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Utilizing Music Learning as Emotional Intelligence Therapy for Students with Intellectual Disabilities in Special Elementary Schools

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Abstract: This research is motivated by the fact that students with disabilities often have limitations in their cognitive abilities, making it challenging for them to comprehend learning materials delivered by teachers. The purpose of this study was to investigate the use of music learning as therapy to enhance emotional intelligence in students with disabilities. This qualitative descriptive research utilized data collection techniques including observation, interviews, and documentation. Data analysis involved data collection, data reduction, data presentation, and conclusion. Data validity was ensured through source triangulation and technique triangulation. The research subjects included music teachers, classroom teachers, and five students with disabilities. The results revealed that singing was the primary form of music learning taught to students with disabilities at SDLB N 1 Yogyakarta. This approach had a positive impact on the emotional intelligence of these students, enabling them to better control their emotions during the learning process. Students with disabilities demonstrated improvements in various components of emotional intelligence. The study identified supportive factors such as facilities, infrastructure, and learning components, as well as inhibiting factors related to students' conditions during the learning process. This research contributes to the understanding of music learning as a form of emotional intelligence therapy for students with disabilities.

Keywords: disabilities, music learning, emotional intelligence, special elementary schools, mentally retarded

1. INTRODUCTION

Students with intellectual disabilities exhibit physical limitations compared to their typically developing peers. These students often face challenges in comprehending learning materials presented by teachers due to their limited cognitive abilities (Jamil et al., 2023). They may also encounter difficulties in understanding their surroundings, leading to challenges in social interactions, heightened susceptibility to disappointment, a tendency to give up easily, and a narrow perspective (Marino et al., 2023). Individuals with below-average intelligence, such as those with mental retardation, often find it challenging to grasp the concepts presented in learning materials. Mental retardation, as defined by the American Association on Intellectual and Developmental Disabilities (AAIDD), refers to a condition characterized by an IQ below 84 and can typically be identified before the age of 16 (Furnier et al., 2024). Children with mental retardation require more time to process reactions and events. This research focuses on exploring how music learning can be utilized as a form of emotional intelligence therapy for students with intellectual disabilities (Clegg



& Lansdall-Welfare, 2023). It aims to investigate the benefits of music learning in enhancing emotional intelligence among this student population (Fadillah et al., 2023). Music education plays a crucial role in providing intellectual stimulation for students with intellectual disabilities (Johnels et al., 2023). It is employed as a form of therapy to stimulate the brain (Bleibel et al., 2023), promote relaxation (Raglio et al., 2023), and increase understanding and concentration among children with special needs (Mohan & Thomas, 2020). When implementing music learning at the elementary school level, it is essential to tailor it to the age and developmental level of students to balance emotional and intellectual intelligence (Sularso et al., 2023). Music can harmonize the right and left brain hemispheres and promote relaxation (Weinberger, 2004), thereby enhancing students' capacity to concentrate (Alam & Mohanty, 2023). The research conducted by Johnels discusses musical interactions with children and adolescents with severe/profound intellectual and multiple disabilities (S/PIMD). The findings reveal six promising components of music interaction: interaction partner response, singing songs, structure and predictability in activities, long-term intervention, technology-mediated and multisensory music activities, and therapeutic alliance between interaction partners (Johnels et al., 2023). Furthermore, Moreno Garcia Gemma's research elucidates the role of music in special education for attaining developmental and therapeutic objectives among students with special needs. Moreno Garcia Gemma conducted a systematic review of previous research findings investigating the impact of music on the development of children with Down syndrome (DS). The findings indicate that music exerts a beneficial influence on the treatment and advancement of four primary domains of development (social-emotional, motor, cognitive, and communication) in children with DS (Gemma et al., 2020).

The form of music learning in schools extends beyond nurturing students' interests and talents; it can also serve as therapy with significant impacts on their abilities. Research by Suhaya and Alya Putri on angklung music therapy for children with special needs illustrates how this choice of musical instrument can enhance motor and cognitive skills (Suhaya & Suhaya, 2020). Similarly, traditional musical instruments can be employed to boost intelligence in these children. Moreover, music education in schools can influence students' emotional well-being and self-assurance. Jose Salvador Blasco Magraner's research demonstrates how music learning can benefit autistic children, enhancing emotional development, concentration, communication, motor skills, and self-confidence (Blasco-Magraner et al., 2021). Xiaohua Ke et al.'s research shows that music therapy for children with special needs can enhance their interaction and communication skills, fostering development in school, family, and community environments (Ke et al., 2022). Additionally, Ramirez's research indicates that music therapy can improve language, cognitive, and emotional response skills in autistic children (Ramirez-Melendez, 2023). The focus of this research is on using music as a form of emotional intelligence therapy, addressing the five components of emotional intelligence, which distinguishes it from previous studies that primarily focused on music as intelligence therapy. This study aims to provide a deeper analysis of music learning as emotional intelligence therapy at SDLB

N 1 Yogyakarta, contributing to understanding music learning for students with intellectual disabilities, as it can stimulate their attention and engagement, allowing them to follow rhythmic patterns and create a conducive learning atmosphere.

2. METHODS

This study employs qualitative research methodology, specifically a case study approach, focusing on Music Learning as Emotional Intelligence Therapy for Intellectually Disabled Students at SDLB N 1 Yogyakarta. The study involved music teachers, 4th and 5th-grade teachers, and five intellectually disabled students as subjects. Data collection methods include interviews, observation, and documentation. Interviews were conducted with music teachers to understand their perspectives on using music learning as therapy for emotional intelligence and with class teachers regarding the emotional intelligence of intellectually disabled students. Direct observation of music learning at SDLB N 1 Yogyakarta was also conducted. Additionally, researchers studied documents related to the music learning and therapy process to strengthen the research results. Data analysis methods consist of data collection, reduction, presentation, and conclusion. Data validity was ensured through technical and source triangulation. The analysis focuses on three issues: limited intelligence, social limitations, and limited mental function, addressing them through a music therapy approach using singing. The aim is to enhance emotional intelligence, which will be analyzed based on five aspects: the ability to recognize one's emotions, manage emotions, motivate oneself, empathy, and build relationships. Trends in these aspects will be analyzed to determine if they are increasing or decreasing. This analysis is illustrated in Figure 1.

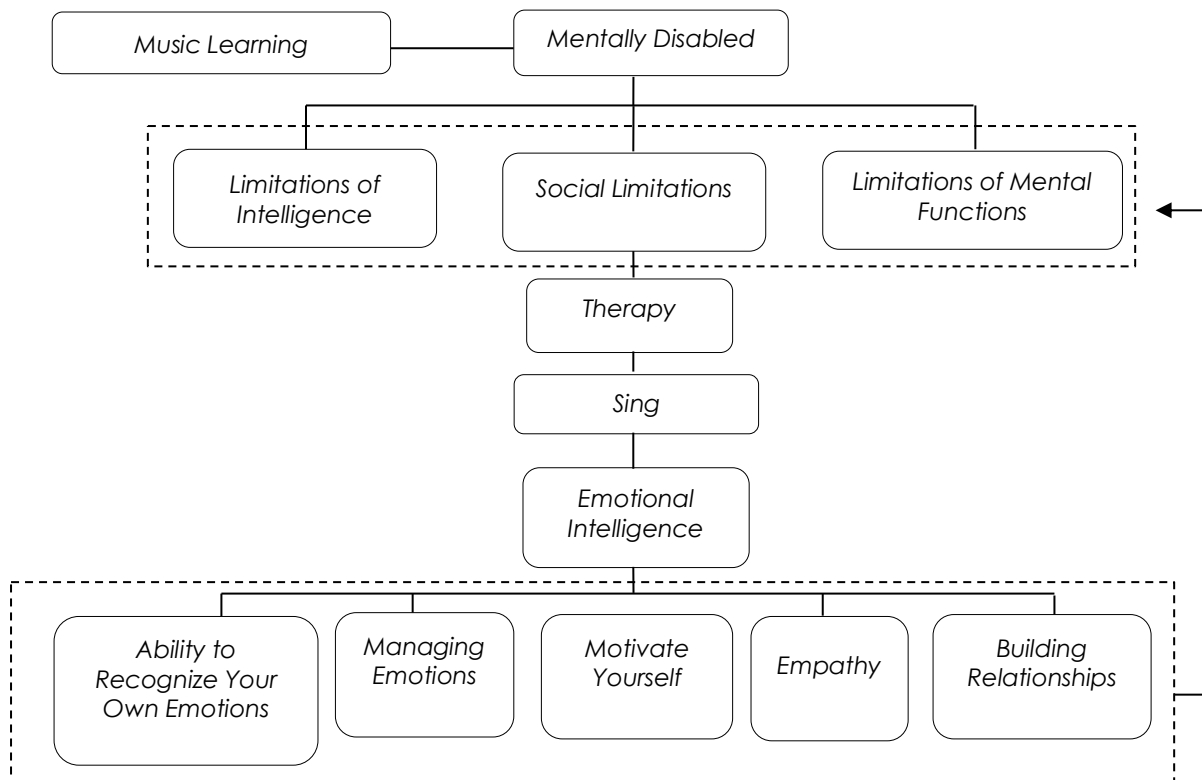


Figure 1. Data Analysis Steps

3. RESULTS AND DISCUSSION

3.1 Music Learning as Emotional Intelligence Therapy for Mentally Retarded Students

Mental retardation refers to the condition experienced by individuals that affects their level of intelligence, physical, social, and emotional functions, necessitating specialized treatment to facilitate their development (Atak et al., 2023). Mentally retarded students exhibit limitations in intelligence, social skills, and mental functions, which impact their emotional intelligence. Adequate emotional intelligence enables individuals to interact socially, manage fear and anxiety, adapt effectively, and take responsibility. It also allows them to control their emotions and understand the emotions of others (Atak et al., 2023). Emotional intelligence encompasses the ability to recognize and manage one's emotions, self-motivation, empathy, and building relationships (Smutchak et al., 2024). The emotional intelligence of mentally retarded individuals tends to vary, influenced by their IQ. Those with higher IQs can often control their emotions better than those with lower IQs, some of whom may exhibit uncontrolled emotional outbursts or tantrums. Unfulfilled desires at home can impact their behavior at school, initially showing interest in learning but becoming bored after about 20 minutes. Teachers incentivize the completion of tasks by rewarding students with items they enjoy. Parenting styles at home can significantly influence the behavior of mentally retarded students. If students are accustomed to unpredictable behavior at home, they may exhibit challenging behavior at school. Negative parenting habits can be mirrored by children, affecting their behavior. The ability to control emotions and understand feelings is crucial for daily life. Mentally retarded students who can control their emotions tend to have better social lives, while those who struggle may find it challenging to socialize. Students who can engage with their environment are more likely to discuss their activities at home.

Students in class often exhibit poor behavior, such as sudden tantrums, the causes of which are often unknown. These tantrums indicate a lack of emotional management skills, particularly among mentally retarded students, which can disrupt the learning process and disturb both peers and teachers. Teachers typically manage these situations by waiting for the student to calm down, ensuring the safety of everyone in the classroom, and encouraging the student to apologize for any disruption caused. During music lessons, mentally retarded students may also exhibit emotional behavior, often due to external factors such as interference from peers. Teachers accommodate students' preferences within the realm of arts and culture, allowing them to choose alternative activities if they are not interested in music (Siswanti & Sularso, 2024). The goal is to fulfill students' wishes while helping them control their emotions and engage in meaningful learning. Music education is essential for developing students' creative expression and appreciation of art, fostering discipline, socialization, tolerance, and democratic values (Sularso, 2019). Music therapy, such as playing the Chinese zither, has been shown to improve brain function in autistic individuals (Y. Wang, 2023). Additionally, music learning impacts the emotional well-being of mentally retarded students, helping to improve their mental balance and sensitivity to beauty.

At SDLB N 1 Yogyakarta, music education focuses on introducing musical instruments and singing, with a curriculum centered around regional songs from the archipelago. Material selection is tailored to the basic competencies expected at the special school level, delivered through singing and instrument introduction to accommodate students' learning needs.

The learning process is facilitated by the teacher's comprehensive planning. Before instruction, teachers create a lesson plan outlining core competency, basic competencies, indicators, learning objectives, materials, methods, models, media, resources, steps, assessment instruments, and student worksheets (LKPD). In the learning activities, an icebreaker is used to engage students before introducing the core material. The teacher demonstrates correct instrument-playing techniques and guides students in singing regional songs with correct tone and intonation, using methods such as demonstration and drill. These activities aim to maintain student interest and participation. Throughout the learning process, teachers utilize a combination of rewards and punishments. Rewards are given for task completion, fostering motivation, while punishments are employed to correct behaviour and encourage improvement. Adopting a student-centered approach encourages active participation and inquiry among students. Teachers also utilize various media, ensuring they align with the content being taught. Musical instruments such as the guitar and keyboard are used to accompany singing lessons, while digital platforms such as YouTube are utilized to demonstrate traditional instrument sounds and shapes. Enthusiasm among students is evident as they observe traditional instruments through YouTube.

Music learning at SDLB N 1 Yogyakarta positively impacts the emotional intelligence of mentally retarded students. Throughout the music learning process, their emotional state becomes more manageable, particularly when they sing songs they enjoy, creating a sense of joy and understanding of the song's emotions and atmosphere. Music can stimulate kinesthetic responses in listeners, leading to active or passive reactions (Lam, 2020). Additionally, music learning can balance the right and left brain hemispheres and enhance social and emotional development in children (Rose et al., 2019). Students with intellectual disabilities can recognize their emotions during music learning, especially when given the freedom to choose songs, which helps them understand the feelings and atmosphere of the songs. Recognizing self-emotions aims to create a sense of happiness and comfort among mentally retarded students during music learning. Teachers can develop students' ability to manage emotions through a proactive approach to music learning. Emotional intelligence enables individuals to manage emotions effectively (Winton, 2023). Motivating students with mental retardation is demonstrated by their enthusiasm for music lessons, especially when teachers teach correct singing techniques, and students enthusiastically participate. Music learning at SDLB N 1 Yogyakarta fosters enthusiasm among mentally retarded students, evident in their active participation and joy during music lessons. External motivation from teachers influences students' enthusiasm in completing assignments.

The demonstrated ability of students with intellectual disabilities to empathize during music learning is exemplified by their willingness

to share notes with friends and assist one another, under the guidance of music teachers. Research indicates that music therapy has been effective in enhancing social skills and reducing repetitive behaviors, particularly among individuals aged 10 years and older. The establishment of relationships through music learning is apparent in the interactions between teachers and students, which are essential for the development of interpersonal skills, leadership abilities, and social acceptance (Jaaskelainen, 2023). Furthermore, students with intellectual disabilities exhibit communication skills by confidently engaging with their peers. Music learning has the potential to improve social skills by promoting empathy, pro-social attitudes, and teamwork (Papageorgi, 2021). Moreover, music education can cultivate enthusiasm and self-confidence among students with intellectual disabilities. Music therapy is crucial in fostering enthusiasm, self-assurance, and a positive outlook among individuals with disabilities (Pater et al., 2023).

3. 2 Factors Influencing Music Learning as Emotional Intelligence Therapy for Mentally Retarded Students

The process of learning music is complex and greatly influenced by a variety of supportive elements. The development of a student's musical ability depends critically on access to resources, high-quality instruction, and comfortable practice space (Burnard & Younker, 2002). Knowledgeable teachers are vital because they may use their expertise and teaching techniques to inspire and guide students through the complexities of music theory and performance (Buonviri & Paney, 2015). Because a large variety of well-maintained instruments and modern technologies are readily available, students can also research various facets of music, from conventional performance to digital production (Aliyeva et al., 2019). A student's practice environment has a big impact on how far they can go; consistent, focused practice in a calm, designated place can help build skills. A motivating framework that promotes perseverance and a sense of accomplishment is also created by outside assistance from parents, peers, and the community (Borup, 2016). On the other hand, several variables can prevent someone from learning music well. Inadequate resources and restricted access to knowledgeable teachers can seriously impede a student's advancement (Davidson & Lupton, 2016). Inadequate or irregular instruction can result in knowledge and ability gaps, while poorly maintained equipment and antiquated technology limit learning chances (W. Li, 2021). Another important factor is the practice space; distracting or boisterous conditions can impair concentration and practice quality. Students may also become demotivated if their parents don't support them or if their community doesn't think music education is important (Priestley et al., 2015). Intrinsic motivation is required for learning to continue, yet relying solely on external rewards or failing repeatedly without the proper support could lead to discontent and disengagement. Taking into account the kids' physical, emotional, and educational needs requires a comprehensive approach to resolving these limiting elements to create an environment where children can develop musically (Keling Liu, 2023).

With its multidimensional approach to improving cognitive, emotional, and social development, music learning can be a

potent kind of emotional intelligence treatment for students with mental retardation (F. Wang et al., 2022). Recognizing, comprehending, and controlling one's own emotions as well as those of others are components of emotional intelligence (Husain et al., 2022). Through music, mentally impaired kids can express themselves, communicate, and develop these important emotional abilities in a unique non-verbal way (Micallef Grimaud & Eerola, 2022). Emotional regulation is significantly impacted by music. For mentally impaired students, the structure and rhythm of music can offer a sense of security and predictability that can be reassuring and soothing (Miranda, 2021). Through the medium of music, kids can express themselves and learn how to control their emotions (Micallef Grimaud & Eerola, 2021). They can relieve tension and worry by, for instance, singing or playing an instrument to release pent-up feelings. Emotional intelligence is based on this process of releasing and regulating emotions, which helps students manage their emotions more effectively in a variety of contexts (Ashori & Rashidi, 2020). Learning music enhances social skills and communication abilities. Collaborating and working as a team is promoted by taking part in group music activities like ensemble playing or choir singing (Erlani et al., 2018). Students' social awareness and empathy are increased through these exercises because they make them listen to each other, plan their actions, and react to social cues. Students gain stronger interpersonal ties and an appreciation for cooperation by working together to achieve a common objective. These are two important aspects of emotional intelligence (Roy, 2023).

Learning music enhances one's sense of self and self-worth. Students feel a sense of satisfaction in their skills and accomplishment when they learn to master a piece of music or an instrument (Haning, 2021). Their self-esteem and confidence are bolstered by this encouraging feedback. Furthermore, learning music frequently entails introspection and expressive writing, which helps students examine and comprehend their feelings and experiences (Shouldice, 2020). This increased self-awareness is crucial for developing emotional intelligence because it enables pupils to recognize their emotional states and comprehend how they affect their behavior and social relationships (Xianjun, 2022). The multimodal experience that music offers can improve cognitive development (Vidulin & Kazić, 2021). When auditory, visual, and kinesthetic elements are combined with music education, the brain's neural connections and cognitive processes are stimulated in different ways (Han et al., 2020). This cognitive stimulation can help mentally handicapped students become more adept at paying attention, remembering details, and solving problems (Darrow, 2017). Through the engagement of music, kids can enhance their ability to regulate their emotions and interact socially, since these cognitive enhancements contribute to their total emotional intelligence (T. Wang et al., 2021). The psychological benefits of music can significantly affect mental health (Rebecchini, 2021). It has been demonstrated that music therapy, which frequently includes aspects of music education, lessens the symptoms of anxiety, depression, and other mental health conditions (Sanfilippo et al., 2021). The therapeutic setting of music education offers mentally impaired individuals a secure place to explore their feelings, build self-esteem, and create coping

mechanisms (Herb, 2022). They feel safe and understood because of the disciplined and supporting character of music education, which is essential for emotional development and healing (Váradi, 2022). For mentally retarded students, music learning is a useful kind of emotional intelligence therapy since it helps with emotional control, fosters social connection, improves self-awareness, stimulates cognitive development, and has other therapeutic advantages (D. Li, 2022). Teachers and therapists can develop a comprehensive strategy that meets the special emotional and cognitive demands of these children by including music in their educational and therapeutic programs. This will ultimately help the students lead more emotionally intelligent and fulfilled lives.

4. CONCLUSION

Music lessons for mentally retarded students at SDLB N 1 Yogyakarta primarily focus on singing, with teachers using demonstration and drill methods. Students demonstrate good emotional intelligence during these lessons, as evidenced by their ability to recognize and understand the emotions and atmosphere conveyed in the songs. They also exhibit emotional intelligence across various components, including recognizing and managing emotions, self-motivation, empathy, and building relationships. Factors influencing music learning can be categorized as supporting or inhibiting. Supporting factors include facilities, infrastructure, and learning components while inhibiting factors stem from student behaviors during the learning process. This research contributes to understanding music learning as emotional intelligence therapy for mentally retarded individuals. However, the study's limitation lies in its narrow scope, focusing on only one school, which limits the generalizability of the findings. Future research should consider conducting studies in multiple schools for more comprehensive insights.

AUTHOR CONTRIBUTION

Sularso: Designing analysis, collecting research data in the field
Dheria Febriana Putri: Data collection, analysis of research data in the field
Bao Hanshi: Provide research theory references and process research data

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