

Improving students' physical fitness through creative gymnastics training methods

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ABSTRACT

Problems: The problem that occurs is that many students are less interested in participating in sports activities, including creative gymnastics, because they are more accustomed to passive activities such as playing gadgets. Physical activity is often considered boring or tiring. Some schools may not have adequate sports facilities, such as large spaces, sports equipment, or access to trained trainers for creative gymnastics. This can limit the implementation of creative gymnastics optimally. **Purpose:** The purpose of this study is to determine the increase in students' physical fitness through the creative gymnastics training method. **Methods:** The type of research is quantitative with an experimental type by providing a pretest, treatment, and posttest. The sample in this study were 30 students of SMK Negeri 5 Konawe Selatan who had a hobby in the field of gymnastics. The test instrument used was a physical fitness test aged 16 to 19 years consisting of 5 test items, namely a 60-meter running test, 60-second elbow bend hanging, 60-second sitting lying, vertical jump, and 1000-meter running. The training method used with creative gymnastics was carried out 3 times a week with moderate, heavy, and light intensity. Data analysis techniques with SPSS version 20 analysis, by searching for descriptive data analysis, normality test, homogeneity test, and t-test. **Results:** Based on table 5 data analysis obtained a value of $13.489 > 0.000$, it can be concluded that there is a significant influence on improving students' physical fitness through the creative gymnastics training method. **Conclusion:** Creative gymnastics, which involves creative and dynamic movements, can improve physical fitness components such as strength, agility, endurance, flexibility, and coordination. In addition, this method also encourages students to be more active, involved, and enjoy physical activity, because creative variations of movements can increase motivation and interest.

Keywords: training, physical fitness, and creative gymnastics

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Introduction

Physical fitness is an important aspect in the physical and mental development of students (Pratama & Winarno, 2022). In general, physical fitness can be interpreted as the body's ability to carry out daily activities without experiencing excessive fatigue and still having energy reserves to carry out other activities (Rusli et al., 2022; Jud et al., 2022). For students, physical fitness plays an important role in supporting the learning process, increasing concentration, and supporting cognitive and emotional development (Abduh et al., 2020). The importance of physical fitness for students can be seen from its various benefits, such as improving heart and lung function, strengthening muscles, developing motor coordination, and increasing physical endurance. In addition, regular physical activity also plays a role in developing social skills, controlling stress, and preventing various diseases such as obesity, diabetes, and heart disease at an early age (Adhianto & Arief, 2023).

School age, students are in a stage of rapid growth, so the need for balanced physical activity becomes very important. Routine physical activity, either through sports, gymnastics, or games that involve body movement, helps students achieve optimal fitness levels (Ridho & Anggara, 2024). Physical fitness also has a close correlation with academic achievement (Fitrah & Putriningtyas, 2024). Research shows that students who engage in regular physical activity tend to have better concentration skills, lower stress levels, and higher academic achievement than students who are less physically active. Therefore, physical fitness should be part of the school curriculum, where students are not only taught about the importance of exercise, but are also encouraged to make it part of a sustainable healthy lifestyle (Putri et al., 2024). To improve physical fitness, sports activities are needed in which there is an element of joy, one of which is through creative gymnastics.

Creative gymnastics is a form of physical activity that involves dynamic, creative, and structured body movements (Biahimo et al., 2024). Basically, creative gymnastics combines elements of basic gymnastics, dance, and music. By combining varied movements and pleasant musical rhythms, creative gymnastics can create a more interesting and non-monotonous atmosphere. This is what makes it suitable for various groups, especially students, as a means to improve physical fitness while stimulating creativity. In the context of education, creative gymnastics is often used as a form of activity in physical education lessons in schools (Amaliah et al., 2024). Through creative gymnastics, students are invited to not only hone their physical abilities, but also develop their coordination, flexibility, balance, and endurance. In addition, creative gymnastics also encourages students to work together in groups, train cohesiveness, and build self-confidence (Khofifah et al., 2023).

Creative gymnastics also has a strong cultural aspect, where the movements created can be adapted from local dances or cultures. This provides an opportunity for students to get to know and preserve their local culture through innovative and meaningful movements (Elfiadi & Munasti, 2022). With all its advantages, creative gymnastics is an effective method in raising awareness of the importance of physical activity in everyday life. Through creativity and freedom of expression, creative gymnastics provides not only physical benefits, but also mental, social, and cultural benefits, all of which contribute to the development of a more holistic individual (Setiawan et al., 2022).

Creative gymnastics offers flexibility in terms of movement, allowing students to express themselves freely and creatively. Compared to more formal sports, creative gymnastics has a greater appeal to students because of the creative element that stimulates activeness and participation. This study is important to examine the extent to which this method is effective in building students' motivation to exercise regularly (Ruslan et al., 2023). Through creative gymnastics, students not only train their physical abilities but also hone social skills, such as cooperation and communication. Students are invited to collaborate in groups to create joint choreography, which can increase a sense of togetherness, leadership, and self-confidence. This shows the importance of a holistic approach in building students' character and mentality through physical (Sari et al., 2023).

The physical education curriculum in schools often requires a new approach that is more varied and in accordance with the needs of modern students. This study can provide insight into how creative gymnastics can be integrated into the physical education curriculum as an innovative and fun method. In addition, the results of this study can be a reference for teachers to design more interesting and effective sports programs (Rumini & Sulaiman, 2022). Physical activities involving free movement and musical rhythm have been shown to help reduce stress and improve mental well-being. At school age, academic pressure often affects students' mental health. This study can show how creative gymnastics can be a means to improve mood, reduce anxiety, and support students' overall mental health (Jusuf et al., 2020).

The problem that occurs is that many students are less interested in participating in sports activities, including creative gymnastics, because they are more accustomed to passive activities such as playing gadgets. Physical activity is often considered boring or tiring. Some schools may not have adequate sports facilities, such as large spaces, sports equipment, or access to trainers trained in creative gymnastics. This can limit the implementation of creative gymnastics optimally. Students have different levels of physical ability, so some students find it too difficult to participate in creative gymnastics or vice versa, feel that this activity is too easy and not challenging. The solution is through a creative and fun approach by naturally offering freedom of movement and musical elements that can make physical activity more interesting. Teachers or trainers need to design creative gymnastics that integrates music that students like and varied movements so that this activity feels fun and not monotonous. Furthermore, giving students the freedom to create their own movements or participate in designing choreography can increase their sense of ownership of the activity, so that they are more motivated to participate. Using the existing space effectively so that the implementation of creative gymnastics does not always require special facilities. This activity can be done in the school yard, hall, or classroom that is transformed into a training place by minimizing the need

for equipment. The implementation of customized exercises and must be designed with flexibility to be adjusted to the physical abilities of each student. Teachers can offer variations of movements from the simplest to the most complex, so that all students can participate according to their abilities, so the purpose of this study is to determine the increase in students' physical fitness through the creative gymnastics training method.

Method

The type of research is quantitative with an experimental type by providing a pretest, treatment, and posttest(Kusumawati, 2015). The sample in this study were 30 students of SMK Negeri 5 Konawe Selatan who had a hobby in the field of gymnastics. The test instrument used was a physical fitness test aged 16 to 19 years consisting of 5 test items, namely a 60-meter running test, 60-second elbow bend hanging, 60-second sitting lying, vertical jump, and 1000-meter running (Rusli et al., 2022). The training method used with Senak Kreasi was carried out 3 times a week with moderate, heavy, and light intensity. Data analysis techniques with SPSS version 20 analysis, by looking for descriptive data analysis, normality test, homogeneity test, and t-test.

Result

Based on the results of the pre-test and data processing on physical fitness of 30 research samples (female students of SMK Negeri 5 Konawe Selatan) for the group of students before being given creative gymnastics training, the lowest score was obtained = 10, the highest score = 16 and range = 6. Furthermore, from the results of the descriptive analysis, the average score of physical fitness for the research sample was 12.97, mode score = 13.00, median = 13.00, standard deviation = 1.52 and variance 2.03. And the results of the post-test and data processing on physical fitness of 30 research samples (female students of SMK Negeri 1 Kendari) for the group of students after being given physical fitness gymnastics training in 2008, obtained the lowest score = 14, the highest score = 19 and range = 5. Furthermore, from the results of the descriptive analysis, the average score of physical fitness for the research sample was 16.43, mode score = 16.00, median = 16.00, standard deviation = 1.38, and variance 1.91

Table 1. Distribution of Physical Fitness Results of Pre-Test Before Being Given Creative Gymnastics Exercises

| Class Interval | Frequency | Percentage |
|----------------|-----------|------------|
| 10,0 – 11,2 | 5 | 16,67 |
| 11,3 – 12,5 | 6 | 20,00 |
| 12,6 – 13,8 | 8 | 26,67 |
| 13,9 – 15,1 | 10 | 33,33 |
| 15,2 – 16,4 | 1 | 3,33 |
| Total | 30 | 100,00 |

In table 1 it can be explained that: those who have physical fitness in the score interval of 10.0 - 11.2 are 5 people (16.67%), those who have physical fitness in the score interval of 11.3 - 12.5 are 6 people (20.00%), those who have physical fitness in the score interval of 12.6 - 13.8 are 8 people (26.67%), those who have physical fitness in the score interval of 13.9 - 15.1 are 10 people (33.33%), and those who have physical fitness in the score interval of 15.2 - 16.4 are 1 person (3.33%). If the distribution of physical fitness is depicted in the form of a bar chart, it is obtained as in Figure 1 below.

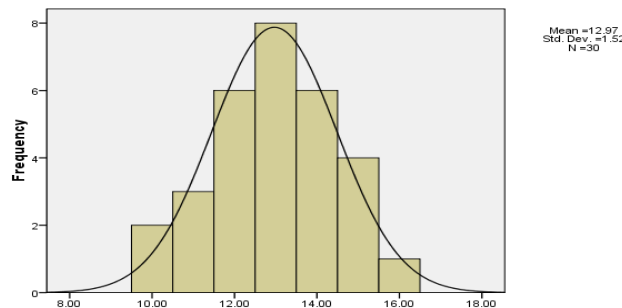


Figure 1. Histogram of Physical Fitness Results from Pretest

Table 2. Distribution of Physical Fitness Results of Post-Test After Being Given Creative Gymnastics Exercises

| Class Interval | Frequency | Percentage |
|----------------|-----------|------------|
| 14,0 – 15,0 | 8 | 26,67 |
| 15,1 – 16,1 | 8 | 26,67 |
| 16,2 – 17,2 | 8 | 26,67 |
| 17,3 – 18,3 | 3 | 10,00 |
| 18,4 – 19,4 | 3 | 10,00 |
| Total | 30 | 100,00 |

In table 2 it can be explained that: those who have physical fitness in the score interval of 14.0 - 15.0 are 8 people (26.67%), those who have physical fitness in the score interval of 15.1 - 16.1 are 8 people (26.67%) , those who have physical fitness in the score interval of 16.2 - 17.2 are 8 people (26.67%), those who have physical fitness in the score interval of 17.3 - 18.3 are 3 people (10.00%), and those who have physical fitness in the score interval of 18.4 - 19.4 are 3 people (10.00%). If the distribution of physical fitness is depicted in the form of a bar chart, it is obtained as in Figure 2 below.

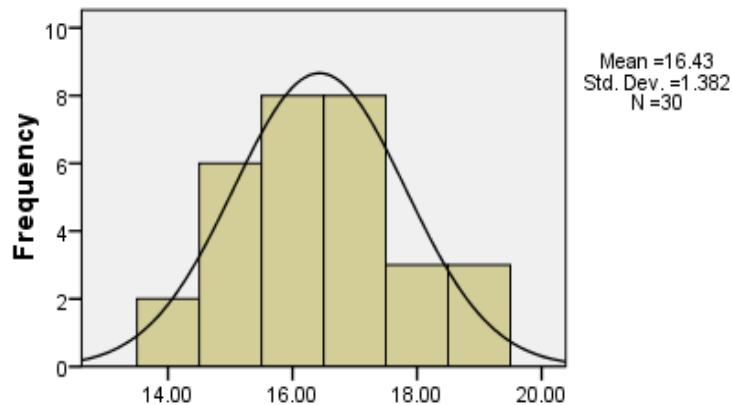


Figure 2. Histogram of Physical Fitness Results of Posttest

Table 3. Data Normality Test

| Data Group | Kolmogorov-Smirnov | | | Information |
|------------|--------------------|----|-------|-------------|
| | Statistic | Df | Sig | |
| Pretest | 0,186 | 30 | 0,126 | Normal |
| Posttest | 0,235 | 30 | 0,059 | Normal |

Table 4. Results of the Homogeneity of Variance Test

| Data Group | Levene Test | | | | Real level α | Information |
|----------------------|-------------|-----|-----|-------|---------------------|-------------|
| | Statistic | df1 | df2 | Sig | | |
| Pretest and Posttest | 0,044 | 1 | 58 | 0,834 | 0,05 | Homogeneous |

Table 5. Results of the t-test for the Difference Test between Pre-Test and Post-Test Physical Fitness with Creative Gymnastics Exercises

| Variable | Paired Differences | | | t | df | Sig. (2-tailed) |
|----------------------|--------------------|----------------|-----------------|--------|----|-----------------|
| | Mean | Std. Deviation | Std. Error Mean | | | |
| Pretest and Posttest | 3,467 | 1,408 | 0,257 | 13,489 | 29 | 0,000 |

Based on table 5, the data analysis obtained a value of $13.489 > 0.000$, it can be concluded that there is a significant influence on increasing students' physical fitness through the creative gymnastics training method on students of SMK Negeri 5 Konawe Selatan.

Discussion

The results of the study on improving students' physical fitness through the creative gymnastics training method show that this method has a significant impact on various aspects of students' physical fitness. Creative gymnastics that combine dynamic movements such as squats, jumps, and stretching have been proven to be effective in increasing muscle strength and endurance. This is important because muscle strength supports students' daily activities and improves their performance in other physical activities. Creative gymnastics training often involves regular stretching movements, which directly increase students' flexibility. Flexibility is an important component of physical fitness because it affects the body's range of motion, reduces the risk of injury, and improves posture. The varied movements and requires good coordination between body parts in creative gymnastics also improve students' balance and coordination. These skills are very useful in various physical activities, both at school and outside of school.

One important finding is that creative gymnastics, with its varied and creative nature, is able to increase students' motivation to actively participate in the exercise. Many students find creative gymnastics more enjoyable than monotonous physical exercises, so they are more involved and enthusiastic. This is important in increasing students' awareness of the importance of physical activity for health. This study also shows that creative gymnastics not only improves physical fitness but also provides psychological benefits. Enjoyable physical activity helps reduce stress, improve mood, and increase students' self-confidence. These aspects are very important for students' mental well-being, which in turn can support academic achievement and overall well-being. Creative gymnastics is usually done in groups, which facilitates social interaction between students. This creates a collaborative environment, where students can learn to work together, support each other, and feel part of a larger community. This social engagement helps students build important social skills.

Introducing fun physical exercise from an early age, creative gymnastics has the potential to form sustainable healthy habits among students. Regular exercise habits that start from school tend to continue into adulthood, thus contributing to the prevention of diseases related to a sedentary lifestyle, such as obesity and cardiovascular disease. These findings support the implementation of the creative gymnastics method in physical education programs in schools, because this method is able to improve physical fitness in a fun and effective way (Ariska, 2018). Improving physical fitness at school age plays an important role in preventing health problems later in life, such as obesity and heart disease. Through the creative gymnastics approach, students not only get short-term physical benefits but also a foundation for a healthy life in the long term. Creative gymnastics combines physical, mental, and social aspects, making it a holistic exercise method (Wijayanti et al., 2024). This is in line with the goals of physical education which not only focus on physical performance but also the overall personal development of students. Overall, the results of this study are important because they show that the creative gymnastics exercise method is not only effective in improving students' physical fitness, but also supports their social and mental development, as well as providing long-term benefits for health.

Previous studies have shown that dynamic movement-based exercise methods, such as creative gymnastics, contribute positively to improving physical fitness. A study by Mulyana et al., (2024), found that gymnastics exercises such as creative gymnastics can improve students' strength, endurance, and flexibility. The results of my study confirm this, with empirical data showing significant improvements in these fitness components. In addition, research by Iriani & Salman, (2024), confirmed that the variety of movements in creative gymnastics encourages students to be more active and involved in physical exercise. My study is in line with these results, showing that this method increases students' motivation to actively participate and maintain a consistent exercise pattern. Previous studies such as those conducted by (Biahimo et al., 2024), state that motivation is one of the key factors in the success of physical education programs. Creative gymnastics, which offers elements of creativity and entertainment, is identified as a more interesting method for students than monotonous physical exercise. The results of my study support these findings with evidence that students feel more motivated and enjoy doing creative gymnastics compared to traditional exercise methods. In this study, this increase in motivation led to students' consistency in following the exercise program, which in turn contributed to their improvement in physical fitness. This strengthens the conclusion that enjoyable and varied exercise methods are important for success in a physical fitness improvement program.

Conclusion

The improvement of students' physical fitness through creative gymnastics training methods is that this training can be an effective method to improve overall physical fitness. Creative gymnastics, which involves creative and dynamic movements, can improve physical fitness components such as strength, agility, endurance, flexibility, and coordination. In addition, this method also encourages students to be

more active, involved, and enjoy physical activities, because creative movement variations can increase motivation and interest. With structured and sustainable implementation, creative gymnastics has the potential to make a positive contribution to students' health and physical fitness.

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