk about old memories or how we are today?
Emma	: Old memories
Chris	: Do you want to talk about our time in the classroom?
Emma	: Yes
Chris	: *I always had a great time when you were my student. You were an amazing student*
Emma's mom	: You had a way of bringing out this confidence in her that was astounding to me um i think that the three years that she spent with you she probably grew more than she had in the previous 12 years of her life it was amazing

Excerpt 16

Chris	: *Well, I'm proud of you for using your mouth. You communicate well I understand everything you're saying.* But remember, sometimes if you use your app, nobody is going to judge you for that either
Kath	: Yea
Chris	: *Anywhere you wanna go, we support you because you're pretty cool*
Kath	: Yea (nodding)

Based on Excerpt 15 and 16, praising Emma and Kath is one of Chris' communication strategies to communicate. Praising individuals with apraxia can help to boost their confidence so they feel encouraged do not become scared when they want to express their feelings. Praising is also used to give them appreciation because they want to try to speak, which is a challenging thing for them to do.

4. Offering specific choice

Another strategy used by Chris is by offering specific choices when Katherine and Emma feel difficulties in answering the questions. Giving choices helps to limit the options since giving broad answer in long sentences may be hard for people with apraxia to express. It helps to lessen the struggles faced by Katherine and Emma to speak.

Excerpt 17

Chris	: If somebody wants to be your friend what should they do?
Emma	: (silence)
Emma	: I don't' know
Chris	: If somebody wants to be your friend should they be *kind or mean*?
Emma	: (silence)
Emma	: Kind
Chris	: If somebody wants to be kind what should they do?
Emma	: I don't know
Chris	: *Ignore you or smile*?
Emma	: Smile

Excerpt 18
Chris   : Here we are two old friends hanging out, what would you like to talk about?
Emma   : (silence)
Emma   : I don't know
Chris   : *Would you like to talk about old memories or how we are today*?
Emma   : Old memories

In Excerpt 17 and 18, Chris changes his question if he finds that it is hard for Emma to answer it. Chris will change his question by giving two choices for Emma so that Emma can answer his question.

The analysis presented in the previous sections demonstrates that people with apraxia of speech in the data experienced expressive language disorders, with the most frequent characteristic is difficulty coming to the point, followed by limited vocabulary, word finding difficulties, overuse of nonspecific words, and omitting certain words. These characteristics are also found in Ersam, et al (2023); however, this research is different from Ersam, et al, in that the participant of this research demonstrates another characteristic, that is omitting certain words. Based on the analysis, individuals with apraxia know or understand what other people are talking about, but because they have problem in their motoric system, it is not easy for them to speak. This is in accordance with Setiyadi et al (2021), in which the participants produce errors but they can still communicate. Therefore, it can be said that people with apraxia understand everything, but it is difficult for them to communicate their thoughts by speaking.

In order to have a successful communication with the apraxia sufferers, non-apraxia sufferers in the data use some communication strategies. When the speakers see the apraxia sufferers unable to express their thoughts or feelings, they apply certain strategies. These strategies include using Yes/No question, using simple sentence, praising, and offering specific choices. This is also in line with Yuniari & Sudarmawan (2022), in which offering choice becomes one of the strategies to communicate with individuals who have expressive language disorder. The verbal communication strategies help these individuals to speak. Even though sometimes it is still difficult for them, these strategies can mostly help apraxia sufferers to respond to questions and express themselves.

CONCLUSION
Based on the analysis, the expressive language disorder characteristic that is mostly observed in data is difficulty coming to the point. As people with apraxia have motoric system problems, it is difficult for them to speak. Despite that, they still can comprehend what other people say. Therefore, it can be concluded that the brain knows what to communicate, but it struggles to execute the necessary speech movements. In short, individuals who have apraxia understand everything, but are difficult to deliver their thoughts in the form of speech. This research also finds that to facilitate communication between people with apraxia and non-apraxia sufferers,

non-apraxia sufferers use certain verbal communication strategies. The mostly used strategy is using Yes/No questions as they do not require elaborate or detailed answers. This research suggests that using the proper strategies, although not eliminating the difficulties entirely, can help people with apraxia to respond to questions and to express themselves. However, as this research only focuses on verbal communication strategies, further research may elaborate nor-verbal strategies to communicate with people with speech or language disorders.

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