Speech Abnormalities of Schizophrenic Character in Lost Transmission Movie: types and conditions

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Abstract. Research has demonstrated that speech abnormalities are one of the symptoms shown by patients with mental health disorders known as schizophrenia. This study examines the speech abnormalities in terms of types and conditions in adult male schizophrenic, as reflected by the main character in Lost Transmission movie. However, in this study, the data analysis of speech abnormalities was used based on the instrument of the Thought and Language Index to examine the types of language abnormalities, and this study employed the Thought, Language, and Communication scale in scrutinizing the conditions of speech abnormality occurrence. The researcher used a qualitative textual analysis from a movie transcript to address those issues. The study revealed that the types of speech abnormalities reflected by the main character of Lost Transmission movie were seven out of eight types. Additionally, this study discovered that speech abnormalities often occur for some possibilities, including delusions, hallucinations, thought disorders, and emotional instability.

Keywords: Types, Condition, Behavior, Schizophrenia, Speech abnormalities

1 Introduction

Humans frequently struggle to communicate for a variety of reasons, including mental disorders. Schizophrenia is one of the variations of a mental disorder whose symptoms can be seen in a variety of areas of human thought, language, and communication[1]. The brain state of schizophrenic patient's characteristic is the enlargement of the third ventricle and the extension of a reduction in brain volume, which may be related to genetic defects that result in susceptibility to schizophrenia[2]. Then there is a decrease in prefrontal gray matter volume and an increase in lateral ventricular and caudate nucleus volume. Those may be related to disease or additional environmental effects occurring exclusively in patients with schizophrenia. It also has an impact on a person's emotions, and social interactions. Schizophrenics frequently experience both positive and negative symptoms. Positive symptoms can be interpreted as the presence of symptoms that are more than they should be. It includes hallucinations (sensory experiences that occur in the absence of stimulation), delusions (inconsistent false beliefs), and thought disorders (unusual or dysfunctional ways of thinking). Negative symptoms refer to absence or dysfunction. It is associated with abnormalities in feelings and activities, such as flat emotions (limited emotional expression through facial expression or voice tone), decreased feelings of pleasure in daily life, and difficulties starting and maintaining activities.

Schizophrenics face challenges with language behavior as a result of their symptoms. Speech abnormalities are the most evident symptom of schizophrenia, which is characterized by disorganized thinking or a 'thought disorder'[3]. As the primary signs of schizophrenia, thought disorder or formal thought disorder (FTD) is a significant indicator of maladaptive social behavior when the speaker fails to obey the rules of communication that are employed to make the partner or listener more easily understand [4]. Formal thought disorder has been the subject of numerous studies. However, the difficulty derives from the clinical observation that the appearance of thought disorders depends on the form and content of the clinical interview[5]. Thus, Liddle et al. started to create a new, convenient instrument for assessing multi reliability, sensitivity, and factor structure, as well as determining slight differences that can be identified. Speech abnormalities classified into three categories based on their context[6]. First, there is a poverty of speech and a weakening of goals, indicating a lack of thought and speech. The *poverty* of speech appears when someone with schizophrenia exhibits a lack of speech, but there are many things to tell that the information is not transmitted completely. It falls under "poverty of speech" when a person uses brief phrases and doesn't provide others with additional information. Concerning that, weakening of goals is a lack of encouragement in thinking and ideas that result in the use of words that are not informative and convey little information in them. In this type, the main problem is that there isn't enough information compared to how many words were spoken. Second, the manifestation of mind and language disorganization, which is one of the features of schizophrenia disorder. Looseness can be discovered efficiently when a patient loses their idea. Liddle et al. [5] also support Andreasen's [4] opinion regarding the division of looseness such as tangentiality and derailment. This abnormality results from inadequate relationships between ideas or thought barriers that lead to the development of new ideas. Next, Peculiar Use of Words is a brand-new term coined by individuals with schizophrenia. Its meaning is proprietary to those individuals. The speaker must explain the word's meaning to the listener because it does not occur in a dictionary. Further, Peculiar Sentences, where the sentence structure produced is unusual and ungrammatical, encourage the speech to be difficult to understand. Eventually, *Peculiar Logic* is a speech pattern in which the patient believes he reached a logical conclusion between two unreasonable or illogical clauses. It is clear from the explanation of Liddle's thought and language index that it is a theory based on the speaker. Third, Liddle asserted that two general abnormalities in speech and thought rules exist, perseveration and distractibility. Perseveration of Ideas is the visual stimulation unbothered condition that inflicts the unnecessary repetition of ideas or topics. Distractibility, on the other hand, occurs as the result of visual stimulation or when the human brain receives external impulses that lead to bizarre beliefs. As a result, the topic of the conversation shifts abruptly. In addition to the types mentioned by Liddle^[5], Andreasen^[6] describes a condition inside the instrument of thought, language, and communication (TLC). Andreasen[6] divided the item of language behavior into three types. First, a thought disorder is a mental condition characterized by abnormalities and disruptions in the mind; some instances of these disorders are poverty of speech and illogicality. Second, a language disorder is a specific disorder in which speech disobeys semantic and syntactic rules, such as incoherence, clanging, and neologisms. Third, communication disorder is a condition in which the speaker fails to convey information due to various factors such as speech pressure, speech content deficiency, distraction, tangentiality, and others. Related to the schizophrenia and language, several previous studies have examined this area such as a study about speech abnormalities in individuals with schizophrenia (Hasanah, 2020; Irfadina, 2021; Dewi et al., 2022) [7], [8], [9]; pragmatic analysis of speech actions in people with schizophrenia Thamrin[10]; and the influenced of schizophasia to the understanding of any certain linguistic problem in text coherence in schizophrenic patients with severe schizophrenia[11]. However, in this study, the data analysis of speech abnormalities was used based on the instrument of the Thought and Language Index by Liddle et al.,[5] to examine the types of language abnormalities, and this study employed the Thought, Language, and Communication scale by Andreasen[4] in scrutinizing the conditions of speech abnormality occurrence. This paper aims to examine speech abnormalities in terms of types and conditions in patients with mental health disorders known as schizophrenia, as reflected by an adult male in the main character in Lost Transmission Movie. The research can serve as a reference to comprehend and obtain information from psycholinguistics about the symptoms or effects of schizophrenia, most of which are speech abnormalities. In addition, it is also an attempt to help improve awareness of mental disorders, schizophrenia.

2 Method

This research used a qualitative textual analysis from a movie transcript to address the issue of the speech abnormalities reflected in the types and conditions in patients with mental health disorder. The subject to be analyzed is the main character of the Lost Transmission movie, released in 2019. The data taken from a transcription of a movie produced by Theo Ross as the main character suffering from acute schizophrenia. The minutes and seconds in the movie are adapted to identify the data collected by the researcher. In other words, Theo's utterances showed some inventiveness in word production, and it demonstrated the classification of the categories of speech abnormalities. The data analysis was conducted based on the instrument named the Thought and Language Index (TLI) designed by Liddle et al., [5] as used to examine the types of language abnormalities, and this study employed the instrument of the Thought, Language, and Communication (TLC) scale by Andreasen (1979) [4] to identify the condition of speech abnormalities. There were three stages carried out in this study in analyzing the conversation data. The first step was to identify all forms of data in conversations that indicate speech abnormalities. The second stage was to classify the type of speech abnormalities such as poverty of speech, weakening of goals, looseness, perseveration of an idea, distractibility, peculiar words, peculiar sentences, and peculiar logic, based on Thought and Language Index (TLI). The third stage was to explain the patient's condition at the time the speech abnormality occurs.

3 Results and discussion

This section presents data on the findings of various types of speech abnormalities and the condition of the schizophrenic. The following table presents a summary of the number and types of the speech abnormalities. According to the Thought and Language Index (TLI) designed by Liddle et al., (2002), the description of findings data was categorized into eight types, which will be discussed below.

Types	Data	Number	
Poverty of Speech	LT.20.43	10	
Toverty of Speech	LT.21.13	10	
	LT.21.35		
	LT.25.38		
	LT.25.42		
	LT.25.45		

 Table 1. A summary of the types of abnormalities

LT.26.59		
LT.34.02		
LT.1.22.25		
LT.1.22.29		
LT.44.52	3	
LT.1.16.10		
LT.1.31.43		
LT.43.32	4	
LT.43.37		
LT.44.52		
LT.51.00		
LT.09.39	8	
LT.13.14		
LT.13.59		
LT.21.57		
LT.22.59		
LT.25.36		
LT.36.24		
LT.50.07		
LT 11 05	3	
	5	
-	0	
LT.33.28		
	7	
LT.44.43	·	
LT.44.52		
LT.50.07		
LT.51.00		
LT.1.10.58		
LT.1.16.10		
	LT.34.02 LT.34.02 LT.1.22.25 LT.1.22.29 LT.44.52 LT.1.16.10 LT.1.31.43 LT.43.32 LT.43.37 LT.44.52 LT.51.00 LT.09.39 LT.13.14 LT.13.59 LT.21.57 LT.22.59 LT.25.36 LT.36.24 LT.50.07 LT.11.05 LT.27.02 LT.1.10.58 -	LT.34.02 LT.1.22.25 LT.1.22.29 LT.44.52 3 LT.1.16.10 LT.1.31.43 LT.43.32 4 LT.43.37 LT.44.52 LT.51.00 LT.09.39 8 LT.13.14 LT.13.59 LT.21.57 LT.22.59 LT.25.36 LT.36.24 LT.50.07 LT.11.05 3 LT.27.02 LT.11.058 - - 0 LT.33.28 1 LT.25.11 7 LT.44.43 LT.44.52 LT.50.07 LT.51.00 LT.10.58

In regard to the limit of the paper, this study presented two examples for each type.

Poverty of Speech

LT.21.13

Hannah: Where's your car? Why don't I drive you to it? Theo: (No response) Hannah: Theo? Theo: Yes, love?

In data LT.21.13, Hannah picks up Theo who looks nervous and confused then makes Hannah ask. However, Theo did not respond and behaved strangely. In this scene, Theo shows the poverty of speech due to his mental condition. He began to show symptoms that occur in people with schizophrenia, namely, formal thought disorder.

LT.25.42

Hannah: Theo, please, can you turn that down? It's really loud! Please turn it down. Theo: (no response) Theo was experiencing such hallucinations and delusions that he felt the radio was transmitting a signal. This resulted in the emergence of poverty of speech where he did not respond to what Hannah said. The researcher discovered numerous sorts of poverty of speech performed by Theo Ross. Poverty of speech that occurs is the impact of the symptoms of schizophrenia that affect the quantity of speech sufferers.

Weakening of Goals

LT.44.52

Frankie: Theo, Theo, please stop!

Theo: Get off me you slut! We all know you're not pregnant. Someone stuck a fucking bomb up you. They should take you to a field and detonate you somewhere.

This scene demonstrates the weakening of goals when Theo feels betrayed by his friends who intend to send him to a mental hospital. The words uttered by Theo were intended for his friend who was pregnant. In the depressed state, Theo frequently showed the difficulty in conveying the content of his message. He uses words that are uninformative and meaningless.

LT.1.31.43

Wendi: I'll be okay, I'll come to you there. Theo, please. Please do this for me. The only way we can be together is if you go into the hospital. And we can generate time from there.

Theo: You're lying to me. You broke my fucking heart. You and me, we could've done it, you know, we, we could've stopped the world from c-crumbling apart and, and stopped all the bad men from ruling and t- taking everything and everybody hating and killing each other. You and me could've done it, but we fucking didn't. And now that chance is gone. It's fucking gone, i..t-time is speeding up, a-and, and we-we're just racing towards the end, and it's just going to get worse. Until the planet dies. And all the animals and all the beauty and all the life is just gone. God, it's just going to be over. I don't even know why I'm trying to stay alive anymore.

In that scene, Theo displayed the weakening of goals. Where the information conveyed is very meaningless. In this speech abnormality, the average patient experiences a condition where he wants to express his heart out loud, which results in a weakening of goals.

Looseness

LT.51.00

Theo: I can't go, I can't leave because I can't leave my wife. Hannah: What wife? Theo: They won't, they won't let us be together yet. Her father, her, her, her father is time of the little things. She is the princess of time. I am time of the sea mammals. It's not ea... I, I... It's not easy to explain, I can't just...

In this instance, Theo reacted emotionally and impulsively to Hannah's statements. Theo reacts with unrelated words such as "They won't, they won't let us be together yet.". Considering the conditions, it is classified as looseness. Theo's imagination was out of control, and he believed that someone was trying to do something with his imagined wife, who is the princess of time.

LT. 43.32

Rudy: Theo, give me the card. [Theo stand up suddenly] Theo: Close your eyes. Blink backwards. You can't follow me down the tube, it's too slippery.

Theo has been visibly loose since he suddenly walked out and started talking to his friends who needed his card. Hallucination and delusion impacted Theo's reactions. Additionally, it demonstrates how Theo's negative symptoms affected his ability to think and talk. Due to his schizophrenia symptoms, Theo is unable to control his words because of the lost control over the flow of ideas.

Perseveration of Ideas

LT.21.57

Hannah: Are you sure it's the right key? Theo: Yeah, it's the right key. It's the right key. It's definitely the right key.

In this case, Theo responded with the repetition of unnecessary words. From the context, it is categorized as perseveration of ideas because he had the repetition of identical words to answer Hannah at that time. The perseveration of ideas occurs when Theo feels pressured by the situation which results in the repetition of words or sentences.

LT.36.24

Hannah: Fine, then we're not going. Theo: You... All right, look, you... I'll take, I'll take, I'll take the pill and then... Okay, give me the pill. All right. [Theo clears throat] Theo: Uh-huh, can we go now? I'm sorry, I'm, I'm sorry, God.

Congruous with the previous explanation, Theo felt pressured, and with that came the perseveration of ideas. The researcher concluded that the patient's condition influences speech abnormalities.

Distractibility

LT.11.05

Hannah: I, I've been on antidepressants since I was, like, 22, so it just, just shuts that part of me off, makes me a bit numb, you know? Sounds good when it's up here. I like it like this. Theo: Where'd you get these scars? And here?

In that scene, Hannah was seriously talking about her past. However, Theo didn't listen and only glanced at Hannah's hand. It produces distraction and switches the topic of the conversation to the scar. The switch in subject results from an idea that is stimulated by something else. This is one example of the type of speech abnormality, distractibility.

Peculiar Sentence

LT.33.28

Theo: Do you have any fly pie?

Hannah: What? No, that's gross. Theo: My mom used to make it. Hannah: Really, you like real flies? That's disgusting. Theo: No, raisins. I thought the flies were like... Oh, no, I meant, uh, the raisins were like flies.

In this situation, Theo asked Hannah an odd question "Do you have a fly pie?". He said those unnecessary sentences and it was difficult to discern the purpose. From the context, it is categorized as a peculiar sentence. He gave a response that was difficult to comprehend due to his disorganized thinking. The sentences appear because Theo got hallucinations and delusions in this scene.

Peculiar Logic

LT.1.10.58

[Doctor drawing]

Theo: That's the symbol for the society. How do you know about that? Are you a member? Cause I, I haven't seen you before. And we need to debrief you. Those feather pricks have been trying to stop me from erasing all the negative energy that's accumulated in the world, from all the terrible events throughout history.

The dialogue occurred when Theo was interviewed in the mental hospital after being caught breaking. The doctor used the LEAP method (listen, empathize, agree, and partner). Its purpose is to rebuild trust and trust enough to listen to your advice. Theo believes that the doctor is also part of his society. Unknowingly, Theo said something suddenly and illogically.

4 Conclusion

Based on the data findings, the researcher concluded that the schizophrenic's significant issues are difficult to properly transmit and receive information. The symptoms of schizophrenia themselves have some significant impacts on the schizophrenic's language abilities. The Schizophrenic's Imaginate world frequently causes people to get perplexed and requires them to repeat themselves in order to prevent misunderstandings. This demonstrates how speech impairments prevent schizophrenia patients from communicating effectively. In this study, the researcher shows some severe problems with speech. It can be characterized by the types of speech abnormalities reflected by the main character of Lost Transmission movie were seven out of eight types; poverty of speech, weakening of goals, looseness, perseveration of idea, distractibility, peculiar sentence, and peculiar logic. Among the various types, the researcher found that the poverty of speech had the highest number of speech abnormalities. Meanwhile, the researcher was unable to find the peculiar words because the subjects in this study used words that were understood and known by the interlocutor. In addition, this study also discovered that speech abnormalities often occur for some possibilities, including delusions, hallucinations, thought disorders, and emotional instability.

References

[1] Kuperberg, G. R.: Language in schizophrenia part 1: an introduction. Vol. 4(8), pp. 576-589. Language and linguistics compass. (2010). https://doi.org/10.1111/j.1749-818X.2010.00216.x

[2] Staal, W. G., Hulshoff Pol, H. E., Schnack, H. G., Hoogendoorn, M. L., Jellema, K., & Kahn, R.: Structural brain abnormalities in patients with schizophrenia and their healthy siblings. Vol. 157(3), 416-421. American Journal of Psychiatry. (2000).

[3] Kuperberg, G. R.: Language in schizophrenia Part 2: What can psycholinguistics bring to the study of schizophrenia... and vice versa?. Vol. 4(8), pp. 590-604. Language and linguistics compass. (2010). https://doi.org/10.1111/j.1749-818X.2010.00217.x

[4] Andreasen, N. C.: Scale for the assessment of thought, language, and communication (TLC). Vol. 12(3), pp. 473–482. Schizophrenia Bulletin. (1986). https://doi.org/10.1093/schbul/12.3.473

[5] Liddle, P. F., Ngan, E. T., Caissie, S. L., Anderson, C. M., Bates, A. T., Quested, D. J., ... & Weg, R.: Thought and Language Index: an instrument for assessing thought and language in schizophrenia. Vol. 181(4), pp. 326-330. The British Journal of Psychiatry. (2002). https://doi.org/10.1192/bjp.181.4.326

[6] Andreasen, N. C.: Thought, language, and communication disorders: I. Clinical assessment, definition of terms, and evaluation of their reliability. 36(12), pp. 1315-1321. Archives of general Psychiatry. (1979). doi:10.1001/archpsyc.1979.01780120045006

[7] Hasanah, I.: Speech Abnormality of The Schizophrenic Character in Middle School Movie. In a Doctoral dissertation, Universitas Islam Negeri Maulana Malik Ibrahim. (2020). Retrived from http://etheses.uin-malang.ac.id/20649/1/16320203.pdf

[8] Irfandina, R. H.: Speech Abnormality of The Schizophrenic Main Character in Fractured Movie. In A Thesis of English Literature Department, Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang. (2021). Retrived from http://journal.uinsgd.ac.id/index.php/jcall/article/download/17496/7567

[9] Dewi, K. A. S., Yadnya, I. B. P., & Mulyawan, I. W.: Speech Comprehension Impairment in Schizophrenia. Vol. 1(8), pp. 2362-2369. ULIL ALBAB: Jurnal Ilmiah Multidisiplin. (2022). https://doi.org/10.56799/jim.v1i8.510

[10] Thamrin, Husni.: Speech Act of a Person with Mental Disorders: A Clinical Pragmatic Analysis. Proceedings of the 3rd International Conference on Language, Literature, Culture, and Education (ICOLLITE 2019), 314-318. (2020). https://doi.org/10.2991/assehr.k.200325.103

[11] Czernikiewicz, A., Woźniak, T., Błaszczak, A., Izdebska, M., Łysoń, E., Ornat, M., & Telenkiewicz, A.: Diagnosis and Construction of Speech Coherence Disorders in Schizophasia. Vol. 20(3), pp. 187-197. Current Problems of Psychiatry. (2019).