



Gamelan as a Communication Trigger for Autistic Children

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ABSTRACT

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Disorders in autistic children can be in the form of behavior, emotions, interactions, and communication. They show responses to their conversation partners in different ways. Autistic children have their own world in interacting and communicating, so many conversation partners have difficulty receiving messages from autistic children. With the learning method using gamelan, students of SLB Bina Anggita are able to control their unstable emotions and moods. When playing and after playing gamelan, autistic children tend to be able to interact and communicate well. In addition to being a learning tool, gamelan can also be a means of therapy for autistic children. The sound produced by gamelan can be a stimulus for autistic children so that their communication psychology can be controlled properly. Disorders in autistic children such as behavior, emotions, interactions, and communication can be overcome by playing gamelan. This study can also be a consideration for parents of autistic children to apply therapy using sound because sound can also build a person's mood.

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1. Introduction

Children with autism disorders will persist into adulthood, so they have the potential to experience personal problems that they experience in the form of social interaction problems, learning disorders, and communication disorders (Vernhet, Dellapiazza, Blanc, Cousson, & Stephanie, 2018). Children with autism tend not to be able to develop like children as usual, so children with autism have a special way to interact with them. These attitudes and behaviors are shown by children with autism because they feel or consider other people to be a threat to them, so they often show bad behavior towards people they don't know.

Autism disorders experienced by children with autism cause children to experience limitations in social interaction which is characterized by lack of concentration and having their own world. Children with autism have a flat expression even though they have an interest when dealing with other people (Purwanto & Sukanto, 2021). Closest people such as family and teachers must be able to create an atmosphere that can maintain the mood of children with autism (Putri Fitriana Herdani, Fredrick Dermawan, & Yuliana Hanami, 2022). Closest people must be able to create a way of communication that is liked by children with autism and also provide movement, objects or sounds as a means of therapy for children with autism. Until now, the cause of autism itself is not known for sure, but it is believed that the cause of autism itself is environmental and genetic factors, both of which are suspected as the main causes of autism. Genetic factors are the most suspected factors, because genetic factors contribute most to the cause of autism (Sevtia Eka Novarita, & Nurul Yamin, 2018). The initial symptoms that appear in children with autism are that children tend to be quiet and seem to have their own world, in this condition parents are not yet aware of the symptoms of autism in children. If parents know the early symptoms it is better to take the child to a psychologist for

further examination regarding their child's condition. dr. Maria Endang Sumiwi said that WHO predicts that 1 in 160 children in the world suffer from autism spectrum disorders, while the number of people with autism spectrum disorders in Indonesia is estimated to increase by 500 people each year. In the period 2020-2021, 5,530 cases of developmental disorders in children were reported, including autism spectrum disorders. With the increasing cases of autism, of course, this is a big problem for the world so it needs to be handled seriously to reduce the number of autism disorders. Having a child with autism is still a nightmare for some parents and some parents experience stress when they find out that their child has autism (Sari & Rahmasari, 2022). With this problem, parents must also prepare everything to care for children with autism and must also pay special attention to children with autism. Parents and children with autism really need support from those closest to them, because caring for a child with autism requires extraordinary patience. Parents and those closest to them must often interact and communicate with children with autism so that children with autism and their families feel comfortable and get more support from those closest to them.

Autistic children need sound, images, shapes, and movements as a medium for communication. In SLB Bina Anggita, there is a different treatment in handling children with autism. It is known that SLB Bina Anggita uses gamelan media as a means of conveying messages between teachers and children with autism or vice versa, even gamelan can also be used as a means of therapy for children with autism. The treatment used by SLB Bina Anggita is a method that is rarely used, because using gamelan which is a media in the form of audio can be used as a means of conveying messages considering that children with autism are children who tend to like visuals. Thus, it is very important to know how children with autism interpret and understand how sound can help them communicate and interact with others. This view can help to understand the experiences of children with autism in interpreting and telling their experiences in communicating through sound media (Widyorini et al., 2014). By knowing the experience of children with autism in using sound as a medium to help communicate, we can understand the essence of the experience of children with autism regarding sound which has a role in helping make it easier for them to communicate and also being able to understand experiences properly. In previous studies, the focus of research was on the interlocutors and parents of children with autism. The problem that distinguishes this study from other studies is that this study examines how voice can play a role in the psychology of communication of children with autism, so that children with autism are able to communicate in a structured manner and without experiencing autism or problems with themselves.

In this study, researchers used the constructivism paradigm using several theories, namely intrapersonal communication theory, and non-verbal communication theory. This study was used to find out that children with autism can communicate with others like other children. However, the communication used by children with autism is different from the communication of children in general, the communication used by children with autism is mostly non-verbal communication or communication that uses symbols, sounds, shapes, and body movements. Children with autism have better visual memory, so they are more easily able to receive information with visuals, shapes, and sounds (Barnett, Trillo, & More, 2018). Researchers are interested in studying the communication of children with autism because researchers want to provide an understanding to the public that children with autism are not children who have mental problems, but they have problems with developmental disorders that affect the way they communicate so that they need special ways of communicating.

2. Method

In this study, researchers attempted to collect data and information directly at the research location. (Iddagoda, nd) said that research as an organized, systematic, data-based activity, is carried out critically, objectively, and scientifically to obtain answers or in-depth understanding of a problem. Therefore, this study is a type of basic research because it aims to find out, explain, and predict the phenomena that occur, according to Jujun S. Suriasumantri (1985). Researchers used qualitative research methods to study the communication psychology of children with autism when hearing the sound of gamelan. (King, 1991) defines qualitative research as an approach or exploration to explore and understand a central symptom. The data used in this study is primary data where researchers use raw data taken directly from the field through observation, interviews, and documentation. Researchers chose to use qualitative research methods because the object being studied is a phenomenon, where the phenomenon can be explained through description. JR Raco, 2010 wrote that

facts, realities, problems, symptoms and events can only be understood if researchers explore them in depth and are not limited to just superficial views. Qualitative research focuses on the process of observation and research on objects, humans, objects, behavior. To obtain valid data in the field, researchers use an existential phenomenological approach, where researchers try to explain the experience and existential meaning of the communication psychology of children with autism when hearing the sound of gamelan in communicating and stabilizing their emotions (Sudirman et al., 2022). Researchers will try to find data and process the data obtained by researchers, then researchers will present the results obtained by researchers in the field in the form of descriptions by revealing the facts of the findings that researchers get regarding how the communication psychology of children with autism when hearing the sound of gamelan, gamelan can play a role in controlling emotions and communicating children with autism.

In order to conclude the results of this study, supporting data are needed regarding the role of gamelan on the psychology of children with autism in communicating and controlling emotions applied by SLB Bina Anggita. Therefore, to obtain valid data, researchers use several data collection techniques, including observation, interviews, and documentation. According to (Raco, nd) data analysis means systematically organizing interview and observation materials, interpreting and producing new thoughts, opinions, theories or ideas. The data that has been collected by the researcher is then analyzed by reading repeatedly to obtain information about the problem being studied and see the significance of the data obtained. Data that is considered mature is then classified to label data that is compatible with each other. Data analysis in qualitative research is the process of systematically searching and compiling data obtained through observation, interviews, and documentation. Qualitative data analysis is inductive in nature where an analysis based on data obtained in the field is then developed into a hypothesis (Abdussamad, 2022). This study uses the Symbolic Interaction theory according to Herbert Blumer, namely action, which is unique in that humans interpret each other, define their actions, not just reactions from one person's actions towards others.

3. Results and Discussion

The results of the study obtained, the use of gamelan can be a means of triggering autistic children in controlling emotions and making children feel calm in conveying messages. When autistic children play gamelan they look more relaxed and are able to understand every instruction given to them. Likewise, after playing gamelan they are also calmer when interacting with their conversation partners. The use of sound or music in learning gamelan for autistic children can help increase attention, develop body awareness, improve, and change behavior (Djohan, 2006). Music learning using gamelan can be a means of therapy for autistic children at SLB Bina Anggita. Proven by the ability of autistic children to follow the instructions given, and can provide feedback to teachers so that the communication that is established can be in accordance with procedures and facilitate two-way communication. In this case, sound can be a trigger in controlling emotions and developing children's awareness in communicating. Actions show a uniqueness that humans interpret each other, define their actions, and not only the reaction of one's actions to others. A person's response is also not made directly based on their actions, but is also based on the meaning given. Every human action must be based on meaning, so that the message given can be received and understood by others. Actions with meaning are a form or process of communication carried out by autistic children at SLB Bina Anggita in interacting. In this case, there are several reactions that have meaning for autistic children and teachers in interacting. This meaning can be useful for teachers and students to understand the delivery of messages between each other.

In this case, the author observed that the use and playing of gamelan musical instruments can produce sounds that tend to be relaxing and children are able to accept and feel comfortable when playing musical instruments. It is evident from these observations that there are several students who often have tantrums and are reluctant to accept instructions from parents or teachers, those who feel that their mood is not right often have tantrums and do things out of control, such as throwing toys, hitting, not wanting to get out of their parents' vehicles, to lying on the classroom floor. However, when learning karawitan, children are able to accept instructions from the teacher, and can play the gamelan according to the specified tone. In learning karawitan, there are also children who are able to show that when there is a mistake in the tempo of the tone, they can stop and ask to repeat it. To analyze this problem, the author has collected data in the form of documentation photos, observations,

and interviews. This is done to answer the formulation of the problem in this study, namely how music can act as a communication trigger for autistic children. Someone who rarely uses non-verbal communication will have a little difficulty in receiving and delivering messages because they do not understand the symbols or gestures of the communicator. Non-verbal communication will convey messages that are true and will be conveyed spontaneously, because non-verbal communication is the most honest communication (Sri Retno Mulyani, Sitti Fauziah, & Rahmawati, 2022). The researcher will collect data that is relevant to the discussion that the researcher gets from interviews and observations of the researcher as well as the results of the documentation that the researcher has obtained. The researcher will examine how music acts as a communication trigger for children with autism when listening to and playing gamelan. Then the researcher tests it using non-verbal communication theory. From the data that the researcher obtains, the researcher can conclude how the role of gamelan is in building communication and good responses for children with autism. In the researcher's observation, there are several behaviors that appear when children are taking part in learning outside of karawitan lessons. The behaviors that are carried out include hitting themselves, screaming, throwing objects, to lying on the floor and doing activities that they want themselves.

Table 1. Results of Observations of General and Sports Lessons



Picture	Description
	In this picture, one of the children is having a tantrum, showing a flat expression and just looking at the game he wants.
	Children who feel bored with learning leave the classroom and look for something they like.
	Children start to get out of control and abandon the activities they are doing.
	When learning sports, children pay more attention to the surrounding atmosphere which they think is new and forget about learning.

Children at SLB Bina Anggita tend to be uncontrollable and prefer their own activities. According to the general subject teacher at SLB Bina Anggita, there are several aspects of behavior that often appear when learning begins. This can happen when they don't like the subject, are bored, and maybe they are in a bad mood when they are about to go to school. This condition can cause their mood to be bad and their emotions are very difficult to control so that they often do activities that they feel comfortable with. In a tantrum, children at SLB Bina Anggita are unable to control their emotions well so that to convey their message they use their own way.

Unlike general learning, when they take gamelan lessons, students tend to be able to adjust their learning and are able to understand the instructions given. When playing gamelan, they are able to control their emotions and are able to receive and convey messages according to their wishes. Autistic children from SLB Bina Anggita also understand their mistakes when playing a song, they are able to correct the beats when they are not in accordance with the tempo. In conveying the beat errors, they also vary, they convey them with meanings that can be understood by the teacher, such as raising their hands, shouting, hitting the gamelan hard, and some also ask to stop. With the signs given by the children, the teacher can capture the message conveyed and try to provide direction to the students.

Table 2. Karawitan Learning

Picture	Description
	<p>Students who make mistakes in the beats stand up and invite the accompanying teacher to accompany their activities.</p>
	<p>Students stop the game by raising their hands to indicate that the beat is not in the right tempo.</p>
	<p>Students put down their gamelan beaters because the lesson was over and interacted with the accompanying teacher to ask about break time.</p>

	One of the students who had finished taking the gamelan lesson helped the teacher to install the printer.
	The author interacted with one of the students of SLB Bina Anggita after the gamelan learning. The student communicated calmly and clearly. The student was able to control his emotions when facing the other person so that communication could be established.

In gamelan learning, each child follows seriously and shows their own meaning and response when participating in the activity. The response shown by students from entering the room until the end of the lesson, students start to enter guided by the teacher to choose the musical instrument they want to play. There are some students who show annoyance because they cannot play the musical instrument they want to play. This inconsistency causes their emotions to be uncontrolled so that the teacher must be able to guide and calm them down. However, when the gamelan music starts to sound, students who were previously reluctant to follow because they did not get the musical instrument they wanted can calm down again and are able to follow the gamelan learning activity. The gamelan learning activity acts as a trigger, where students at SLB Bina Anggita can control their emotions so that they can interact well with their conversation partners. In this case, the sound of the gamelan played by students can also play a role in improving the communication psychology of SLB Bina Anggita students so that they can interact and send messages to each other well.

4. Conclusion

This study shows the role of gamelan as a communication trigger for autistic children can be shown by the emotional stability of students in communicating with their conversation partners. Students are able to interact with friends, teachers, and others to convey messages to each other. In these interactions, students who have just finished playing gamelan do not feel afraid and their emotions tend to be more stable. Students who previously had tantrums when taking general subjects are now seen to be able to take part in other activities.

In this study, the sound produced by the gamelan gives a sense of relaxation so that the psychology of SLB Bina Anggita students in interacting and communicating can run well. The author conducted this study to prove that autistic children actually have special qualities like other children. The researcher also hopes that the interlocutor can understand the meaning that appears in autistic children when communicating.

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6. References

- Abdussamad, Z. (2022). *Qualitative Research Methods Book*.
- Aprilo, ED (2021). Learning Regional Songs Using Pianica Instruments to Improve Musical Skills of Autistic Children. *Jurnal Pendidikan Sendratasik*, 11 (1), 1–16.
<https://doi.org/10.26740/jps.v11n1.p1-16>
- Asfar, AMIT, Asfar, AMIA, & Halamury, MF (2019). Behaviorism Theory.
https://www.researchgate.net/publication/331233871_THEORY_BEHAVIORISME_Theory_of_Behaviorism. February, 1–33.
- Dr. SKM, Sandu Siyoto, MK, & Ali, MASM (2015). *Basic Research Methodology Dr. Sandu Siyoto, SKM, M.Kes M. Ali Sodik, MA 1*. Basic Research Methodology, 1–109.
- Iddagoda, A. (nd). Mangala Fonseka and Athula Manawaduge. *A Guide to Academic Writing and Research Reports*, Nugegoda 2019. *Roczniki Kulturoznawcze*, 13 (2), 113–115.
- King, G. R. D. (1991). Creswell's appreciation of Arabian architecture. In *Muqarnas* (Vol. 8).
<https://doi.org/10.1163/22118993-90000268>
- Koesdiningsih, T., Basoeki, L., Febriyana, N., & Maramis, MM (2019). The Relationship of Visual Support Usage to Improvement. *Periodical Journal of Epidemiology*, 7 (1), 77–84.
<https://doi.org/10.20473/jbe.v7i12019>.
- Nurrezqia, A., & Ramadhana, MR (2022). The Role of Family Communication in Online Learning Assistance for Autistic Children. *Journal of Educational Dynamics*, 15 (1), 39–50.
<http://ejournal.uki.ac.id/index.php/jdphttps://doi.org/10.51212/jdp.v15i1>
- Purwanto, CV, & Sukanto, ME (2021). *Autism and ADHD*. 1–44.
- Raco, R. (nd). *METHODS*.
- Ridho, AR, & Hariyadi, M. (2021). Application of Communication Psychology. *Komunique: Journal of Islamic Broadcasting Communication*, XIII (1), 53–78.
- Roulston, Kathryn. (2008). Volumes 1-2. In *The SAGE Encyclopedia of Qualitative Research methods*.

- Sari, CR, & Rahmasari, D. (2022). Parental Communication Strategies for Autistic Children. *Journal of Psychological Research*, 9 (1), 171–179.
- Sudirman, MY, Kurniawan, NA, Putri, SNJ, Aiman, U., & Saputra, R. (2022). KIPAS Counseling: Intensive Progressive Adaptive Counseling and Structure in Reducing Trauma in Covid-19 Survivors. *Proceedings of the National Seminar on Guidance and Counseling*, State University of Malang, 389–398.
- Widyorini, E., Harjanta, G., Roswita, MY, Sumijati, S., Eriyani, P., Primastuti, E., Hapsari, LW, & Agustina, E. (2014). *Psychology of Children with Special Needs*. 1–100. http://repository.unika.ac.id/26427/1/2013G2_BukuABKpdf.pdf
- Yanti, F. (2022). *Communication Psychology*. Agree Media Publishing.