Language Characteristics in Children with Autism

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Abstract- **This paper primarily aims to investigate the language characteristics observed in the speech of children with autism. Autism, as a complex neurodevelopmental disorder, results in impairments in social interaction and communication among affected children, significantly impacting their ability to comprehend and express language effectively. Recent studies have explored several language characteristics in children with autism, such as language delay, impaired pragmatic skills, echolalia, pronoun reversal, extreme literalness, metaphorical language, neologisms, affirmation by repetition, repetitive questioning, insistence on the same verbal scenario, autistic discourse style, and poor control of prosody.**

Keywords: **autism, language, characteristics, children.**

INTRODUCTION

The intellectual and social development of autistic children influences their communication and language skills. While some autistic children may have the ability to communicate verbally, others have very limited communication abilities. On the other hand, some autistic children may possess an extensive vocabulary and grasp of grammatical structures, but they tend to focus deeply on their specific areas of interest when engaging in conversation. Autistic children often face challenges in understanding the meaning and patterns of language, as well as interpreting body language and intonation. These difficulties can hinder their ability to interact effectively with others **(NIH, 2020).** Autism is a complex neurodevelopmental disorder that is characterized by impairments in social interaction, communication, as well as restricted, repetitive, and stereotyped patterns of interests and activities **(APA, 1994).** In the **DSM-V, the American Psychiatric Association (2013)** classified autism as a spectrum disorder, recognizing the individuality of each person by proposing levels of severity to measure distinctive symptoms. The symptoms of Autism Spectrum Disorder (ASD) in the DSM-V are divided into two primary categories: a) impairments in social communication and interaction, and b) restricted, repetitive patterns of behaviors, interests, or activities. **Leo Kanner (1943)** introduced the term "Early Infantile Autism" in his article "Autistic Disturbances of Affective Contact" to describe the features exhibited by 11 children. He summarized these characteristics as difficulties in social interaction, an inability to establish connections with others, adherence to routines, insistence on sameness, a lack of spontaneous activities, a strong focus on specific interests, inappropriate attachment to objects, a lack of or delay in spoken language, echolalia, pronoun reversals, literal language, impaired nonverbal communication, challenges in initiating and maintaining conversations, engagement in restricted repetitive and ritualistic behaviors, and abnormalities in speech intonation. **Rutter (1978)** put forth four criteria for defining autism: a) onset before 30 months of age, b) challenges in developing social skills and interaction, c) delayed and atypical language development, and d) insistence on sameness, demonstrated by engaging in repetitive, stereotyped, and ritualistic behaviors and activities.

Recent studies have provided a summary of language characteristics observed in autistic children's speech, which can be outlined as follows:

Language Delay

The language of children with autism, as described by the **American Psychiatric Association (1994),** is characterized as a delay or lack of development in spoken language. This delay is not compensated for by alternative forms of communication such as gestures or imitation. **Kanner (1943)** noted that autistic children exhibit a delay in speech development compared to typically developing children. When they do use verbal language, it may not be primarily for communication purposes. Additionally, children with autism may experience various speech delays and abnormalities, including mutism and unusual language patterns involving repetition, reversed pronouns, and literal interpretation. **Eigsti et. al. (2007)** stated that the literature on language in autistic children highlights two key points: a) the absence of verbal communication and b) early speech delays, with their first words typically being produced at 38 months of age or later, whereas typically developing children start speaking earlier.

Pragmatic Language Deficits

Pragmatic language refers to the ability to use language appropriately in various social situations, understand nonverbal cues, and follow social rules to effectively communicate with others in different social settings. The social interaction and communication of individuals with autism are influenced by their challenges with pragmatics. According to the **American Psychiatric Association (1994)**, verbal individuals with autism who struggle with pragmatic language impairments find it difficult to initiate and sustain conversations with others. They also face challenges in interpreting and utilizing nonverbal cues during social interactions. **Kanner (1943)** identified several pragmatic deficits that affect language in children with autism, including a lack of or limited eye contact, which is crucial for understanding nonverbal cues and meanings in conversations. Other deficits include repeating sentences or phrases, producing unrelated noises and words, difficulties with turn-taking in conversations, using language literally without adapting it to different situations or individuals, a lack of communicative gestures, and providing or asking irrelevant questions during conversations. Early research by Christiane Baltaxe, as referenced by **Uta Frith (1989),** showed that German-speaking adolescents with pragmatic deficits exhibited a combination of formal and informal language expressions due to difficulties with social interaction. They also struggled to differentiate between new and old information, faced challenges with conversational strategies such as turn-taking, treated new topics as familiar, and used expressions typically reserved for new topics when discussing

previously mentioned subjects. While autistic children generally show similar phonological and syntactic development to typically developing children, their rate of development may be slower. However, autism can lead to insufficient semantic and pragmatic functioning **(Tager-Flubserg, 1981)**. Additionally, autistic children may struggle to use their linguistic knowledge to recall stored information, which can contribute to pragmatic deficits **(Tager-Flubserg, 1991)**. Lorna Wing, Burgoine, and Wing (1983) identified the main characteristics of Asperger's syndrome that contribute to pragmatic deficits, including inappropriate approaches to others, one-sided conversations, repetitive and pedantic speech, poor nonverbal communication, and intense preoccupation with a single topic of interest **(Attwood, 1998)**.

Echolalia

Echolalia is considered a syntactic feature in the language of individuals with autism **(Wilkinson, 1998)**. The term "echolalia" has its roots in Greek, where "echo" refers to repetition and "lalia" refers to speech. In the early stages of language acquisition, echolalia can be observed in the speech of typically developing children. However, if it is observed after 30 months of age, it could be a sign of pathological echolalia **(Patra and De Jesus, 2023)**. Autistic children display echolalia in their speech when they begin combining words to create phrases and sentences **(Kanner, 1943)**. Klin et al. (2005) stated that echolalia involves the repetition of words and phrases with the same tone and pitch. There are two types of echolalia that can occur in the speech of autistic children: immediate echolalia, which involves the immediate repetition of recently heard words or phrases, and delayed echolalia, which involves the repetition of words or phrases from past interactions **(Volkmar et al., 2005)**. Echolalia is a linguistic phenomenon commonly observed in autistic children as they begin to learn and use language. Autistic children may struggle with understanding their native language, and repeating what is said to them can aid in their brain's absorption of vocabulary. Additionally, echolalia can serve as confirmation of whether or not an individual has correctly received a message from a speaker. This phenomenon can also occur in individuals who are learning a foreign language, as repeating words and phrases can aid in vocabulary acquisition and ensure comprehension of instructions given by a native speaker. Individuals with Asperger's syndrome or PDD experience delayed echolalia, which requires advanced auditory memory over a prolonged period, but they do not experience immediate echolalia **(Siegel, 1996)**. Some children with autism repeat only the final words of sentences, while others mimic the entire verbal utterances **(Bartak and Rutter, 1974)**. Repeating the words of other speakers helps autistic children comprehend speech, interpret information in their own way, and engage in communication to exchange information **(O'Neil, 1998)**.

Pronoun Reversal

Pronoun reversal, a linguistic feature specific to the syndrome **(Wilkinson, 1998),** is observed in individuals with Autism Spectrum Disorder (ASD) **(APA, 1994).** This phenomenon is commonly seen in the speech of children with autism, who substitute "you" for "I" when referring to themselves. During a transitional period, individuals with ASD may also use third-person pronouns like "he" instead of the first-person. Pronoun reversal shares similarities with echolalia, which involves the repetition of phrases or sentences with the same wording and intonation **(Kanner, 1943)**. Understanding pronouns can be challenging as it depends on the context in which they are used. Typically developing children may exhibit pronoun reversal during the early stages of language development but typically outgrow it by the age of 2-3. In contrast, pronoun reversal can persist in the language of children with autism until around the age of six. Furthermore, pronoun reversal is more prevalent in the speech of children with autism compared to those with Asperger's syndrome **(Volkmar & Wiensner, 2017)**. Both children with autism and typically developing children display low rates of pronoun reversal in their speech, but children with autism tend to exhibit more reversals. This suggests that pronoun reversal may be a result of asynchronous development of language and social skills in children **(Naigles et al., 2016)**. However, autistic children who improve their social interaction skills can use pronouns appropriately, overcoming the challenge of pronoun reversals **(Firth, 1989)**. Additionally, autistic children struggle with using both reflexive and personal pronouns. Reflexive pronouns are governed by syntactic constraints, while personal pronouns are influenced by both syntactic and pragmatic factors **(Perovic, Modyanova, and Wexler, 2013)**. Autistic children face greater difficulties in understanding pronouns compared to typically developing children. Moreover, older children with ASD tend to make more mistakes in their use of pronouns than typically developing children of the same age. Unlike typically developing children, children with ASD do not demonstrate significant improvement in pronoun interpretation with age. Older typically developing children with a better understanding of theory of mind show more accurate interpretation of pronouns compared to younger typically developing children, whereas children with ASD do not show the same level of improvement **(Overweg, Harman, & Hendriks, 2018)**.

Literal language

Children with autism often interpret language in a literal manner, leading to difficulties in various aspects of their lives. They may struggle to grasp that words and phrases should be understood within specific contexts, and they may not recognize how tone and emphasis can alter the meanings of language. Consequently, they may encounter challenges in comprehending idiomatic expressions, humor, and figurative language **(Dodd, 2005)**. The autistic writer O'Neill expressed, "I take what others tell me literally because my brain isn't capable of understanding the gray and subtle areas of language" **(O'Neill, 2000)**. **Kanner (1943)** explained that children with autism tend to use words in their original form without adapting them to fit new contexts. For instance, one of Kanner's cases responded to the question "what is this picture about?" with "people are moving about."

Metaphorical Language

Kanner (1946) coined the term "metaphorical language" and emphasized that the apparently nonsensical and unrelated statements made by children with autism are actually examples of metaphorical language. **In 1943,** Kanner provided several instances of these incomprehensible statements, such as one involving a girl who had a fondness for animals. Whenever she cried, her mother would console her by saying "Rabbit don't cry" or "Dogs don't cry." When she turned seven, she would repeat these phrases to calm herself

whenever she felt anxious or uneasy. **Kanner (1946)** argued that the metaphorical language used by autistic children in their speech is meaningful and significant because it pertains to their personal experiences, rather than being irrelevant or meaningless.

Neologisms

Neologism refers to a newly created word that is only understood by the speaker and has no connection to its conventional meaning, making it incomprehensible to the listener. This feature is observed in the language of autistic individuals and is considered a source of creativity and richness. It's worth noting that not all autistic children exhibit neologisms in their speech, and it's not exclusive to them, as some typically developing children also use neologisms. Furthermore, neologisms are present in the speech of both children and adults. Additionally, autistic children don't just use neologisms in their childhood; they may continue to use these techniques into adulthood **(Lawrence, 2010).** Moreover, the presence of neologisms in the language of autistic children signals a breakdown in communication **(Firth, 1989). Attwood (2007)** provided examples of autistic children using the word "snook" to denote the chocolate pieces in an ice cream, "clink" to refer to a magnet, and "broken" to describe a toddler who was unable to walk and talk.

Affirmation by Repetition

Children with autism do not typically use the word "yes" in their language until they reach the age of six or seven. Prior to this age, autistic children tend to repeat the question as a way of confirming their agreement, rather than using the word "yes". For example, it took Donald a significant amount of time before he was able to separate his desire to sit on his father's shoulders from saying the word "yes". Previously, he would simply repeat the question as a way of expressing his acceptance **(Kanner, 1943).**

Repetitive Questioning

children with autism often repeat their questions and expect to receive identical responses from the person they are asking. They anticipate that the listener will use the same words, in the same order, and with the same tone. If they don't receive the expected response, they may become upset and have tantrums until they get the desired answer. They do this to elicit a predictable reaction and to feel a sense of control and safety in their environment **(Bogdashina, 2004).**

Demanding the Same Verbal Scenario

Some autistic children have a tendency to repeat the same sequence of events and prefer to maintain the same verbal scenario and intonation for those events. They spend much of their day asking for the same sequence of events and using the same verbal scenarios. This repetition provides them with a sense of security and reduces their anxiety. An example of this is Donald, who, after waking up from his nap, would say "Boo" to his mother and ask her to say "Don, do you want to get down?" Once his mother complied, he would then say "Now say all right," and upon her compliance, he would get down **(Kanner, 1943).** Some autistic children don't mind repeating the same verbal scenario by themselves **(Bogdashina, 2004).**

Autistic Discourse Style

Children with autism may use a language that is excessively formal and characterized by an overly sophisticated vocabulary and grammar **(Bogdashina, 2004).**

Poor Control of Prosody

Some features of poor control or prosody affect the language of autistic children, such as repeating verbal utterances in a monotonous manner, using echolalia, speaking in a sing-song manner, having a high or low pitch, and struggling with intonation **(Kanner, 1943).** Autistic individuals often exhibit distinct prosodic features when they speak, such as a flat and monotonous voice, and unique patterns of intonation, rhythm, and stress. They may struggle to use or comprehend intonation as a means of communication and have difficulty interpreting the speaker's intended meaning conveyed through their intonation patterns **(Bogdashina, 2004). Uta Frith (1989)** pointed out that autistic children may struggle with various prosodic features of speech, including sudden changes in the tone of their speech from low to high, speaking too quickly and unclearly, using monotonous or pedantic speech, repeating phrases excessively, or making nonsensical remarks in a normal voice.

Conclusion

In summary, children with autism face difficulties in acquiring and using their native language naturally and spontaneously, unlike typically developing children who acquire and develop it in a normal and gradual manner. The current study aimed to identify different language characteristics present in the speech of autistic children and how they are influenced. It's worth noting that these characteristics can vary significantly among children with autism. Some individuals may show these features more prominently than others, while some may not display all of them. Moreover, early intervention and suitable support can have a significant impact on the language development and communication abilities of children with autism.

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