The Effect of *Jentreng* Music Therapy on Increasing The Concentration of Student With Intellectual Disabilities

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**ABSTRACTS**

The purpose of this study was to determine the effect of *jentreng* music therapy on increasing the concentration of students with intellectual disabilities. This study used a qualitative descriptive method for 2 students with intellectual disabilities who have difficulty concentrating at the Special School of Bhakti Mulia 2 Sumedang. The results showed that there was an increase in the concentration ability of mentally retarded students after doing *jentreng* music therapy. Because *jentreng* music therapy has a calm character, it can make students calmer in their behavior and increase concentration in the learning process. *Jentreng* music therapy can be said to affect increasing the concentration ability of students with intellectual disabilities. *Jentreng* music therapy can be considered by teachers to be used before the learning process begins for students with intellectual disabilities and can be developed for other students with special needs.

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1. INTRODUCTION

Music is an arrangement of sounds that contains tones, rhythms, songs, and harmony. Music is produced from rhythmic musical instruments. Music can be used for therapy, for example, therapy for victims of tsunami trauma, trauma to sounds, and also people with autism, patients are given a pleasant situation by listening to music and singing or playing music (Arini & Supriadi, 2011). A neurologist from Harvard University, Mark Tramo, M. D. (Sumartini, 2020) states that music vibrations that enter through the ear can affect the psyche.

*Jentreng* music is one of West Java’s traditional music that uses a musical instrument similar to the harp. This music is still preserved in areas, one of which is in the Rancakalong area, Sumedang, West Java. *Jentreng* music in Rancakalong is commonly used at a traditional rice harvest ceremony called *ngalaksana* as gratitude to God Almighty for the abundance of blessings through agriculture. *Jentreng* is always played in pairs with the *tarawangsa* musical instrument or a kind of fiddle. This music is a type of instrumental music / no poetry. *Jentreng* music is played using a pelog barrel with a calm character (Atik Soepandi in Yulaeliah, 2008).

Students with intellectual disabilities are children who have mental intellectual limitations below the normal average, so they experience difficulties in academic, communication, social tasks, and because they require special education services. Children with intellectual disabilities experience disturbances in the central nervous system and have low thinking skills, weak attention, and memory, easy to shift concentration causing children to find it difficult to accept lessons or follow the lessons given (Sari & Natalia, 2018). Children with intellectual disabilities whose concentration is easily disturbed by the surrounding environment will have difficulty accepting learning or will interfere with other children who are studying. While in learning requires good concentration so that learning objectives are achieved.

Currently, many studies discuss music therapy, such as classical music therapy (Mozart) in the elderly with stage 1 hypertension (Aini et al., 2017), music as a therapeutic medium for mentally retarded patients (Raharjo, 2007), the effect of classical music therapy on the cognitive development of children with mild mental retardation (Astuti & Suhartono, 2021), classical music on the cognitive development of children with mental retardation (Sumartini, 2020), the effect of music therapy on the concentration level of autistic children (Ningtyas, 2020), and many other studies regarding music therapy. But until now there has been no research that discusses the effect of *jentreng* music therapy on increasing the concentration of children with intellectual disabilities.

This study aims to determine the effect of *jentreng* music therapy on increasing the concentration of children with intellectual disabilities. The method used is a qualitative descriptive method for 2 mild students with intellectual disabilities in the third grade of Special Elementary School who have concentration problems at Bhakti Mulia 2 Special School in Sumedang. This study shows the results that there is an increase in the concentration ability of students with intellectual disabilities after playing *jentreng* music. Because *jentreng* music has a calm character, so students' behavior becomes calmer and students' concentration abilities increase. Therefore, *jentreng* music therapy can be considered by teachers to be used in increasing the concentration of children with intellectual disabilities which can be done before learning begins, during learning, or outside of learning hours. The novelty of this study is (i) the use of *jentreng* music therapy and (ii) the research subjects are mentally retarded students.
2. METHODS
2.1. Subject and Location Research

The research subjects were conducted on two students with intellectual disabilities in the third grade of Special Elementary School at Special School Bhakti Mulia 2 in Sumedang, West Java.

2.2. Research Procedure

This study focuses on the application of jentreng music therapy in increasing concentration in students with intellectual disabilities. The stages of research procedures carried out include (i) planning, (ii) implementation, (iii) observation, and (iv) reflection. Figure 1 describes the research flow in the research procedure, namely the action planning stage, the researcher introduced the principal and fellow teachers to the topic of study, the results to be achieved, and the focus of observation. The implementation of the action begins with the initial stage of therapy, then the core activities of therapy, and the implementation of learning. At the observation stage, the researcher observed the process of implementing the action, its effects, obstacles, or problems that arose during the jentreng music therapy activity. The reflection stage involves the researcher with the help of the principal and fellow teachers on the results of the observations.

![Figure 1. Research flow on research procedures.]

2.3. Activity Procedure

Figure 2 describes the procedure for classroom action research activities which consists of the stages of planning, implementing, observing, and reflecting. Researchers make an action plan first, then carry out the action as the implementation of the plan. The planning stage contains the steps of preliminary diagnosis, data gathering feedback of results, and action planning (Prihantoro & Hidayat, 2019). The implementation of the action is always accompanied by observations, both by the actor himself and by the observer. In this case, the observers in question are fellow teachers and school principals. The role of the observer is to see, hear and record everything that happens during the implementation of the action, either with or without the use of observational aids. Data obtained from observations and tests will be selected, simplified, organized systematically and rationally and with triangulation techniques, a conclusion will be obtained. This activity is a reflection activity. Reflection is done together to find out which things must be maintained and which things still need to be improved.

![Figure 2. Procedure for research activities class action.]

2.4. Research Instrument

In the research activities, we collect data through observation, interviews, and documentation. Observation activities are carried out during the learning process in natural
situations. Sidiq et al. (2019) suggested that observation is the process of observing research subjects with their environment and recording or photographing the observed behavior without changing the subject's natural conditions and social environment. The interviews were conducted on fellow teachers and parents of students who were conducted outside of learning activities. In the aspect of development, we provide an assessment score for students' abilities with scores of 0 (not good), 1 (poor), 2 (good enough), 3 (good), 4 (very good).

3. RESULTS AND DISCUSSION
3.1. Student Demography

Sumartini (2020) stated that mentally retarded children have difficulty capturing complex information, have difficulty understanding the lessons given, have difficulty doing their tasks, have difficulty in remembering immediately (immediate memory), and have difficulty solving problems. Table 1 explains the demographics of students with intellectual disabilities which consist of motor, communication, concentration, language, and academic abilities.

Student B has good motor and communication skills, poor concentration, good language, and academic skills. Student R has good enough motor skills, good communication, good enough concentration, good language, and good enough academics.

Table 1. The condition of student's ability.

| No. | Student | Motoric skill | Communication | Concentration | Language | Academic |
|-----|---------|---------------|---------------|---------------|----------|----------|
| 1   | B       | 3             | 3             | 1             | 3        | 3        |
| 2   | R       | 2             | 3             | 2             | 3        | 2        |

3.2. Learning Process Activities

Learning activities begin with initial activities, namely, the teacher opens the lesson with greetings, checks student attendance, conditions students to pray together before learning begins. Students listen to the teacher’s explanation about the objectives of implementing jentreng music therapy activities to be achieved in these activities. The main activity of teacher learning is to condition the child's sitting position so that the child is comfortable. The teacher counts the child's pulse before therapy is carried out. Then the teacher played jentreng music from the laptop for about 10 minutes. The teacher records the child’s reaction when music is being played. The teacher calculates the child's pulse after therapy is carried out. In the final activity, the teacher assesses the learning process. Several factors became the focus of observation activities in jentreng music therapy, namely the reaction of children to the music and its effect on children's concentration during learning.

3.3. Results of Research Activities

Table 2 describes the results of therapy from pre-cycle to cycle 5. Where the implementation of therapy is carried out for 5 consecutive days. Actions are taken when students enter the classroom and the therapy is carried out before learning begins. Students listen to jentreng music together from the teacher’s laptop for approximately 10 minutes. Student B before being given therapy had a fast pulse rate of 125/minute because students were easily distracted and were too active in moving. After being given jentreng music therapy, student B's pulse rate decreased to 115/minute. Student R had a pulse rate of 119/min before being given therapy and being 110/min after being given therapy.

Students B and students R before being given jentreng music therapy could not stay still and often played around during learning. They can focus in less than 5 minutes. However,
after being given *jentreng* music therapy, their focus time increased by more than 5 minutes. Student B and student R were initially less interested in carrying out the instructions given by the teacher. After doing *jentreng* music therapy, they became interested enough to carry out the instructions given by the teacher. This indicates a change in behavior after being given music therapy although the increase is still low. In connection with the results of this study, music therapy is basically the use of music as a therapeutic medium, namely to improve, maintain, develop mental, physical, emotional health, social interaction, develop interpersonal relationships, natural emotional expression, and to increase self-awareness (Raharjo, 2007).

### Table 2. Comparison of research cycle results.

| No. | Aspect                | Student B   | Student R   | Description       |
|-----|-----------------------|-------------|-------------|-------------------|
| 1   | Pulse                 | 125/minute  | 115/minute  | decrease          |
| 2   | Concentration         | < 5 minute  | 5-10 minute | increase          |
| 3   | Carry out instructions | poor        | good enough | increase          |

### 3.4. Analysis of the Result of Research Activities

In this study, researchers implemented *jentreng* music therapy for students with intellectual disabilities to increase concentration. Based on observations in the learning process, the therapeutic process is still not optimally carried out and not in accordance with what is expected. For example, the implementation of therapy is carried out simultaneously, allowing them to play around. In addition, therapy that is carried out before learning can make students not want to learn because they want to continue listening to therapeutic music. However, students with intellectual disabilities who were given *jentreng* music therapy experienced an increase in their concentration ability. This is in accordance with the statement that developing cognitive abilities such as memory and concentration can be done by listening to music (Raharjo, 2007). Although the increase is low because the therapeutic process is not optimal. Thus *jentreng* music therapy can be said to affect increasing the concentration ability of students with intellectual disabilities.

### 4. CONCLUSION

This study aims to determine the effect of *jentreng* music therapy on increasing the concentration of students with intellectual disabilities. We used a qualitative descriptive method on 2 students with intellectual disabilities in the third grade of elementary special schools who have concentration problems. Based on the research that has been done, it can be concluded as follows: the concentration of the two students with intellectual disabilities before *jentreng* music therapy had a low level of concentration. After doing *jentreng* music therapy, the concentration level of students increased. So that there is an effect of *jentreng* music therapy on increasing the concentration of mentally retarded students.

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6. AUTHOR’S NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

7. REFERENCES

Aini, N., Hariyanto, T., and Ardiyani, V.M. (2017). Perbedaan tekanan darah sebelum dan sesudah dilakukan terapi music klasik (Mozart) pada lansia hipertensi stadium 1 di desa donowarih karangploso malang. Nursing News:Jurnal Ilmiah Keperawatan, 2(3), 44-57.

Arini, S. H. D., and Supriadi, D. (2011). Kacapi sulung instrumentalia sebagai salah satu kesenian khas sunda. Harmonia: Journal of Arts Research and Education, 11(1), 10-16.

Astuti, N. D., and Suhartono, S. (2021). Pengaruh terapi musik klasik terhadap perkembangan kognitif anak terhadap tuna grahita embisil ringan. Indonesian Journal of Professional Nursing, 1(2), 13-18.

Ningtyas, R. (2020). Pengaruh terapi musik terhadap tingkat konsentrasi pada anak autis di sdlb negeri 2 pangkalan bun. Jurnal Borneo Cendekia, 4(1), 53-58.

Nursanjaya, N. (2021). Memahami prosedur penelitian kualitatif: Panduan praktis untuk memudahkan mahasiswa. Negotium: Jurnal Ilmu Administrasi Bisnis, 4(1), 126-141.

Prihantoro, A., and Hidayat, F. (2019). Melakukan penelitian tindakan kelas. Ulumuddin: Jurnal Ilmu-ilmu Keislaman, 9(1), 49-60.

Raharjo, E. (2007). Musik sebagai media terapi. Harmonia: Journal of Arts Research and Education, 8(3), 1-13.

Sari, E., and Natalia, E. (2018). Pengaruh fishing game terhadap konsentrasi anak tunagrahita di SLB C Alpha Wardahaha Surabaya. Jurnal Keperawatan, 7(2), 1-8.

Sidiq, U., Choiri, M., and Mujahidin, A. (2019). Metode penelitian kualitatif di bidang pendidikan. Journal of Chemical Information and Modeling, 53(9), 1-228.

Sumartini, N. P. (2020). Terapi musik klasik memiliki pengaruh terhadap perkembangan kognitif anak retardasi mental di Sekolah Luar Biasa (SLB) Negeri Pembina Mataram. Midwifery Journal: Jurnal Kebidanan UM. Mataram, 5(2), 123-129.

Yulaeliah, E. (2008). Musik pengiring dalam upacara ngalaksa masyarakat Rancakalong Sumedang. Resital: Jurnal Seni Pertunjukan (Journal of Performing Arts), 9(1), 31-36.