SPEECH DISORDER OF STUTTERING CHARACTER IN ROCKET SCIENCE MOVIE

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Abstract

Stuttering is a speech disorder in which repetition and prolongation of syllables, sound, and phrase interfere with fluency. Someone who experiences stuttering will have a hard time to start the word because of disruption in repetition, vocals and articulation involve the throat, palate, tongue, lips, and teeth. Stuttering may be worse when the person is excited, tired or under stress, or when feeling self-conscious, hurried or pressured. A situation such as speaking in front of a group or talking to the phone can be particularly difficult for people who stutter. As a reflection of real life, a movie can also contain the phenomena of stuttering such as in Rocket Science movies. This research aimed to describe the types of stuttering and also the consequences of being stuttering in social life that experienced by Hal Hefner in Rocket Science movies. This research was conducted by using content analysis qualitative method. The data were generated from movie and movie script in the form of utterances, dialogues, words, and conversations. The result of this research shows that there are ninety-five data which are indicated as the types of stuttering experienced by Hal Hefner in Rocket Science movie. Besides, it was also found the consequences of being stuttering in social life experienced by Hal Hefner in the movie. The researcher shows that there are twelve data of consequences that the researcher found in the movie. The most common consequence that the researcher found in the film is fear to talk.

Keywords: Speech Disorder, Stuttering, Types of Stuttering, Consequences

Abstrak

Gagap adalah gangguan berbicara yang mana terjadinya pengulangan dan perpanjangan suku kata, suara, dan frasa yang dapat mengganggu kefasihan. Seseorang yang mengalami gagap akan mengalami kesulitan untuk memulai kata karena gangguan dalam pengulangan, vokal, dan artikulasi yang melibatkan tenggorokan, langit-langit mulut, lidah bibir, dan gigi. Gagap akan lebih buruk ketika bersemangat, lelah atau dibawah tekanan, atau ketika merasa sadar diri, tergesa-gesa atau tertekan. Situasi ketika berbicara didepan kelompok atau

**Keyword:** Gangguan Berbicara, Gagap, Tipe-tipe Gagap, Konsekuensi

### A. INTRODUCTION

Psycholinguistics is a study of mental processes in language use. Hence, psycholinguistics studies the role of the brain in language matters (Harley, 2001) It includes three matters, i.e. language acquisition, language comprehension, and language production. Language acquisition is the study of mental processes to get language itself. Language comprehension is the study about the mental process of humans to comprehend language. Language production is the study about mental process that enables human to articulate language.

The speakers are disfluent at times, especially under certain conditions, such as nervousness, stress, fatigue or complexity of language. This disfluent phenomenon is caused by either speech errors or speech disorders. One example of a speech disorder is stuttering. People, who stutter, generally have more disfluencies and different signs than other speakers do.

Basically, people speak without interference or inability to produce language. However, if someone is experiencing interference and the inability to produce language it is a stutter. Stuttering is a speech disorder that interferes with a person's ability to speak fluently. It can involve the repetition, prolongation, or blockage of sounds, syllables, or words (Scott, 2010).

One phenomenon of stuttering is manifested in a movie entitled Rocket Science. The researcher thinks that Rocket Science is interesting to be the object of the research because of three reasons. Firstly, this movie clearly tells about stuttering phenomena which tells the characteristics of someone who stutters. Second, this movie also tells about the stuttering phenomenon that tells the consequences that stutterers get from their social lives and how stuttering sufferers face his fears when speaking in public. Third, how the environment around a stutterer can help him reduce his stuttering by using some speech therapist method. Since the movie tells about the phenomena of stuttering, kinds
of speech disorder, which is under the field of psycholinguistics, the researcher is interested to explore and analyze the phenomena of stuttering suffered by the main character in Rocket Science movie.

The objectives of this research were to identify the types of stuttering that experienced by stuttering character and to identify the consequences being stuttering character in the social life of the communication in the Rocket Science movie. It was expected that this research can inspire another researcher to analyze stuttering in linguistics point of view. Hopefully this research can be a reference for future researcher.

B. THEORETICAL BACKGROUND
1. Psycholinguistics
   Aitchison (2003) state that psycholinguistics is a branch of science that combines two scientific disciplines, namely psychology and linguistics. This relates to the relationship between the human mind and language when examining the processes that occur in the process while producing those who understand written and oral discourse. How people process this phenomenon in their brain is not merely about the description of producing and presenting language, but also about the description of what has been learned as the background that has been interpreted.

2. Speech Disorder
   Lanier (2010) states that speech disorder is a condition in which a person has problems creating or forming the speech sounds needed to communicate with others. Speech disorder can affects the way person talks. A person who has speech disorder actually knows what they want to say but is constrained in producing a sound so affecting in the fluency of language. This certainly gives effect on how someone speaks. Speech disorder can occur in all ages, from children to adults.

3. Fluency Disorder
   (Lanier, 2010) states that a fluency disorder is a relationship between smooth and rhythm in speaking. A person with a fluency disorder usually always repeats the word and lengthens a voice, a word, a sentence. Types of fluency disorder are stuttering and cluttering, but stuttering, the most common fluency disorder

(1)Cluttering
   Kissagizlis (1992) states that cluttering is a disorder of fluency characterized by two strands of breakdown: those relating to motor speech and those relating to linguistic variables. Individuals with cluttered speech often report that their listeners have difficulty understanding them, and attribute this to factors such as their rate of speech, the clarity of their speech, and/or the organization or relevance of their message.
(2) Stuttering

Sleeper (2007) states that Stuttering is a speech disorder in which repetition and prolongation of syllables, sound, and phrase interfere with fluency. Someone who experiences stuttering will have a hard time to start the word because of disruption in repetition, vocals and articulation involve the throat, palate, tongue, lips, and teeth. Stuttering may be worse when the person is excited, tired or under stress, or when feeling self-conscious, hurried or pressured. A situation such as speaking in front of a group or talking to the phone can be particularly difficult for people who stutter. Hedge and Davis (2009) divided types of stuttering into 3 they are:

a. Repetition

Repetition is a common types that happen when units of speech experience repetition of words that are not very common or very numerous. Dealing with repetition Hedge and Davis categorize repetition into 3 types:

(i) Part-word Repetition

Word repetition is a repetition that occurs in several parts of a word rather than the whole word when someone makes disfluency in his/her utterance.

(ii) Whole-word Repetition

Whole-word repetition is a repetition of a single word rather than a part of words when someone makes disfluency in his/her utterances.

(iii) Phrase Repetition

Phrase repetition is a repetition of a group of words with or without of finite verb.

b. Sound Prolongation

Sound prolongation is a phenomenon where the unit speaks unnaturally prolonged or lengthened. The prolonged unit is usually the first sound of a syllable or word. This happens when the articulator cannot move from the first voice position to the next.

c. Block (Silent Pause)

Block is a complete stop of speak which is caused by the inappropriate cessation of sound. In other words, block is a condition where you cannot say any sound even if you have the intention to speak.

4. Consequences of being Stuttering in Social Life

Stuttering is a smooth speech disorder that mostly occurs in childhood and its prevalence is around 1% of the total population. Stuttering includes various forms of unintentional disturbances in speech such as syllable repetition, prolongation, blocking sounds, substitution, and avoidance of words. This speech disorder is a communication and social problem, which has a negative impact on mental and emotional health and various aspects of adult life. Therefore, in most people who stutter, daily activities are affected and in some cases, stuttering causes problems in communication during speaking activities including making calls or speaking in front of other people. And most often, communication problems will occur in various activities at school, at home or at work (Kasbi, 2014).
According to Dickson (cited in Hundsaker, 2011) Stuttering that lasts for years is very annoying because it can affect how well a person adjusts to the environment and the social situation outside the home. Adults who experience sustained stuttering often experience difficulties with social interactions because they are embarrassed by their inability to speak fluently. From the explanation above, Dickson (cited in Hundsaker, 2011) divided several consequences being stuttering in communication into 4 types, they are fear to talk, failure in communication, mocked or bullying, and hard to get friends or partners.

a. Fear to Talk
Most people talk without much difficulty most of the time. It is true that people hesitate and stumble over words at times, especially when under stress or fatigue, but they show little concern over such mistakes. However, people who stutter overreact to their mistakes. They were afraid that it would happen become tense and felt helpless. As long as the tension is so high, the flow of speech stops or won’t start.

b. Failure in Communication
Communication is a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior. Communication refers to any verbal or nonverbal behavior that influences the behavior, ideas, or attitudes of others (West, 2010). However, who stutter people must have an indicator that makes them fail in communication with people. The first indicator is nervousness. Nervous which causes stutterers to experience communication failure is not being able to complete what they want to convey, because the mouth becomes heavy to talk when talking to others so there is a reluctance to express opinions while in a discussion forum. The last indicator is to avoid answering questions. This is because stutterers difficult to find the right words or look for words that do not make them stutter. So, they are difficult to answer questions quickly and clearly.

c. Mocked or Bullying
Bullying can take many forms, can be directed at anyone, and seems to come from anyone. Bullying can be intentional, vindictive, open or can be more covert, such as a degrading view or patronizing tone in someone’s voice. Bullying can be physical, verbal, intimidation, or it may be nothing more than social alienation. Stuttering children only consist of a small group of children who are ridiculed. However, most of these people were intimidated because of the difference in their speech. The type of bullying that occurs most is imitation and calling names (Roth and Beal, 1999).

d. Hard to get Friends or Partners
Stuttering can affect one’s employment opportunities, other people’s perceptions, self-image, relationships with peers and intimate relationships. Dickson (cited in Hundsaker, 2011) states that an individual who stutters are viewed as less desirable romantic partners and friends. Therefore, stutterers are often lonely and do not have friends or partners. They also feel that no one wants to be friends with them because of this disfluency.
C. RESEARCH METHOD

In this research, the method used is qualitative research. According to Creswell (1988) Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reported detailed views of information, and conducts the study in a natural setting. Other than that, the approach use in this research is content analysis. Content analysis is a systematic technique to analyze content and process of message; or a tool for observing and analyzing the content of open communication behavior of selected communicator (object of the study). In the case of this study, the content analysis can be interpreted as a observational tool to examine the object through communication behavior towards others. The researcher use qualitative content analysis in order to identify the speech disorder experienced by the stuttering character through the systematic process.

There are some processes in analyzing the data in this research based on Cullen (2007). First, the researcher identified and classified the utterances based on the signs and symptoms of stuttering and the consequences of being stuttering in social life. Second, the researcher encoded them by using Hedge and Davis and Dickson’s theories and some of inappropriate data sorted out. Third, the researcher put data into data sheets by using codes to simplify the signs and symptoms and consequences that used of the data. The arrangements of the codes used in the data are data number, the signs and symptoms stuttering, the consequences of being stuttering, and the duration of the dialogue that shows stuttering utterances. Next, the researcher re-examined the signs and symptoms and the consequences of stuttering to determine how they are linked. And then, the researcher described the data based on those signs and symptoms and the consequences of being stuttering. Furthermore, the researcher re-checked and re-read the data again to make sure there are no mistakes. Finally, the researcher made a conclusion. The researcher presented the table that shows the codes of data which can help the researcher to identify the data.

<table>
<thead>
<tr>
<th>Types of Stuttering</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part-word Repetition</td>
<td>PW</td>
</tr>
<tr>
<td>Whole-word Repetition</td>
<td>WW</td>
</tr>
<tr>
<td>Phrase Repetition</td>
<td>PH</td>
</tr>
<tr>
<td>Sound Prolongation</td>
<td>SP</td>
</tr>
<tr>
<td>Block (Silent Pause)</td>
<td>BL</td>
</tr>
</tbody>
</table>

Table 1. The Types of Stuttering
Table 2. The consequences of being Stuttering in Social Life

<table>
<thead>
<tr>
<th>Consequences of being Stuttering</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear to Talk</td>
<td>FtT</td>
</tr>
<tr>
<td>Failure in Communication</td>
<td>FiC</td>
</tr>
<tr>
<td>Mocked or Bullying</td>
<td>MoB</td>
</tr>
<tr>
<td>Hard to get Friends or Partner</td>
<td>HtgFP</td>
</tr>
</tbody>
</table>

In addition to the code above, the researcher also used page of script and time of the scene as coding.

Table 3. Other Coding of Data

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page</td>
<td>PG</td>
</tr>
<tr>
<td>Scene</td>
<td>SN</td>
</tr>
<tr>
<td>Data</td>
<td>D</td>
</tr>
</tbody>
</table>

D. FINDINGS AND DISCUSSION

1. Types of Stuttering

In this part, the researcher discusses about the types of stuttering. Based on Hedge and Davis's theory, there are three types of stuttering that usually occur in the stuttering phenomena. They are repetition, which consist of three subtypes they are: part-word repetition, whole-word repetition, phrase repetition; sound prolongation and block (silent pause). But in this research, the researcher only found two types of stuttering that experienced by the stuttering character in the movie.

(Hal goes to Ginny's house, he knocks the door and Ginny's Mom opens the door for him).

Hal Hefner: Mas- mas uh masturbation is a natural precursor of adult sexual development and it should be unfettered in a child's learning. Johnson, '98.

Ginny's mom: Her plans changed. Virginia says to keep on working Hard and she'll call you to let you know when you should come on over.

(D39/PW/SN 00:43:43-00:43:57/PG.41)

The conversation above happened when Hefner goes to Ginny's house, he knocks the door and Ginny's Mom opens the door for him. Hal tried to train debate material with Ginny's mother, and he also hopes that he can meet Ginny. But Ginny's mother said that Ginny would meet him later.

In that dialogue, Hefner repeats the part word “mas” from the word “masturbation” several timers. Repetition in this dialogue occurs because he hurriedly conveyed what he wants to say. Stutterers who speak in a hurry can make it worse, because the brain and its verbal organs do not connect properly, so that when the brain sends a signal to say what it wants to say but the verbal organ...
of a stutterer will be very difficult to convey what is actually conveyed by the brain so that the disability occurs.

Hal Hefner : Good afternoon, esteemed opponents from Glen Rock. Good afternoon. Let’s get our... let... let’s, uh let... let let’s get, uh, down and... down and down and dirty, shall we, with this this thing-this thing-this thing-I’ll call our plan. Excuse me, I’m... I’m I’m I’m I’m really sorry.

(D44/PH/SN 00:52:36-00:53:08/PG.49)

The dialogue above happened when Hefner in the debate competition. Before the dialogue above happened, he wants time to rest to the jury because he was very nervous. After Hefner During his rest time, Hefner called his speech therapist and asked for advice for him to speak fluently and not be nervous when public speaking. After that, he returned to the debate room to continue the Affirmative opening. But, he could not convey the standard affirmative opening smoothly. Therefore, he apologized to the judge and the opposing team, and then he left the room leaving Hector who is still in the room. In that data, Hefner repeats the phrase “this thing” several times. Phrase repetition occurs because repetition that happens in all the group words including a sentence can be called a phrase. The repetition in this scene happened because Hefner feels strange and nervous when delivering his Standard Affirmative Opening in front of the judge, and the opposing team.

2. Consequences of being Stuttering in Social Life
(In the debate’s class, Hefner joins with Ginny’s Team to fight another team, then coach Lumbly asks Hefner to speak up).

Coach Lumbly : Now Hal Hefner wows us with his Second Affirmative, another eight-minute speech boiled down here to 10 seconds.

Hal Hefner: (Hefner stands up to speak up but it’s so difficult to get the words out) Uh Uh the...

Ginny (She stands up and taje Hal’s position to speak up and let Hefner to sit down): I'll be handling Hal Hefner’s crossex and rebuttal until the first actual debate tournament against other actual schools. Until then, he will be my silent partner. Hal Hefner, sit down.

(D05/FT/SN 00:36:01-00:38:52/PG.37)

In the data above, Hefner knows exactly what he wants to say. Everything he had learned was already in his brain but there was no word coming out of his mouth. In this scene above, fear to talk happened because he was fear to talk, fear to say his arguments in front of class, and he was felt nervous to be in front of the class and public speaking, therefore he only said "uh" and followed by words "the" because of things he felt unsure of what he wanted to say. In this case, the indicator
that causes Hefner’s fear to talk in public speaking is nervous, which causes him to vibrate his lips when he makes disfluency on his utterances.

(There is a discussion class in the hall room which are followed by Hefner’s classmates. When the discussion class begins, the teacher who acts as Abraham Lincoln points Hefner answer and express his idea in front of his classmates).

Abraham Lincoln : (begin to ask Hefner who stands up near with her) What cannot a house divided against itself do? It is this argument that will lead me to victory.

Hal Hefner : What cannot it do? Uh it it...

(The teacher who acts as Abraham Lincoln asks again to Hefner).

Abraham Lincoln : Hold it further away from your mouth. What cannot a house divided do?

Hal Hefner : It can’t... can’t can’t can’t Mr. President... a house divided can’t...

Abraham Lincoln : Some Help from the citizenry?

Hal’s Classmate : I can’t stand, I thought it would shit itself. (with gesture as if mocking Hefner because it is disfluent when speaking)

(D02/MoB/SN 00:08:49-00:12:44/PG.13)

The data above, show that when Hefner was in theater class. The theater class is presenting stories from Abraham Lincoln. A teacher who acts as Abraham Lincoln told Hefner to go to the stage and finish the dialogue. However, Hefner could not continue the dialogue because he was too nervous in public speaking. In this situation, Hefner’s classmates saw Hefner on stage by showing a face as if to mock Hefner because he has speaking trouble. Moreover, one of Hefner’s classmates expressed his opinion that he could not wait for Hefner to finish his dialogue and also to show his face as if to mock Hefner and other classmates bully Hefner and laugh at him.

3. Discussion

Based on the data funding, the researcher found that Hal Hefner experienced two types of stuttering, namely: repetition that divided into three subtypes: part-word repetition, whole-word repetition, phrase repetition; and block (silent pause). The one type that the researcher does not found in the movie is sound prolongation. The reason why this one not experienced by Hefner because Hefner always uses some pause rather than prolongs or lengthens his syllable when he makes disfluency. Therefore, he also does part-word repetition rather than sound prolongation.

This research does not stop in categorizing the types of stuttering however, the researcher also going identifying the consequences of being stuttering in the social life experienced by Hal Hefner in the movie. According to Dickson (cited in Hundsaker, 2011) consequences being stuttering in communication divided into four types of consequences they are: fear to talk, failure in communication, mocked or bullying, and hard to get friends or partners. But the data of hard to gets friends
or partner does not found in the movie. The reason why this consequence not found because in the movie, because Hefner who is a stutterer has had several friends who accept him for whom he is, and also Ginny who is Hefner's partner in the debate at his school was the person who first recruited Hal Hefner to become a partner in a school debate.

E. CONCLUSION

Firstly, in Rocket Science movie, Hal Hefner experienced two types of stuttering. They are repetition that divided into three sub-types part-word repetition, whole-word repetition, phrase repetition; and block (silent pause). Whereas block (silent pause) is the most frequently experienced because Hal Hefner usually block sound or silent pause when he makes disfluency in his utterances, and part word repetition is the least frequent experienced by Hal Hefner because he usually repeats whole-word than part-word when he makes disfluency in his utterances. In this research, the researcher found no data on sound prolongation. The reason why the data of sound prolongation was not found in the movie because of Hefner always uses some pause rather than prolongs or lengthens his syllable when he makes disfluency. Therefore, he also does part-word repetition rather than sound prolongation. Second, Hal Hefner experienced three consequences. They are fear to talk, failure in communication, and mocked or bullying. Whereas failures in communication and mocked or bullying are equally common in people who stutter because they will have difficulty in speaking and delivering what they want directly. The cause of this is uncertainty and nervousness that causes stutterers cannot finish what they want to say. People who stutter also have other consequences such as being mocked and bullying by people around them. This happens because people around stutterers will think people stutter freaks, so because of that they mock stutterers with imitation to speak stuttering. In this research, the consequences of hard to get friends or partners the data did not found in the movie because Hefner feels that he doesn't need friends or partners as other normal people want. The only thing he wanted and needed was how he could speak fluently when debating in front of the class or on stage.

REFERENCES


