

Strategies for Managing Emotional Barriers in Students with Autism Through Drum Music Activities: Impacts on Emotional Regulation

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ABSTRACT

This study investigates the use of drum music as an effective strategy for managing emotional outbursts in children with Autism Spectrum Disorder (ASD), particularly during tantrums. The research is motivated by parents, teachers, and therapists' challenges in handling tantrum behaviours, which often disrupt the affected child, their peers, and surrounding activities. Drum instruments were introduced as an engaging and enjoyable medium to redirect and regulate such behaviours in children with ASD. This study uses a descriptive qualitative research method to explore drum music's theoretical and practical impacts on emotional regulation. According to the research, children with ASD benefit significantly from playing drum instruments when it comes to emotional regulation. This entertaining and captivating practice promotes emotional self-regulation while acting as a diversion. The study demonstrates how youngsters may naturally and successfully regulate their emotional responses when engaged in drum-playing activities, highlighting the potential of drum music as a therapeutic aid.

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1. INTRODUCTION

Autism, first introduced by Leo Kanner in 1943, is a syndrome characterized by difficulties in social interaction, communication, and emotional control rather than a disease. Individuals with autism often exhibit delayed language acquisition, mutism, echolalia, repetitive behaviours, and an obsessive desire for order in their environment (Azwardi, 2005). These challenges extend to verbal and nonverbal communication, significantly impacting their social interactions and emotional regulation (Fadli, 2010). Each autistic child is unique, displaying symptoms with varying qualities and intensities, which has led to the broader classification of Autistic Spectrum Disorder (ASD) in recent years (Pieter et al., 2011). In Indonesia, the prevalence of autism is rapidly increasing, although precise data on the number of autistic children remains unavailable.

Autism Spectrum Disorder (ASD) refers to a group of brain development disorders characterized by stereotypical behaviours and deficits in communication and social interaction, with varying symptoms and severity (American Psychiatric Association, 2013). In 2012, the prevalence of ASD in the United States was estimated at 14.6 per 1,000 children aged 8 years, with a higher occurrence in boys (23.6 per 1,000) compared to girls (5.3 per

1,000) (Christensen et al., 2012). Globally, the prevalence of autism is approximately 0.15–0.20%, a figure also reflected in Indonesia, where an estimated 6,900 new cases of autism are reported annually (Mashabi & Tajudin, 2009).

Children with Autism Spectrum Disorder (ASD) face a variety of significant challenges that include impairments in social interaction, communication, behaviour, perception, movement, and emotion. Impaired social interaction is a significant criterion of autism seen since infancy, as Adrien et al. (1993) and Nelson & Israel (1997) explained. In addition, autistic children also experience communication difficulties, both verbal and nonverbal, which hinder their ability to interact effectively (Attwood, Frith & Hermelin, 1988). The behaviour of children with autism often shows unusual patterns, such as doing repetitive activities that have no clear purpose or maintaining routines without change (Nelson & Israel, 1997). It further strengthens the complexity of the challenges they face in living their daily lives.

Perception and movement disorders in autistic children are significant challenges, even though their sensory functions are not impaired. Children with autism often experience dysfunction in processing visual, auditory, olfactory, and pain stimuli, which is caused by damage in the regulation and integration of sensory input (Ornitz, 1985; Prior, 1986). As a result, they face oversensitivity, such as being disturbed by mild stimuli, or undersensitivity, such as not responding to verbal or environmental stimuli (Melly Budiman, 2000). In addition, emotional disturbances often appear as temper tantrums, aggressive behaviour, or uncontrolled emotional expressions, such as laughing, crying, or getting angry for no apparent reason. The inability to regulate these emotions, as reported by Budiman (2000), indicates the need for holistic interventions to support the development of children with ASD.

Autism causes impairments in social cognition, skills, and social interactions, which are important aspects of social life. Children with autism show typical characteristics often considered strange, especially regarding social interaction, communication, and behaviour (Pangestu & Arulita, 2017). As Peter Salovey and John Mayer introduced, emotional and spiritual intelligence plays an important role in understanding and managing various emotions and human spiritual potential, affecting a person's success more than intellectual intelligence (Hamzah, 2008). ESQ, as explained by Ari Ginanjar Agustian (2001), is a method that answers inner needs and can inhibit things that are counterproductive to progress, making it a relevant concept in supporting the development of children with autism.

As explained by Ari Ginanjar Agustian (2001), emotional intelligence involves the ability to feel, understand, and use emotions effectively as a source of energy, information, and influence in human life. Mayer and Salovey (Batool, 2013) explain that emotional intelligence involves understanding, expressing, and regulating emotions to facilitate thought patterns and intellectual growth. Goleman (2015) adds that aspects of emotional intelligence include recognising one's emotions, managing emotions, motivating oneself, understanding the emotions of others, and building relationships. These elements support an individual's ability to interact and adapt effectively in a social environment.

If autistic children do not receive proper intervention, symptoms such as tantrums and meltdowns can worsen, even becoming challenging to overcome as they get older (Danuatmaja, 2003). Early intervention, such as therapy, can help children with autism make significant progress, although the approach and methods used need to be adjusted to the specific symptoms they have (Danuatmaja, 2003). Children with ASD often exhibit behaviours such as laughing, crying, and getting angry for no apparent reason, as well as difficulty controlling emotions such as temper tantrums and meltdowns (Kusdiyanti, 2000). Although they may seem similar, tantrums and meltdowns have significant differences in

the context of their handling, so proper intervention is needed to address these symptoms effectively.

In a tantrum, children with Autistic Spectrum Disorder (ASD) are often difficult to control. However, several effective ways exist to help overcome tantrums in these children. One standard method is diverting their attention to other more interesting and enjoyable objects, such as music. Diverting attention can help children forget the cause of their tantrums so they can calm down more efficiently and focus on something more positive. Objects such as music can attract children's attention and divert negative emotions such as anger, frustration, or sadness.

Music, as an enjoyable and calming medium, can express emotions and reduce tantrums in children with ASD. According to music psychologist Karl Seashore, music can profoundly influence emotions by bringing us to a happy, sad, or hopeful mood (Pekerti, 2005). According to research, music has a favourable effect on children with ASD and helps them control their emotional expression. It has been demonstrated that music games, including "feeling bands," which employ instruments according to the expression of emotions, are effective at attracting attention and diverting children with ASD from throwing fits. Thaut's (1984) study confirmed that children with ASD tend to have more extended involvement in musical activities compared to normal children. Music helps these children uniquely process stimuli, although they may have limitations in perception. Musical instruments with interesting shapes and sounds can attract the attention of ASD children, provide a valuable medium of expression to overcome negative emotions and reduce the frequency of tantrums.

Children with Autistic Spectrum Disorder (ASD) show a unique interest in specific musical instruments, especially those that are rhythmic and can release negative energy. Hyperactive children with ASD tend to be attracted to percussion instruments, such as drums because the sounds they produce help them release excessive emotions and tension while creating feelings of happiness. Drums can serve as a cathartic medium, assisting children with ASD to express and relieve negative emotions. In addition, cymbals also attract the interest of children with ASD because the vibrations they feel when hitting and touching the cymbals can create a stimulating and fascinating experience (Marin, 2004). The purpose of this study is to describe strategies for handling emotional barriers in autistic students through drum musical instrument activities, as well as their influence on the emotions of autistic children.

2. RESEARCH METHOD

The research method used is a descriptive qualitative method to describe and explore the role of drum music instruments in controlling emotions in children with ASD. The subjects in this study were 4 ASD children and four parents. This study's data source was obtained through location interviews in Serang City, Banten Province, in 2021. Data collection techniques were carried out through observation, interviews, and documentation. In qualitative research, data collection is carried out in natural conditions, primary data sources, and data collection techniques are more on participant observation and in-depth interviews.

The data processing process begins by grouping the data collected through observation, interviews, documentation, and literature reviews or notes that are considered to be able to support this study to be classified and analyzed based on research interests. The results of the data analysis are then compiled in the form of a report using descriptive analysis techniques, namely by describing the information or data collected and analyzed based on existing theories. Validity in qualitative research is another strength in research, regarding

the certainty of whether the data being researched is accurate or not from the perspective of the researcher, participants, and even readers in general.

3. FINDINGS AND DISCUSSION

The themes emerging from the focus group observations are discussed first, followed by complementary findings from the focus groups and semi-structured interviews. The conclusions of the observation of themes emerging from the focus group observations discuss the role of drums in controlling emotions in children with autism. The findings of the study are presented in the form of case studies. The group was chosen because of the diversity of children, including those who differed in age, developmental level, maturity, temperament, and social interaction styles in autistic children.

Table 1. Overall profile of participants presented as case studies in this study

Participant	Age	Gender	Category
Va	12 years	Female	Autism (mild category)
Al	12 years	Male	Autism (severe)
Ly	8 years	Female	Autism (mild)
Pr	20 years	Male	Autism (mild category)

Participant Va

According to the interview results conducted with Va's parents, who are currently 8 years old and in grade V1 of elementary school, when Va was three, there were no signs of how he communicated with his family. The child did not cry or smile, and his sleep pattern changed. Va has a very different sleep pattern from others; if children generally have a sleep schedule at night, Va sleeps during the day. It made his parents take the initiative to take him to the doctor. The results of the doctor's diagnosis showed that Va had ASD, which was categorized as hyperactive. The doctor also advised him to go on a calorie diet.

In addition, Va likes various musical instruments, including playing percussion instruments. When Va does not sleep all night and has a tantrum, he will cry all day and does not want to be held. To overcome this, his parents look for instruments that can be percussed for Va to play. Over time, his parents bought musical instruments such as pianos and drums for Va to play when he has a tantrum.

Participant Al

Based on field observations conducted on April 15, 2021, on a participant with the initials Al, this child is known to be very active and never interacts with people around him. He was initially categorized as ASD when both of his parents felt that there was something odd about their child, who was already 17 months old but was not yet able to speak or had difficulty speaking. Therefore, Al's parents looked for academic references from the internet, including those from scientists, hospitals, and even biologists. It was only then that it was discovered that Al was included in ASD. When Al felt emotional, he would cry all night and throw a tantrum during the day. To overcome this, his parents immediately took a musical instrument in the form of a drum to give to Al.

Participant Ly

Like Al, Ly is a very active child who never interacts with people around him. At the age of 3, the child could not speak at all. It was only then that his parents found out that Ly had a speech disorder and was included in ASD. The only difference is that Ly doesn't cry. Her parents tried their best, learning from various sources so that their child had positive

activities in her daily life, and it was seen that at the age of 4, Ly had shown good development.

Participant Pr

According to the results of the study on Pr, who is currently 20 years old and has worked as an engineering consultant in Jakarta, Pr did not go through the crawling or even walking stage as a baby. However, when Pr was approximately 6 months old, she could immediately walk. Strange things also began to appear when she was 4 months old. Namely, she could already "babble". However, until the age of approximately 2 years, she had a speech disorder and could speak, but the meaning of her words was unknown. At the age of 6 months, Pr was observed by nutritionists and advised to go on a diet because she turned out to be experiencing a tantrum. Pr really likes Western music, like classical music in English, without anyone teaching it. Uniquely, when Pr is experiencing emotional disturbances, her parents will perform the call to prayer as a sedative.

According to Carlson's (2004) research, children with ASD may experience happy feelings due to using their gross motor skills—such as playing musical instruments—to stimulate integrated visual, aural, and tactile sensations. Even though children with autism have been treated with a variety of therapies, each approach has pros and cons. Thus, interventions must be customized to meet the needs of each kid. Using drums is a successful therapy for children with ASD who struggle with emotional regulation. Positive emotional expressions, including joy, happiness, enthusiasm, and sympathy, were displayed by study participants, demonstrating the effectiveness of music therapy in helping them control their emotions.

The role of musical instruments, especially drums, significantly impacts mood and emotional health. Sad music can make us cry, while happy music can improve our mood. Playing musical instruments, especially percussion instruments such as drums, is ideal for the body, and the sandals express oneself spontaneously and passionately, provide positive energy, and help reduce stress and anxiety. Studies show that playing the drums can lower blood pressure and stress hormones while improving memory and reading ability, especially in children who start practising early. Drum therapy is effective in overcoming emotional trauma, where the sound vibrations stimulate the release of negative memories, providing mental calm and balance.

4. CONCLUSION

The use of drums can contribute significantly to emotional control in children with Autism Spectrum Disorder (ASD). The results showed that children can control their emotions naturally and unconsciously through drumming activities. This activity is fun and engaging for children, thus encouraging active participation and more controlled emotional expression. Therefore, drums are an effective tool in supporting emotional control in children with ASD, contributing positively to their emotional well-being.

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