

## Echolalia Communication for Autism: An Introduction

Muhammad Dalimunte<sup>1</sup>, Sholihatul Hamidah Daulay<sup>2</sup>, Rabi'atun Adawiyah<sup>3</sup>

<sup>1</sup> Universitas Islam Negeri Sumatera Utara, Indonesia; muhammaddalimunte@uinsu.ac.id

<sup>2</sup> Universitas Islam Negeri Sumatera Utara, Indonesia; sholihatulhamidah@uinsu.ac.id

<sup>3</sup> Universitas Islam Negeri Sumatera Utara, Indonesia; rabiatusadawiyah@uinsu.ac.id

---

### ARTICLE INFO

#### *Keywords:*

communication;  
children;  
autism;

---

#### *Article history:*

Received 2022-02-22

Revised 2022-05-02

Accepted 2022-07-31

---

### ABSTRACT

Autism comes from the Greek phrase *vehicles* this means that self. Autism isn't always a kind of disorder however is a complicated developmental sickness resulting from harm to the brain, usually may be detected on account that the kid is born or at the age of a toddler. One of the problems confronted by autistic kids in communication, particularly for kids who enjoy intense barriers, is in gaining knowledge of language and speech. The issue of autistic kids in speaking is because of experiencing language disorders (verbal and non-verbal), despite the fact that language is the principal medium of communication. The purpose of this study was to investigate the phenomenon of echo-influenced communication in children with autism. In this study, researchers use a qualitative approach to explain existing reality. The main informants for this study were teachers at the Emotionally Focused Therapy Center and teachers at the Behavior Therapy Center. The results of the study are that learning to communicate with nonverbal children with autism is by communicating the concept of language through visual media, with teachers asking questions and children answering things with their abilities. Communication difficulties in children with autism are due to language disorders (linguistic and nonverbal), but language is the most important medium of communication. They often find it difficult to convey their desires both verbally (verbally / speaking) and non-verbally (gesturing / gesturing and writing). Most of them can speak and use short sentences with basic vocabulary, but their vocabulary is limited and their language is difficult to understand.

*This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.*



---

### Corresponding Author:

Sholihatul Hamidah Daulay

Universitas Islam Negeri Sumatera Utara, Indonesia; sholihatulhamidah@uinsu.ac.id

---

## 1. INTRODUCTION

Moore (2012) stated that Autism is a unique neurological disorder. There is no medical test that can differentiate the diagnosis of autism. The diagnosis can only be made by a professional who is used to what happens in childhood, which makes a person unable to carry out social interactions, and seems to live in his own world. Autism is a developmental disorder (Grossi et al., 2013). The number of people with autism is increasing all over the world, including in Indonesia. Currently, autism can be detected early. However, information about autism and how to deal with it has not yet been widely shared. As Gayatri (2009) quoted Desta Sarasati Raharjo, according to US statistics in May 2004, one in 150 children under the age of 10, or about 300,000, have symptoms of autism. The estimated growth rate is from 10% to 17% per year. Experts estimate that there will be 4 million people with autism in the United States over the next decade. Autism occurs everywhere in the world. Regardless of ethnicity, race, religion, or social status. In Australia, an agency that monitors autism problems (Australia Autism Association) has revealed that 1 in 100 people has autism characteristics.

In fact, communication is a basic human activity, Boeschoten (2007) but autism children can be recognized by many factors, including communication difficulties. People can relate to each other in their daily lives, whether at home, at work, in the market, in society, or wherever they are. Everyone is involved in communication and language activities. If the process goes well, communication will run smoothly and successfully. The process of communication takes place through language. According to Nwora & Gee (2009), language formats can be symbols, gestures, writing, images, and speech formats. By nature, humans are social creatures who cannot live alone and will always communicate and relate to other people. Since birth, humans have become social creatures because humans need other people, especially parents, relatives, neighbors, friends, friends, and even strangers. In relation to humans as social beings, humans always live together with other humans.

In social interplay in society, people talk each verbal communicate and non-verbal communicate. Many human beings assume that communicate is simple to do. However, it seems that the communicate technique isn't always clean while the communicate technique is generally confronted is experiencing obstacles. This complex state of affairs happens due to the fact a person does now no longer achieves conveying his message to others or different human beings can't trap the message of the sender which results in a useless communicate. Levy & Perry (2011)

The average person consciously carries out the process of social interaction and is greeted by others with the same consciousness. When interacting, the general public can successfully carry out the interpersonal communication process. Humans can interact by communicating with each other and by providing symbols that others can understand. However, this does not apply to people with special needs or semantic disabilities (Nuruddin, 2007: 116), such as children with autism. For children with autism, performing the process of communication and interaction is certainly not an easy task. Jacobsen (2010). In Australia, an agency that monitors the problem of autism (Australia Autism Association) has revealed that 1 in 100 people has autism characteristics. (Baird et al., 2008)

Based on the above explanation, it is important to study the study of oral communication disorders in children with autism. Knowledge of oral communication disorders in children with autism is expected to inform parents, teachers, and therapists in order to train autistic children's communication in a targeted manner. In the literature on autism, echolalia is generally considered to be a symptom of this condition. For example, Frith describes it as "one of the most characteristic behavioral disorders in autistic infants" (1989: 123). Like Frith et al. It is pointed out that regular children's speeches also have a repetitive form similar to immediate ecological speeches. This raises the question of whether there is a difference between the two populations, either in terms of species or frequency of echo used. A study by Prizant and Duchan (1981) suggests that children with autism may pack more diverse behaviors into an immediate echo format. Taking into account the characteristics of nonverbal behaviors, segments, and suprafixes, they claim that they show that seven different functional behavior types can be reliably distinguished within the entire set of immediate echoes. However, studies of normal children around

the age of 2030, where repetition is most common, also suggest that repetitive forms can achieve a variety of behaviors (McTear, 1978; Casby, 1986; Greenfield and). Savage Lumbo, 1993). It is still possible that there are differences in the nature of these types of behavior between people with autism and those who are normal, but this is clearly far from being clear for several reasons. Most notably, studies involving normal and autistic populations use different types of speech act classification. Considering these and other considerations, some authors may argue that there is little difference in the form of repetition used by normal and autistic children (Rydell and Mirenda, 1991).

Communication restrictions are a separate barrier to allowing people with autism to interact with their surroundings. Garfin and Lord (Paul and Sutherland, 2005) say that communication skills are a major factor in determining the extent to which autistic people can engage with others and participate in daily activities at school and in community homes. I am saying. In addition, Carr and Durrant (Paul and Sutherland, 2005) state that improving communication skills in people with autism is directly related to the prevention and mitigation of behavioral problems.

This study aims to provide an overview of cases of communication barriers in adolescents with autism. In addition, this study will also look at the efforts that have been made by parents and schools in improving communication skills in autistic adolescents. The design used in this research is a case study. The teacher helps by showing visual images and asking children with autism to imitate them. When it comes to children with autism verbally, both teachers place great emphasis on adding or expanding vocabulary. Autism, which is also known as "Classical Autism", is the most common type of Autism Spectrum disorder (ASD), which is a syndrome that causes disturbances in social skills, communication, and behavior. People with ASD process information in their brains in a different way than other people in general. Autism appears before the age of 30 months with the main symptoms of impaired verbal and nonverbal communication, inability to interact socially, abnormal habit patterns in the form of stereotypic body movements, very narrow interests, and ritualistic and obsessive behavior. Children with autism spend most of their time playing alone and have minimal eye contact. Children with autism experience normal growth with various intelligence, their sensitivity to pain tend to decrease, but they are very sensitive to sensations such as sound, touch, and various sensory stimulations, so they often do not like to be held or hugged. (US Department of Health and Human Services; 2008).

## 2. METHODS

The methods of data collection were observation, interviews, and document analysis. The data in this study recorded spoken dialogue in autistic children, treated as a language symbol for constructing communication disorders/echolalia in the oral language of autistic children. The source of the survey data is children with autism in North Sumatera. It aims to provide an overview of cases of communication barriers in adolescents with autism. In addition, this study will also look at the efforts that have been made by parents and schools in improving communication skills in autistic adolescents. The design used in this research is a case study. The interactive model describes how senders and recipients can communicate in a physical and psychological context to exchange ideas, messages, and information. Interactive nonverbal or linguistic communication takes place between humans and machines in a give-and-take manner. In this case, a child with autism uses Echolaria with a voice pattern similar to the following: Self-stimulation: This use of the echolalia voice pattern, often referred to as "voicing," is intended as a calming strategy. Repetition is used to overcome overwhelming sensory challenges.

## 3. FINDINGS AND DISCUSSION

Shea and Mesibov (2005) found that most autistic adolescents exhibit language and language abnormalities. This is also due to Levy and Perry (2011), who states that the majority of autistic youth

continue to have problems related to behavior, communication, education, life skills, independence, social skills, and friendship. It is supported. In a milder view, people with autistic communication skills evolve as they get older, but still face various social barriers to communication (Magiati, Tay, and Howlin, 2014). Communication in children with autism has many phenomena, including:

### 1. Learn Developmental Delay

Autism can affect a child's development. People with autism spectrum disorders may also have developmental learning disabilities such as They are lagging behind in reaching certain learning disabilities, or developmental milestones. For example, someone may have difficulty understanding the basic idea of a skill, such as personal cleanliness, or following simple one or two-step instructions. At every stage of a child's development that may indicate a problem, there are specific "danger signs" that parents, schools, and doctors should be aware of. These early warning symptoms, or "red flags," might arise abruptly or gradually.

### 2. Difficulty in Communication Skills

Children up to 1215 months should be able to ask simple questions and a nod to simple commands such as "yes" and "no". At this age, the baby needs to try to pronounce words like "mom" and "daddy". They may even begin to imitate the little words they hear on a regular basis, such as "Yay" and "Who". Language skills can be impaired in children with signs of autism spectrum disorders. They can't talk at all, or they start going without talking for a long time. They may refuse to communicate with others, including those they love and trust. Communication is not just verbal. This includes reading facial expressions and eye contact, recognizing voice tones, and understanding gestures. Overall communication skills are highly dependent on the child's social and intellectual development.

### 3. Repetitive Movements and Actions

Specific movements and actions. Behavioral behaviors such as intentionally shaking the head, legs, and arms, intentionally changing facial expressions, and pulling hair can be indicators of autism. Autism is characterized by shaking, tapping, or other repetitive activity. "Is pulling hair an indicator of autism?" Parents can be worried. Pulling hair can be a symptom of autism, but it is not enough to diagnose ASD. "Repetitive behaviors can be divided into two types by scientists. Movements such as flapping hands, tampering with objects, and shaking the body are" low-order "like vocalizations such as growls and repetition of specific words. This is an example of repetitive behavior. Characteristic rituals of autism, such as routines, fixation on equality, and intense interest are examples of "higher" repetitive behaviors "(Spectrum News).

Echolalia is a condition that occurs when a person repeats a word, phrase, or sound heard from another person. This condition is common in children with autism or autism spectrum disorders (ASD). This is her unique way of communicating and sets her apart from others. However, as the child learns to speak, it is necessary to understand that Echo Laria is actually part of the child's development. When learning to speak, children tend to repeat or imitate the words of their parents and teachers from the videos they often listen to. However, by the time the child is 2-3 years old, echolalia begins to decline and disappears spontaneously as the child's speech increases. Nonetheless, Echolaria does not disappear in children with autism and remains a unique means of communication. In fact, experts say that Echolaria is the usual way for autistic children to mature their cognitive and verbal abilities. In addition to children with autism, echolalia can also occur in children or adults with certain neurological or developmental disabilities. People in this state usually find it difficult to communicate normally with others, so Echo Laria is used as an answer to these difficulties. There are two types of echo language that people generally experience. There are two types of echolalia in question.

#### 1. Immediate echo language or direct echo language

People with this type of echo language repeat the words and sounds they just heard. For example, when a parent says "bath time," the child actually says "bath time," rather than taking a

shower immediately as instructed. But in autistic people, direct echo language is their way of telling others that they are digesting what they are saying.

## 2. Delayed Echo Laria

As the name implies, a person with this type of echo language repeats a word or sound for some time after hearing it. The time lag between what is said and what is said can be minutes or a year after hearing the speech. These words can be said anytime, anywhere. Either direct or delayed, both can be communicable or non-communicable. Echolalia of communication means that someone has the meaning or purpose of communicating when repeating another person's words. This can mean asking, approving, or even protesting. Non-communication means the repetition of words executed without a clear communication purpose.

Children with communication disorders and children with autism are particularly vulnerable to echolalia. Some people experience this problem only when they are depressed or anxious. Others can experience this condition at any time, but it can eventually lead to them being silent because they are unable to express themselves. Adults with severe amnesia or head injuries can also experience echolalia when trying to regain their ability to speak.

### How to Help Autistic Children Overcome Echolalia:

Echolalia is a repetition of a particular word or phrase spoken by a person immediately after or after the word is spoken. This condition is often compared to parrot mimicry. For example, when asked "How about juice?", The child answered Echo Laria "How about juice?". Echolalia is considered to some extent as part of the language learning of young children. However, children with autism are highly dependent on echolalia and can continue to use it from adolescence to adulthood.

#### 1. Teaching Scripts

##### a. Understand the purpose of the script.

Children with autism can rely on scripts to facilitate communication. Many children with autism repeat the words and phrases (echolalia) that say, "I've listened to you and thought about the answer." Be calm and patient around the children. Echo Laria is a communication tool for children, and if you think it is not intended to irritate others, you can better evaluate your child's perspective.

##### b. I will teach you a "don't know" script.

Encourage children with autism to say "I don't know" and answer questions they don't know. There is evidence that teaching new phrases to answer questions that you don't know using "don't know" scripts make it easier for children to learn new phrases and use them well.

- Ask a series of questions that a child with autism knows does not know the answer. For example, ask "Where are your friends?" Then answer "I don't know." Next is "What is the name of the capital of Indonesia?" And "I don't know." This script allows you to ask and practice as many questions as you like each time.
- Another way to teach a "don't know" script is to have someone answer the "don't know" question.

##### c. Ask your child to answer correctly.

Children can use Echolalia when they don't know how to answer or express their thoughts in words. Please provide a script to help them give the correct answer. For example, ask, "What is your name?" Ask for the correct answer (child's name). Repeat this until your child learns the correct script. Try this on all questions with the same answer. "What color is our house?" Followed by "white", "what is the name of the dog?", And "spot". You need to answer every time you teach a script until your child starts writing the script himself. This method only works for questions with the same answer. For example, the question "What color is your shirt?" The color of the child's clothes changes every day so it doesn't work.

- d. In other words, teach children multiple scripts.  
This is a way to get the basics right, even when your kids are stressed. This step-by-step process can be a tool for building trust, vocabulary, communication, and proper interactions for children.
- e. Teach a needs-based script.  
Children with autism can become frustrated and depressed and hysterical if they cannot express their needs. Scripts help them express their needs so that they can solve things before they reach the limit of patience and scream or cry. Here are some sample scripts:  
"I need time alone."  
"I'm thirsty."  
"Too noisy."  
"Please stop."

## 2. Using Modeling Techniques

- a. Use the exact words you want your child to use. Modeling must use the exact words and phrases that the child wants to understand, learn, and rephrase. This will help your child learn how to say the things he wants to say. For example, I already know that kids don't like playing with certain toys, but to express it verbally, after providing the toys, say "I don't thank" or "I don't like". You can continue to use words and phrases.  
When the child uses the desired phrase, give the appropriate response. For example, if the child successfully says "I want more," refill the plate. If you repeat a phrase several times and your child doesn't respond, take the desired action. The child will begin to associate phrases with actions. Then, try again. Over time, the child will begin to use the taught phrases.
- b. Include spaces and periods for answers in the text.  
When you want to give a snack or drink milk, you can signal "I want to drink \_\_\_\_" (pointing to milk and saying "milk"). Or say "I want \_\_\_\_" (point to a snack and say "snack"). Over time, the child independently fills the gap.
- c. Make a statement to the children instead of asking a question.  
It's best not to ask "Are you sure?" Or "Do you need help?" Because they repeat the question. It's better to say what the child needs to say. Example: If you see your child trying to reach something, instead of asking "Do you need help?", "Pick up the toy" or "Pick up the toy." Please try to say. You can get my book. ". Has this sentence been repeated? Then help your child even if your sentence is not repeated.
- d. Do not say your child's name at the end of the sentence.  
When you start repeating words, your child's intent is lost. Say "Hello!" Or "Good night!" Just say it and don't end with your child's name. Or you could say that the name comes first, pauses, and then ends with the phrase you want to convey. If your child needs to praise something successful, say congratulations without your child's name. Don't say "That's great, Andy!" Just show it with actions such as "Very good!", Kissing her cheeks, tapping her back, or hugging her.
- e. Make the educational process interesting and enjoyable.  
Choose a time to relax and have fun lessons and games. In this way, your child will learn with enthusiasm and you will have the opportunity to network and enjoy. Teaching should not be painful or compulsory. If either is too frustrating, stop and try again later.

## 3. Understand the purpose of Echolalia communication

- a. Learn the purpose of echolalia in autism.  
Echolalia is a common form of communication. Children with autism can use it. If you don't understand the meaning of each word or the purpose or usage of the question. In this case, the child relies on the text he hears to communicate. For example, say "How about a cake?" Instead of "Can you give me a cake?", The cake was already ready when the adult first asked this question. When the child is stressed. Echolalia is easier than spontaneous speech, making

it easier to use when you feel stressed. For example, in a crowded room, a child with autism has a hard time handling all the sounds and movements around him. Therefore, it is too difficult for a child to pronounce the full text.

If the child feels the same when the statement is used. Echo Laria can convey emotions. For example, a child may say, "The pool is closed today," and one day when the pool is closed, the child may be disappointed and express disappointment. When children need time to think. For example, when a child with autism is asked what he wants to eat for dinner, they may ask, "What do you want to eat for dinner?" To yourself, This shows that the child is given time to listen and think about the questions. When a child tries to build a relationship. Echolalia can be used as a game or a joke.

b. Remember that delayed echolalia can also be used outside of social interactions.

This can help a child with autism in several ways:

- Remembering things. Children with autism can have problems following a series of steps. You can repeat the sequence yourself, reminding yourself and working to make sure the work was done correctly. Example: "I have a cup. Pour the juice slowly. Close the juice bottle again. OK."
- Calm down. Repeating self-soothing phrases helps autistic children control their emotions and relax.
- Stimming. Stimming can help you in a variety of ways, including concentration, self-control, and mood improvement. If your child is in the way of others, you can ask them to lower their voice. But if children are allowed to enjoy their activities, it's better than usual.

c. Pay attention when a child uses echolalia.

- Children who use echolalia prior to hysterics may have severe distress or sensory input overload.
- Children who repeat the question (for example, "Do you want to eat cake?" Express your desire to eat cake) may not understand the purpose of the question.
- Children who repeat phrases to themselves in a singing voice may use them to concentrate or to have fun.

d. Be patient and give your child some time.

When children with autism do not feel pressure to react quickly, they may be more relaxed and easier to talk to. Explain that you are patient and enjoy listening to what your child has to say, no matter how long it takes.

Based on the above explanation, we can conclude that echolalia is a pervasive developmental disorder characterized by difficulty in communication and social interaction (American Psychiatric Association, 2000). Hill and Firth (2003) state that autism is a lifelong developmental disorder based on neurological problems. Symptoms of autism usually appear by the time the child reaches 1224 months of age and is with someone who has experienced autism throughout his or her life (APA, 2013). Communication restrictions are a separate barrier to allowing people with autism to interact with their surroundings. Garfin and Lord (Paul and Sutherland, 2005) say that communication skills are a major factor in determining the extent to which autistic people can engage with others and participate in daily activities at school and in community homes. In addition, Carr and Durrant (Paul and Sutherland, 2005) state that improving communication skills in people with autism is directly related to the prevention and mitigation of behavioral problems.

#### 4. CONCLUSION

A common challenge faced by children with autism spectrum disorders and their parents is that children with autism cannot express or express their feelings in words like children with typical development. Is an assumption that should not exist (by other children, other parents, or even teachers). But we cannot be far from the truth. There are many difficulties faced by children with autism: B. (1) Difficulty in language comprehension (difficulty in language comprehension). Children

with autism do not seem to be able to recognize words as meaningful, follow verbal instructions, hear warnings, or understand when scolded. By the age of 5, many children with autism have language restrictions. (2) Difficult to speak (difficult to speak). Some autistic children never speak, some autistic children learn to say some words, they usually repeat words spoken by others, have difficulty using conjunctions, and cannot use words flexibly, or express thoughts. Most of them can speak with short sentences in basic vocabulary, but their vocabulary is limited and their language is difficult to understand. His vocabulary is limited, so he doesn't understand many of the words they say. Those who can speak like to imitate speech and babbling (echolalia).

## REFERENCES

- American Psychiatric Association, (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington: American Psychiatric Publishing.
- Baird, G., Charman, T., Pickles, A., Chandler, S., Loucas, T., Meldrum, D., Carcani-Rathwell, I., Serkana, D., & Simonoff, E. (2008). Regression, developmental trajectory and associated problems in disorders in the autism spectrum: The SNAP study. *Journal of Autism and Developmental Disorders*, 38(10), 1827–1836. <https://doi.org/10.1007/s10803-008-0571-9>
- Boeschoten, M. A., Kenemans, J. L., Van Engeland, H., & Kemner, C. (2007). Face processing in Pervasive Developmental Disorder (PDD): The roles of expertise and spatial frequency. *Journal of Neural Transmission*, 114(12), 1619–1629. <https://doi.org/10.1007/s00702-007-0780-y>
- Da Cruz, F. M. (2010). Verbal repetitions and echolalia in Alzheimer's discourse. *Clinical Linguistics and Phonetics*, 24(11), 848–858. <https://doi.org/10.3109/02699206.2010.511403>
- Daulay, SH., (2019). *Language and Society*. Medan: Lembaga Peduli Pengembangan Pendidikan Indonesia (LPPPI).
- Desta Sarasati Raharjo, dkk., (2014), Pengaruh Terapi Bermain Menggantung Terhadap Peningkatan Motorik Halus Pada Anak Autisme Usia 11 – 15 Tahun di Sekolah Luar Biasa Negeri Semarang. *Jurnal Ilmu Keperawatan dan Kebidanan*. Sekolah Tinggi Ilmu Kesehatan Telogorejo Semarang.
- De Wit, T. C. J., Schlooz, W. A. J. M., Hulstijn, W., & Van Lier, R. (2007). Visual completion and complexity of visual shape in children with pervasive developmental disorder. *European Child and Adolescent Psychiatry*, 16(3), 168–177. <https://doi.org/10.1007/s00787-006-0585-9>
- Elsabbagh, M., Divan, G., Koh, Y., Kim, Y. S., Kauchali, S., Marcin, C., Montiel-Nava, C., Patel, V., Paula, C. S., Wang, C., Yasamy, M.T., & Fombonne, E. (2012). Global prevalence of autism and other pervasive developmental disorder. *International Society for Autism Research 2012*, doi: 10.1002/aur.239.
- Ganz, J. B., Simpson, R. L., & Lund, E. M., (2012). The Picture Exchange Communication System (PECS): A promising method for improving communication skills of learners with autism spectrum disorder. *Education and Training in Autism and Developmental Disabilities*, 47(2), 176-186.
- Hard, S. L. & Banda, D. R., (2010). Picture Exchange Communication System with individuals with developmental disabilities: A meta-analysis of single subject studies. *Remedial and Special Education*, 31(6), 476-488, doi: 10.1177/0741932509338354.
- Jacobsen, K. (2010). Diagnostic politics: The curious case of Kanner's syndrome. *History of Psychiatry*, 21(4), 436–454. <https://doi.org/10.1177/0957154X09341438>
- Kobayashi, R., Murata, T., & Yoshinaga, K., (1992). A follow-up study of 201 children with autism in Kyushu and Yamaguchi areas, Japan. *Journal of Autism and Developmental Disorders*, 22(3), 395-411.
- Levy, A. & Perry, A., (2011). Outcomes in adolescents and adults with autism: A review of the literature. *Research in Autism Spectrum Disorders*, 5, 1271-1282, doi: 10.1016/j.rsad.2011.01.023.
- Luyster, R., Richler, J., Risi, S., Hsu, W. L., Dawson, G., Bernier, R., Dunn, M., Hepburn, S., Hyman, S. L., McMahon, W. M., Goudie-Nice, J., Minshew, N., Rogers, S., Sigman, M., Spence, M. A., Goldberg, W. A., Tager-Flusberg, H., Volkmar, F. R., & Lord, C. (2005). Early regression in social



- communication in autism spectrum disorders: A CPEA study. *Developmental Neuropsychology*, 27(3), 311–336. [https://doi.org/10.1207/s15326942dn2703\\_2](https://doi.org/10.1207/s15326942dn2703_2)
- Nwora, A. J., & Gee, B. M. (2009). A case study of a five-year-old child with pervasive developmental disorder-not otherwise specified using sound-based interventions. *Occupational Therapy International*, 16(1), 25–43. <https://doi.org/10.1002/oti.263>
- Rosen, T. E., Mazefsky, C. A., Vasa, R. A., & Lerner, M. D. (2018). Co-occurring psychiatric conditions in autism spectrum disorder. *International Review of Psychiatry*, 30(1), 40–61. <https://doi.org/10.1080/09540261.2018.1450229>
- Stribling, P., Rae, J., & Dickerson, P. (2007). Two forms of spoken repetition in a girl with autism. *International Journal of Language and Communication Disorders*, 42(4), 427–444. <https://doi.org/10.1080/13682820601183659>
- Wahyuningsih, D (2018). Second Language acquisition for Children. *Al Ishlah Jurnal Pendidikan*, 10 (2), 208-215. <https://doi.org/10.35445/alishlah.v10i2.90>
- Wilczynski, S. M. (2007). Introduction to the special issue on autism spectrum disorders. *Psychology in the Schools*, 44(7), 651. <https://doi.org/10.1002/pits.20254>

