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LANGUAGE DISORDER ANALYSIS OF AN AUTISTIC SAVANT IN THE *RAIN MAN* MOVIE

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Abstract:
Language is a basic need to our existence of life since speaking, listening, reading, and writing are such fundamental aspects of our daily lives. Those aspects are substantial in establishing social interaction and seizing fabulous achievements as well. However, some people suffered from injured brain, mental retardation, and autism who experienced difficulties such as speech disorder and language disorder. This research was designed to identify types of words utterances and types of language disorder that produced by an autistic savant character in the *Rain Man* movie. By conducting qualitative research with psycholinguistic approaches, this study revealed the autistic savant characters of the producing utterances, namely articulation disorder, phonological disorder, voice disorder and repetition. By developing people's knowledge and awareness on the autistic language disorder, this study enlightened people to communicate and understand autistic person in their surroundings and prevented miscommunication as well. Further research is expected to be administered, particularly on an autistic woman to explore comprehensive knowledge and understanding on autistic language disorder.

Keywords:
Language disorder; autistic savant; psycholinguistic approaches.

INTRODUCTION

In establishing social interaction and seizing tremendous achievements as well, several fundamental aspects of language such as speaking, listening, reading, and writing are needed in our daily lives (Korneeva et al., 2019). However, in daily circumstances some people with language limitation caused by injured brain, mental retarded, and autism existed and experienced difficulties in social interaction. Those reality were literally portrayed in real-life movies or animations, and one of the movies was entitled *Rain Man* that had been released in 1988 (Levia et al., 2019).

Rain Man was a movie directed by Barry Levinson based on the story written by Barry Morrow and Ronald Bass. It was released on 16 December 1988 in the United States and won the Academy Awards**.** Levinson also appeared in the film as a psychiatrist with other movie stars: Tom Cruise as Charlie Babbitt, Dustin Hoffman as Raymond Babbitt, and

Valeria Golino as Susanna, Charlie's girlfriend. The character of Raymond as a savant autistic character was inspired by a real-life savant, Kim Peek (Ikalyuk & Kuzmyn, 2015).

As portrayed in the character of Raymond Babbitt, an autism had a developmental disability in such typical social interaction, interests, and communication with unique phenomena of pronoun rehearsal, echolalia, and a reduced or even reversed production-comprehension lag (Gernsbacher et al., 2016). An autism was also defined had language deficiency whether in receptive language disorder such as difficulty in interpreting verbal language, difficulty in following verbal guidance, and difficulty in focusing his mind; or in expressive language disorder such as difficulty in inserting words into sentences, difficulty in choosing the correct expression, poor comprehension, taking words out of sentences, repeating some words or phrases, and inappropriately using language structure (Rahmawati & Emy Sudarwati, 2021).

Several analyses had been conducted due to the autistic person and his or her language disorder in social interaction (Hanafiah et al., 2020; Houtman et al., 2021; Luthfiyati et al., 2019), or communication disorder (Chairunisa, 2021; Prastiwi & Indah, 2020). A comparative analysis was also carried out to find similarities in an autistic language disorders (Ramírez-Santana et al., 2019). However, this study was inhibited to the savant autistic man on *Rain Man* movie and presented with different perspectives of psycholinguistic approaches that covered articulation disorder, phonological disorder, voice disorder and repetition (Rahmawati & Emy Sudarwati, 2021; Wittke et al., 2017). Hopefully, this approach would bring better knowledge and understanding to readers that could be implemented in dealing with autistic people in daily circumstances.

METHOD

This study was examining language disorder of a savant autistic character in the *Rain Man* movie by applying qualitative research with descriptive analysis (Creswell, 2012). By watching and observing the savant autistic man in the *Rain Man* movie, the study classified the evaluation based on the word utterances production into two categories, namely *Consonants* and *Vowels*. The consonants category was analyzed including *bilabial, labio-dental, dental, alveolar, alveus-palatal, velar,* and *glottal*. Both categories, the consonants and the vowels were specifically identified in every scene of the movie. Each category was evaluated due to the indicators of the psycholinguistic approach (Rosmala et al., 2021).

Data Analysis

The type of words utterances produced by an autistic savant character in the movie, divided into two categories namely Consonant and Vowel. The consonants covered *bilabial, labio-dental, dental, alveolar, alveus-palatal, velar,* and *glottal* and described on the following descriptions. Both consonants and vowels were identified in every scene of the movie in detailed.

Bilabial

According to McMahon (2002, p. 3) that for a bilabial sound, the active articulator was the bottom lip, and the passive articulator was the top lip.

Labio-dental

According to McMahon (2002, p. 31) that for labio-dental sounds, the active articulator was against the bottom lip, but this time it moved up to the top front teeth.

Dental
According to Yule (1996, p. 35) that consonant was categorized as dental sound when the tip of the tongue was placed behind the upper from teeth.

Alveolar
Based on Birjandi & Salmani-Nodoushan (2005, p. 49) stated that an alveolar sound was produced when the tongue tip, or blade, touched the bony prominence behind the top teeth. This prominence was in fact that part of the gum which lay behind the upper teeth.

Alveus-palatal
According to Birjandi & Salmani-Nodoushan (2005, p. 49) that Alveus-Palatal was articulation by the 'front' of the tongue against the hard palate.

Velar
According to McMahon (2002, p. 33) that for velar sounds, the active articulator was the back of the tongue, and the passive articulator was the velum, or soft palate.

Glottal
According to Birjandi & Salmani-Nodoushan (2005, p. 50) stated that glottal sounds were those sounds that were made in the larynx through the closure or narrowing of the glottis. It was mentioned earlier that there was an opening between the vocal cords which was called the glottis.

RESULTS AND DISCUSSION

This section presents the analysis of the data findings and discussion based on the appearance of the data in the productive language disorder of an autistic character in the *Rain Man* movie. The autistic savant in the *Rain Man* movie named *Raymond Babbitt*. The analysis covered 20 scenes and displayed in the consonants category and the vowels category. The findings and discussion comprehensively described as follow.

Results

Raymond Babbitt, the autistic savant in the *Rain Man* movie produced some kinds of articulation disorder, voice disorder and rhythm disorder although his speech was clear enough. He often created phonological errors (addition, assimilation, deletion, and substitution). He made improper stress in every syllable which was categorized as voice disorder. Whereas he also used the repeated words and phrases in his utterances, such as: 'of course' and 'definitely'. His utterances were lack of stress and intonation, flat or singsong intonation. In some condition, he produced repetitive and stereotyped utterances. The following were the detail of language disorder produced by Raymond Babbitt based on scenes.

The bilabial included: practice /'præktɪs/ (Scene 3), butt /bʌt/ (Scene 9), i'm /aɪm/ (Scene 9) (Scene 17), with /wɪð/ (Scene 9), my /maɪ/ (Scene 9), bed /bed/ (Scene 16), men /men/

(Scene 19), window /'wɪndəʊ/ (Scene 14), waved /weɪvd/ (Scene 14), bye /baɪ/ (Scene 14). Th bilabial sound were [p] as the voiceless and [b], [m], [w] are voiced.

The labio-dental covered: fabulous /'fæbjələs/ (Scene 7), from /frəm/ (Scene 7), full /fʊl/ (Scene 9), first /fɜ:st/ (Scene 13) (Scene 17), funny /'fʌni/ (Scene 14), save /seɪv/ (Scene 16), gave /geɪv/ (Scene 18). The initial sounds of the words fat and vat and the final sounds in the words first and save were labio-dental. They were represented by the symbol [f], which was voiceless, and [v], which was voiced. Notice that the final sounds of laugh and cough, and the initial sounds of photo, despite the spelling differences, were all pronounced as [f].

The dental involved: there /ðeə(r)/ (Scene 8), these /ði:s/ (Scene 11), they /ðeɪ/ (Scene 12), then /ðen/ (Scene 13), the /ðə ; ði/ (Scene 13) (Scene 16), thrusday /'θɜ:zdeɪ/ (Scene 14) The voiced dental were presented by the symbol [θ] and [ð]. The initial sound of the words above that were categorized as voiceless dental was presented by the symbol [θ] whereas the category as voiceless dental was presented by the symbol [ð]. The writer did not find the words that were categorized the symbol [ð] in the Raymond Babbitt's utterances.

The alveolar comprised: trade /treɪd/ (Scene 2), today /tə'deɪ/ (Scene 4) (Scene 15) (Scene 20), definitely /'definətlɪ/ (Scene 4) (Scene 5) (Scene 9) (Scene 12) (Scene 13) (Scene 14) (Scene 17), tapioca /tapɪ'əʊkə/ (Scene 5), dollar (Scene 7), Tuesday /'tju:zdeɪ/ (Scene 9), no /nəʊ/ (Scene 9), number /'nʌmbə(r)/ (Scene 9), airline // (Scene 11), know / nəʊ / (Scene 13), name /neɪm/ (Scene 13), trivia /'triviə/ (Scene 18). The symbol for those sounds were [t], [d], [s], [z], [n]. Also notice that despite the different spelling of know and no, both those words were pronounced with [n] as the initial sound. Other alveolar were the [l] sound found at the beginning of words, but in this case the writer did not find the word that voiced, and the [r] sound at the beginning of airline.

The Alveus-palatal covered: schedule /'ʃedju:l/ (Scene 4), you /ju:/ (Scene 9), and yeah /jeə/ (Scene 20). The sound produced were 'sh' and 'ch' which were symbolized [š] and [č]. The other voiced alveus-palatal was [ĵ], [ž]and [y]. The examples were scheduled you and yeah. One sound which was produced with the tongue in the middle of the palate was the [y] sounded to be found at the beginning of words like you. This sound was usually described as palatal.

The velar distributed: course /kɔ:s/ (Scene 3) (Scene 4) (Scene 7) (Scene 8) (Scene 9) (Scene 11) (Scene 12) (Scene 13) (Scene 17) (Scene 20), glamourous // (Scene 7), exiting /'eksɪtiŋ/ (Scene 7), cash /kæʃ/ (Scene 7), waiting /weɪtiŋ/ (Scene 7), backtag /bæktɪg/ (Scene 10), count /kaʊnt/ (Scene 16), card /ka:d/ (Scene 16). There was a voiceless velar sound, represented by the symbol [k] such as course, cash, count, and card. The voiced velar sound to be heard at the beginning of word like glamourous was represented by [g]. This is also final sound in word like backtag. One other voiced velar was represented by the symbol [ŋ]. In English, this sound was normally written as the two letters 'ng'. So, the [ŋ] sound was at the end of exiting and waiting.

The glottal included: hundred /'hʌndrəd/ (Scene 7), hurt /hɜ:t/ (Scene 9), who /hu:/ (Scene 13) (Scene 17). The glottal place just produced the voiceless glottal which was

symbolized with [h] and [ʔ]. One was the sound [h] which occurred at the beginning of hundred and hurt, and for most speaker, as the first sound in who. This sound was usually described as a voiceless glottal. The 'glottis' was the space between the vocal cords in the larynx. When the glottis was opened, as in the production of other voiceless sounds, but there was no manipulation of the passing out through the mouth, the sound produced was that represented by [h].

Meanwhile, in the category of **Vowels**, Raymond Babbitt produced several utterances included: all /ɔl/ (Scene 2), do // (Scene 2) (Scene 4) (Scene 5), uh oh uh oh /əʊ/ (Scene 6), wheel /wi:l/ (Scene 7), of /əv/ (Scene 7), good /gʊd/ (Scene 7), eleventh /ɪ'levn/ (Scene 8), entire /ɪn'taɪə(r)/ (Scene 9), squeezed /skwi:zd/ (Scene 9), cheese /ʧi:z/ (Scene 14), teeth /ti:^{θ}/ (Scene 14).

Discussion

Based on the detail above data, the analysis of Raymond Babbitt's language disorder was classified into four types of psycholinguistic approaches, namely: articulation disorder, phonological disorder, voice disorder, and repetition (Purba, 2018).

Articulation Disorder

It referred to the production of speech sounds which did not change in different word contexts. Those errors occurred during the production of isolated speech sounds (phonemes) and thus misarticulated at the syllable and word levels as well. Someone who had articulation disorder could be hard to be understood because he/she said sounds incorrectly. Sometimes they had difficulties in saying specific consonants and vowels. Raymond Babbitt had articulation disorder when he uttered the speech that was primarily difficult to understand and unintelligible.

The difficulties included the above analyses of consonants and vowels. The alveolar sounds were mostly found in Raymond's utterances, for examples sounds /l/ and /r/ sounded /n/ and /l/; whereas labiodentals sound for example /f/ was rarely used. Moreover, Raymond's utterances as an autistic were flat intonation and the rhythm was different with normal people. In meantime, Raymond was difficult in producing the alveolar fricatives sounds for example sounds /s/ and /d/ which were produced with the narrow opening.

Phonological Disorder

Phonological disorder included a difficulty in learning and organizing the sounds needed for clear speech, reading and spelling; therefore, the sound produced was unclear. The phonological disorder characteristics were divided into failure to produce and use sound appropriately, then substituting one sound for another, omitting sounds, addition, and assimilation sounds.

There were several phonological disorders uttered by Raymond Babbitt such as addition, assimilation, deletion, and substitution sound. The example of 'prac-practically' (addition), the word 'scheduled' was pronounced just the sound /skeʤ/ (deletion). Furthermore, the substitution such as sound /I/ a kind of high front vowel produced with short pronunciation was substituted with sound /i:/ of long pronunciation. Since phonological disorder included a difficulty in learning and organizing the sounds, it was

related with the hippocampus in limbic system. The hippocampus appeared to be primarily responsible for learning and memory. When it was damaged or removed, the ability to store new information become failure and would display stereotype and produced unintelligible utterance. In other hand, although he made those impairments, the assimilation was seldom occurred for Raymond was an autistic savant who had extraordinary skills such as memory feats and mathematical calculations. When he told his memory, the utterance used was clear enough.

Voice Disorder

Voice disorder happened when people said the voice improperly. Even normal people did this. Voice disorder included talking too much or loudly, using unnatural pitch/intonation, and using improper stress. For example, the utterance 'fabulous' and 'exciting'; the word 'fabulous' /'fæ'bjʊ̀ləs/ was stressed in the first syllable, but Raymond Babbitt with his autistic language produced it by giving stress in the second syllable /fæ'bjʊ̀ləs/. Raymond also gave improper stress of the word 'exciting' /Ik'saItIŋ/. The proper stress was in the first syllable, but he delivered stress in the second syllable.

Moreover, Raymond Babbitt also produced unclear word such as 'Wsshffhshhfsh'. The symptoms of a person who had voice disorder could be found he or she was producing sound improperly, talking too long, and using unnatural pitch or stress in his or her utterances. Raymond Babbitt's utterances showed improper sound, he also talked too long and used unnatural pitch. The utterance of 'bet your butt' was produced with flat intonation and unnatural pitch. He often uttered "what prescription medicines" when he met strange people. He utilized it as a point of conversation to "break the ice". Raymond also often produced his utterances with quick and loud intonation when he was in uncomfortable situation. From the analysis, the unclear word produced by Raymond was rarely found. Although his utterances were clear enough, he created improper stress and applied unnatural pitch with flat intonation.

Repetition

Repetition referred to speech disorder in which the syllable, word or phrase was repeated. Even repetition happened normally, but as an autistic, Raymond always did it even though the word or phrase he used was meaningless. When he faced new or strange situation and surrounding, he always sketched 'Who on First'; or when he felt nervous or frightened, he started screaming his main man in 'Wallbrook Institution'. He also answered 'I don't know' several times when he did not like the atmosphere or the questions. Raymond also used utterance 'of course' improperly. Furthermore, the speech of autistics was mostly like robotic sounding speech, lacked in the stress and intonation pattern of everyday speeches. Besides, they often produced same or ritualistic answers when someone asked them some questions.

CONCLUSION

The autistic savant produced utterances characters, namely articulation disorder, phonological disorder, voice disorder and repetition. The articulation disorder consisted of consonant sound where the alveolar sounds were mostly used, and the labio-dental sound was rarely used. The autistic character developed his own rules in producing utterance which was called phonological disorder that covered addition, deletion, and substitution. The voice disorder included talking too much or loudly, using unnatural pitch/intonation, using improper stress, and producing unclear word. Raymond Babbitt often used improper stress in his utterances, and he also produced the utterance with unnatural pitch especially when he was under pressure. The last, the autistic savant character produced some repetition in syllable, word, phrase, and in sentence. Furthermore, the autistic savant speech mostly sounded like robotic sounding speech and lacked the stress and intonation pattern of everyday speeches.

REFERENCE

Birjandi, P., & Salmani-Nodoushan, M. A. (2005). An Introduction to Phonetics. In *Zabankadeh Publications*. https://doi.org/10.1080/19371918.2012.639642

Chairunisa. (2021). Linguistic Disorder of the Character with a Stutter in the Movie Script of A Fish Called Wanda. *KnE Social Sciences*, *2021*(March), 167–174. https://doi.org/10.18502/kss.v5i4.8675

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research in educational research*. Pearson Education Inc. https://doi.org/10.1017/CBO9781107415324.004

Gernsbacher, M. A., Morson, E. M., & Grace, E. J. (2016). Language and Speech in Autism. *Annual Review of Linguistics*, *2*(1). https://doi.org/10.1146/annurev-linguist-030514-124824

Hanafiah, R., Sitorus, C. R. N., & Yusuf, M. (2020). Language Disorder Experienced by Children Suffering ASD in Medan. *ICOSTEERR 2018*, *August*, 1280–1285. https://doi.org/10.5220/0010071612801285

Houtman, H., Yukamana, H., & Puspita, Y. (2021). First Language Acquisition of Children with Mild Autism: Case Study of Developmental Language Disorders at Palembang Bina Autis Mandiri. *Silampari Bisa: Jurnal Penelitian Pendidikan Bahasa Indonesia, Daerah, Dan Asing*, *4*(2), 468–477. https://doi.org/10.31540/silamparibisa.v4i2.1486

Ikalyuk, L., & Kuzmyn, O. (2015). Psycholinguistic characteristics of autists and their prototypes in American cinema discourse (based on the films “Rain Man” and “The Real Rain Man”). *Journal of Vasyl Stefanyk Precarpathian National University*, *2*(2), 87–93. https://doi.org/10.15330/jpnu.2.2-3.87-93

Korneeva, A., Kosacheva, T., & Parpura, O. (2019). Functions of language in the social context. *SHS Web of Conferences*, *69*, 1–5. https://doi.org/10.1051/shsconf/20196900064

Levia, R., Jufrizal, J., & Marlina, L. (2019). the Study of Language Disorder of an Autistic Savant Portrayed in Levinson’S Rain Man Film (1988). *English Language and Literature*, *8*(1), 120–128. https://doi.org/10.24036/ell.v8i1.103059

Luthfiyati, D., Kholiq, A., & Tamimih, N. D. (2019). An Analysis of Social Interaction of Autism in Life, Animated Film. *Linguistic, English Education and Art (LEEA)*

Journal, *3*(1), 108–119. https://doi.org/10.31539/leea.v3i1.920

McMahon, A. (2002). An Introduction to English Phonology. In *Edinburgh University Press*. https://doi.org/10.1353/lan.2003.0133

Prastiwi, N. D., & Indah, R. N. (2020). Communication Disorder of The Autistic Character in The "Fly Away" Movie. *Metathesis: Journal of English Language, Literature, and Teaching*, *4*(2), 128. https://doi.org/10.31002/metathesis.v4i2.2218

Purba, N. (2018). The role of psycholinguistics in Language Learning and Teaching. *Tell : Teaching of English Language and Literature Journal*, *6*(1), 47. https://doi.org/10.30651/tell.v6i1.2077

Rahmawati, D. A., & Emy Sudarwati. (2021). "I can Speak Like You, I am Just Different" A Psycholinguistics Study of Autistic Child. *RETORIKA: Jurnal Ilmu Bahasa*, *7*(2), 141–151. https://doi.org/10.22225/jr.7.2.3041.141-151

Ramírez-Santana, G. M., Acosta-Rodríguez, V. M., & Hernández-Expósito, S. (2019). A comparative study of language phenotypes in autism spectrum disorder and specific language impairment. *Psicothema*, *31*(4), 437–442. https://doi.org/10.7334/psicothema2019.92

Rosmala, D., Nurul Hidayati, A., & Abdullah, F. (2021). Early language development of a child with expressive language disorder: A parents' narration. *J-SHMIC : Journal of English for Academic*, *8*(1), 66–76. https://journal.uir.ac.id/index.php/jshmic/article/view/3905

Wittke, K., Mastergeorge, A. M., Ozonoff, S., Rogers, S. J., & Naigles, L. R. (2017). Grammatical language impairment in autism spectrum disorder: Exploring language phenotypes beyond standardized testing. *Frontiers in Psychology*, *8*(APR), 1–12. https://doi.org/10.3389/fpsyg.2017.00532

Yule, G. (1996). *Pragmatics*. Oxford University Press.