

CHAPTER I

INTRODUCTION

The first chapter in this research presents the introduction about research background, statement of problem, research objective, research significance as a theoretical and practical description of the research, and definition of key terms.

1.1 Research Background

Down Syndrome is a developmental disorder caused by excess chromosomes, which are structures in the cell nucleus that contain genetic material. This genetic disorder generally affects physical and cognitive conditions. Therefore, the most individuals with Down Syndrome are considered to have severe intellectual disability, operating at a significantly below-average cognitive level (Evans & Martin, 2009).

Kendler (in Carrol, 1986) reveals that individuals with Down Syndrome have varying levels of intelligence, ranging from mild (with IQ between 53-68), moderate (with IQ between 36-52), severe (with IQ between 20-35), to very severe (with IQ below 20). This statement illustrates that a person's language ability is closely related to their level of intellectual intelligence. This level of intelligence also relates to the language skills of individuals with Down Syndrome, which shows that each person has varied language symptoms.

The most complicated aspect is speaking. Namasivayam et al., (2020) states that speaking is a very complex process, it involves coordination between breathing (respiration), sound production (phonation), and pronunciation of sounds (articulation). This can be a challenge, especially for individuals with Down Syndrome who have limited language skills. Limited language skills will certainly affect communication. As we know language is very important in human life. Rabiah (2018) considers language as a means of interaction or as a tool for establishing communication, which includes conveying ideas, concepts, and even emotions.

In language skills, vocabulary is also very influential for individuals with Down Syndrome. They have difficulty mastering the many words and phrases needed to communicate effectively. As a result, they tend to only be able to produce short, simple sentences. Their ability to express more complex thoughts and ideas is often limited by this limited vocabulary. This is in line with what Rahim (2021) states that individuals with Down Syndrome have limited vocabulary and are only able to speak in short and simple sentences.

An individual's language skills are said to be good when they are able to achieve good language skills, there are several elements that must be met such as a complete sensory system, adequate cognitive abilities, a healthy nervous system that allows the individual to process language information properly, stable emotions, and exposure to language (Indah, 2017). This means that if there are individuals who do not fulfill one of these elements, these individuals can cause problems in their language development. These problems that arise can be said to be language disorders.

Language disorders are also known as communication disorders. These are disorders of language production and language comprehension. The American Speech-Language-Hearing Association (1993) or ASHA states that language impairment is a disorder of understanding and using spoken, written, or other symbol systems. According to Field (2003), language disorders can be receptive (impaired language comprehension), expressive (impaired language production), or a combination of both. The American Psychiatric Association (1994) notes that expressive language disorders exhibit certain linguistic features, such as limited speech, weak vocabulary, difficulty expressing ideas, slow language development, and more. In contrast, receptive language disorder is characterized by symptoms such as hearing loss, and exhibiting echolalia (repeating words). For people with Down Syndrome, Martin et al., (2009: 3) receptive language skills are usually superior to expressive language skills, and vocabulary is stronger than syntactic skills. In addition, there is evidence to suggest that phonology, vocabulary in expressive language use, syntax in language comprehension and expressive

language use, as well as some aspects of language pragmatics are impaired beyond the expectations of nonverbal cognitive levels.

Based on ASHA's (1993) theory, language impairment characteristics include five areas of linguistic studies namely phonology, morphology, and syntax, then semantics (language content), and pragmatics (language function in communication). Rondal & Comblain (1996) note that individuals with Down Syndrome often have difficulty in pronouncing words and phonological processes, but are still able to communicate semantically and pragmatically in accordance with minimal cognitive and social needs. Rondal in Indah (2017) also adds that in general, the phonological development of individuals with Down Syndrome is also slow. Martin et al., (2009) state that maybe normal people are also likely to make mistakes in the phonological process but the mistakes made by normal people will not be sustainable and are temporary without interference.

Phonological disorder is a disorder related to the rules of phonology. The term phonology itself is used to identify sound disorders of a language (Berntal et al., 2017). The sound disorders discussed in phonology are linguistically based speech sound errors. Abass (2022) mention that there are four distinct patterns for generating speech sounds, which include substitutions, omissions, distortions, and additions. This means that speech disorders in individuals with Down Syndrome include various problems in the pronunciation of sounds, such as the addition of additional sounds, loss of sounds, unclear pronunciation, and changes in sounds. Thus, the words spoken do not match the standards generally found in people without the disorder.

After the problems described above, in this study, Zack Gottsagen is an actor with Down Syndrome, will be the object of research. Gottsagen is an actor with Down Syndrome who has attracted the attention of the public and international media through his role in the movie "The Peanut Butter Falcon" (2019) with Shia LaBeouf and Dakota Johnson. His name skyrocketed when he became the main character named Zak who is also a person with Down Syndrome in the movie. Not

only that Gottsagen's performance in the movie "The Peanut Butter Falcon (2019) received a lot of praise and inspired many people, especially people with disabilities to pursue their dreams and prove to the world that they also have extraordinary abilities. Thus, even though Gottsagen with all his limitations in terms of language and verbal communication due to his Down Syndrome, he still managed to prove his greatness. Amazingly, the actor born April 22, 1985, in Florida, USA is the first actor with Down Syndrome to be awarded an Academy Award. However, despite his achievements, there is no specific research that examines the phonological disorder that Gottsagen may have. To study this phonological disorder will be studied through psycholinguistics.

Psycholinguistics is one of the branches of linguistics which comes from two words "psychology" and "linguistics" which means the study of psychology and language. This is in line with Carroll's thought (2008:3) that the study of psycholinguistics is one of the branches of cognitive science. Cognitive science combines findings from psychology, linguistics, and, to a lesser extent, artificial intelligence, neuroscience, and philosophy. Scovel (1998: 4) also adds that psycholinguistics is the use of language discourse to gain insight into the nature and structure of the human mind. So, this branch of science integrates principles of linguistics and psychology to explore the complexities of language, including structure, comprehension, production, and language acquisition.

As previously described, people with Down Syndrome note that individuals with Down Syndrome often have difficulty pronouncing words and phonological processes (Rondal & Comblain: 1996). This problem is quite interesting to research and learn how Gottsagen communicates. Considering that Gottsagen is an actor who is certainly in the world of acting, voice is one of the important tools to convey character and role well. In addition, Down Syndrome is also a fairly common condition that affects several people around the world. However, our understanding of how individuals with Down Syndrome communicate may still be limited. Therefore, this research has a very important relevance.

There are three previous studies that are relevant to this topic. The first research is entitled "Psycholinguistic Analysis on Language Disorder of the Main Character with Asperger Syndrome in "Please Stand By" Movie" by Lubis et al. (2022). In this study, a qualitative descriptive approach was used which was strengthened by the field of psycholinguistic studies. The data in this study were analyzed using Carroll's (2008) theory to explain the phenomenon and type of language disorder experienced by the main character in the movie. The findings of this study are that the main character of the movie has two forms of Asperger's Syndrome symptoms. The first is limited and repetitive patterns of behavior and interests, and the second is social communication and social engagement. There are also two categories of language impairment: expressive and receptive language impairment.

Further research was conducted by Sukmawulan (2018) with the title "Language Disorders Analysis of Down Syndrome Sufferer: A Case Study". This research was conducted on a teenager named Abi. The aim is to investigate the language disorders experienced by Abi and analyze the characteristics of these disorders, as well as look for possible causes. This research uses a case study approach with qualitative methods to answer the research questions. The theory used is a combination of the American Speech-Language-Hearing Association's theory (1993, p. 40, as cited in Paul et al., 2012, pp. 1-2), Selikowitz's theory (2007), and Gary E. Martin et al.'s theory (2009). Then, the data used included Abi's utterances, which were supported by interviews with her parents. In the data analysis, the results of this study show that Abi has phonological, morphological, and syntactic impairments, as well as some semantic aspects in his language. An evaluation of Abi's language performance also revealed strengths and weaknesses. The identified causes of language impairment involved oral anatomical factors, oral motor problems, hearing loss, and limitations in Abi's language use.

Finally, the research title is "Expressive and Receptive Language Disorder of Shaun Murphy in the Good Doctor Series" by Rokhim & Indah (2022). The method used is a qualitative descriptive approach to deeply understand the language

difficulties depicted in the movie. The data were taken from Shaun Murphy's transcribed utterances from *The Good Doctor* movie which were then analyzed using Carroll's (2008) theory to explain how autistic savant individuals communicate with others. The results of this study show that of the twelve utterances produced by Shaun Murphy, only 4 out of 6 types of language impairment were found. These included speech impairment, phonological impairment, difficulty in understanding concepts, and difficulty in following instructions. Stuttering is the most prevalent issue in Shaun Murphy's communication, characterized by stammering, hesitation, and repetition of sentences. This language difficulty mainly arises when the main character feels panic, excitement, anxiety, or lack of confidence, which affects the way he communicates.

The difference between this research and previous research lies in the use of objects and theories. The researcher uses Gottsagen as the object of research which will be taken through several interview videos on YouTube. Gottsagen is used as the object of research because there is something interesting about him. He won the Academy Award even though his Down Syndrome condition limits him. In this study, the researcher will use the theory of the American Speech-Language-Hearing Association (1993). Although the theory is the same as the previous study, the researcher will examine more deeply the phonological errors of Gottsagen through psycholinguistic studies and use the theory of Carroll (2008) to examine the types of language disorders (expressive and receptive language disorder).

Research on language impairment in individuals with Down Syndrome has an important impact on society's understanding of the potential of individuals with this disorder. Therefore, this research aims to conduct an in-depth study of Gottsagen's language skills, as well as any possible phonological disorder that he may have. With a better understanding of this case, this research can provide valuable insights.

1.2 Statement of Problem

Based on the above background, individuals with Down Syndrome often face obstacles in their communication, which can affect social interactions, daily life, and the possibility of developing their potential. In terms of their language skills, individuals with Down Syndrome often have difficulty pronouncing vocabulary clearly, and often add sounds, delete sounds, and change sounds. However, besides individuals with Down Syndrome who experience language problems, there is Gottsagen, who is an actor with Down Syndrome, who has succeeded in achieving achievements in the world of acting. Meanwhile, in the world of acting, it is not only related to body movements, but voice is also important. So, the problem to be investigated in this research can be formulated as follows.

- a. How does Zack Gottsagen experience phonological disorder?
- b. What type of language disorder Zack Gottsagen has?

1.3 Research Objective

Based on the formulation of the problem above, the objectives to be achieved in this study are as follows.

- a. To analyze the phonological disorder experienced by Zack Gottsagen.
- b. To find out the type of language disorder Zack Gottsagen has.

1.4 Research Significances

The results of this research are expected to provide benefits for various parties. The benefits of this research are theoretical benefits and practical benefits as follows.

- a. Theoretically, this research can add knowledge and theoretical perspectives in linguistic studies, especially in the fields of phonology and psycholinguistics related to language disorders in people with Down Syndrome. It can also add new insights to better understand the complexity of language disorders and develop more accurate theoretical models. The

analysis of sound system patterns in Gottsagen language can make a significant contribution to the understanding of the phonology of Down Syndrome.

- b. Practically, for other researchers, the results of this study can be used as a reference for further research related to Down Syndrome language disorders, especially in the fields of phonology and psycholinguistics. This research can help professionals such as speech and language therapists to diagnose and intervene with language disorders in individuals with Down Syndrome more accurately and effectively. Therefore, the researcher also hopes that this research can be further developed in relation to phonological disorders, especially in Down Syndrome.

1.5 Definition of Key Terms

Important terms in this research:

- a. **Psycholinguistics:** Psycholinguistics is the study of the mental retrieval and processes involved in language use, encompassing the production, comprehension, and storage of both spoken and written language (Naumoska & Kalajdžisalihović, 2023: 11).
- b. **Language Disorder:** Language disorder refers to an impaired ability to understand and/or use spoken, written, and/or other symbol systems that include language structure (phonology, morphology, syntax), language meaning (semantics), and the role of language in communication (pragmatics) (American Speech-Language-Hearing Association (1993)).
- c. **Down Syndrome:** Down Syndrome is a congenital syndrome due to fetal development that is not like in general (Selikowitz, 2008). This syndrome is caused by an excess of chromosome 21 known as trisomy 21 (Irwanto et al., 2019).
- d. **Phonological Disorder:** This phonological disorder is a disorder related to the rules of phonology. The term phonology itself is used to identify sound disorders of a language (Bernthal et al., 2017).

- e. **Zack Gottsagen:** Gottsagen is an actor with Down Syndrome who has attracted the attention of the public and international media through his role in the movie "The Peanut Butter Falcon" (2019) with Shia LaBeouf and Dakota Johnson. His name skyrocketed when he became the main character named Zak who is also a person with Down Syndrome in the movie. He was born April 22, 1985, in Florida, USA and he also is the first actor with Down Syndrome to be awarded an Academy Award.

