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Comparison of Physical Fitness Levels Among Participants of Extracurricular Activities: Male Futsal and Basketball at SMA Negeri 21 Surabaya

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ABSTRACT
In a school environment, there must be a program that can increase the talents and interests of each student. This program is an extracurricular that is useful for improving students' talents in academic and non-academic activities. An example is developing talent in students who have an interest in sports activities. At SMA Negeri 21 Surabaya, the sports that students are interested in are basketball and futsal. But every extracurricular definitely has participants with different physical abilities. Students' physical abilities can be determined by carrying out a physical fitness test through one of the VO2max tests. The purpose of providing VO2max is to find out whether futsal and basketball extracurricular participants have different levels of physical fitness. Measurement of physical fitness level uses a bleep test where extracurricular participants will run according to the sound made by the instrument. Each level gets faster for the sound. After measuring the level of physical fitness for each extracurricular activity, the measuring tool used to determine differences in physical fitness levels is SPSS 26. The results of the research that has been carried out show that the results of physical fitness levels are almost the same. Because the results of the independent sample t-test do not show a result of 0.000, The results of the calculation show 0.293, which is not said to have a significant difference in the level of physical fitness of futsal and basketball extracurricular participants at SMA Negeri 21 Surabaya.

Keywords: *Extracurricular, VO2max; Basket Ball, Football*

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INTRODUCTION
In the role of education, there are aspects that can be used as a reference in life and can provide positive values for personal development in the course of life. This leads to an understanding of one's potential and the moral development necessary for self-education and the education of others. As explained by Zaidan (2013), in the modern era, education is a necessity for every individual living in their environment. All individuals, from infants to the elderly, are entitled to receive proper education. Education is a scientific method for the holistic improvement of human dignity and can help society expand and develop to its maximum potential. In the effort to enhance the quality of human resources, the educational development approach in educational institutions goes beyond intellectual aspects to include human, ethical, social, and physical dimensions of the learners. In other words, it aims to cultivate the entirety of the Indonesian people. Every process undergone during education requires an understanding of self-development

to endure and progress positively. This aligns with the educational process for the better, as emphasized by Hartanto and Slamet (2014).

Within the realm of education, there are various meanings that one must explore. It is stated that each subject in the school's curriculum is not equal to the information acquired. One of the subjects most favored and enjoyed by students is Physical Education, Sports, and Health (P.E). PE differs from other subjects in that its educational structure emphasizes sports with the goal of developing the physical and moral aspects of students. Physical education essentially involves instructional guidance that utilizes physical actions and trains psychomotor skills to bring about comprehensive changes in an individual's qualities, both physically, rationally, and clearly. Topics in this subject include various perspectives such as health, critical thinking, social skills, physical fitness, logical thinking, and moral functions. Physical education, especially sports education, is defined as education oriented towards sports to train or educate individuals to understand developments in the sports world, as mentioned by Yanto and Prihanto (J.B, 2013).

They explain that "Physical education is part of general education that prioritizes sports and active living to achieve physical, mental, social, and emotional growth that is harmonious, parallel, and proportionate." Physical fitness is the body's ability to adapt using physical activities without significant fatigue, and one noticeable aspect of a person in prime condition is their physical appearance. Therefore, mandatory training programs like physical fitness training should be systematically planned. The basis of this goal is to improve physical conditions. Physical fitness has several elements, including strength, speed, muscle strength, and agility.

In the context of physical education institutions, there is a focus on providing physical fitness elements. This can be interpreted as the fitness possessed by each individual for their physical well-being in daily life, as stated by Putera (2014). He explains that physical fitness can serve as a reference for participants in extracurricular activities, especially in extracurricular activities such as boys' futsal and boys' basketball. Participants in these activities tend to have better physical fitness compared to those not participating in these extracurriculars. This contributes to personal development, turning potential into achievements, and enhancing physical fitness.

Therefore, it is essential to incorporate these aspects into individual and institutional development within education, focusing not only on academic aspects but also on non-academic activities to support greater achievements beyond the potential in teaching and learning activities, as explained by Ega (2013). Extracurricular activities are seen as a student's learning need that should be fulfilled through both extracurricular and intracurricular activities. Enhancing talent and interest in planned curriculum-based activities is expected to fully develop students' potential. Scheduled extracurricular activities can positively benefit students in utilizing their leisure time effectively, ensuring that it is used in a disciplined, well-planned manner that promotes continuous development and physical health. In an interview at SMA Negeri 21 Surabaya, Yasser Gregorias, a teacher specializing in physical education, sports, and health, emphasizes that extracurricular basketball activities should also focus on improving basic basketball skills with specific forms provided by the coach after school.

The success of extracurricular basketball activities depends on factors such as the availability of adequate equipment and facilities, appropriate training venues, and specific skills or expertise from teachers or external individuals. School basketball and futsal teachers contribute to the success of these activities by providing equipment and enhancing students' skills through participating in basketball and futsal extracurricular activities. Therefore, SMA Negeri 21 Surabaya implements various measures, starting from providing adequate facilities to fostering the enthusiasm of students participating in every extracurricular activity, especially in futsal and

basketball. These extracurricular activities show progress and achievements far superior to other extracurricular activities. Students involved also maintain good physical health to optimize their performance during regular training and activities. It's not only basketball; other extracurricular activities like futsal also have interesting criteria that can be developed within individuals for non-academic achievements. Analyzing daily life and participation in activities allows for personal development, especially with two dominant extracurriculars, Futsal (16 male students) and Basketball (16 male students), which show significant differences in achievements.

When students participate in these extracurricular activities, they actively engage in the training process and a series of available activities. This can make a significant difference in their achievements. The quantity also influences the practice habits during pre-match activities. It can be said that in terms of achievements and the perception of the community, extracurricular futsal for boys at SMA Negeri 21 Surabaya is considered superior to boys' basketball extracurricular activities at the same school. Although various sports are taught as part of sports extracurricular activities, school extracurricular programs are often tailored to the facilities available and the specific needs of each school's students. The goal of extracurricular activities is to enhance students' skills, talents, and physical fitness. Sports extracurricular activities undoubtedly impact the physical fitness of participating students.

Through extracurricular learning activities, students can develop their skills and talents. Besides honing their skills and talents, students can take on challenges and interact with new friends. At SMAN 21 Surabaya, there are sports extracurricular activities such as futsal and basketball, where these extracurricular activities excel and are most favored by some students at SMAN 21 Surabaya. The need to implement physical fitness levels and to determine the level of physical fitness through tests, as mentioned by Kamilun (2014), plays a crucial role. One of the applicable methods for analyzing physical fitness test results is the Multistage Fitness Test (MFT). This information about physical fitness, beyond academic activities, serves as a support for students to achieve success, especially in the application of extracurricular activities.

Extracurricular activities are learning activities carried out outside school hours, either directly at school or outside school. The information above motivates researchers to explore and investigate the potential disparities in physical fitness levels between students involved in extracurricular activities and those not involved in these activities at SMAN 21 Surabaya. Researchers aim to gather information about the difference in physical fitness levels between these two groups. Therefore, this study is conducted with a focus on the topic "Comparison of the Physical Fitness Level of Male Futsal and Basketball Extracurricular Participants at SMA Negeri 21 Surabaya."

METHOD

This study applies a comparative research method with a qualitative approach aiming to formulate a comparison of physical fitness levels among male extracurricular participants in futsal and basketball at SMA Negeri 21 Surabaya. This research will be conducted whenever the extracurricular activities for male futsal and basketball are scheduled and take place at the educational institution, namely the field of SMA Negeri 21 Surabaya located at Jl. Argopuro No.11-15, Sawahan, Kec. Sawahan, Kota SBY, East Java 60251. The population for this study consists of all male participants in the futsal and basketball extracurricular activities at SMA Negeri 21 Surabaya, totaling 32 participants. Sample refers to the subjects used in the research, and for this study, the sample consists of 16 participants from the futsal extracurricular and 16

participants from the basketball extracurricular.

This research utilizes the Multistage Fitness Test (MFT) as the assessment instrument to determine the level of physical fitness. Initially, there were two audible signals with a one-minute interval used to evaluate the quality of the Multistage Fitness Test (MFT) cassette. This step involved starting the stopwatch upon hearing the first signal and stopping the stopwatch upon hearing the second signal, then comparing the recorded times. The suitability of the one-minute interval indicates the cassette's good condition and the 20-meter distance that can be used. Subsequently, a single audible signal will be heard at regular intervals. Afterward, a brief explanation is given on how to perform a countdown for five seconds before the test begins. Then, a single audible signal will be heard at regular intervals.

Participants are expected to reach one end of the track before the first signal, then turn and run in the opposite direction. Every time a signal is heard, participants are required to have reached one end of the track. After one minute, level one is announced, which includes seven shuttles. The interval between signals will progressively shorten, and to move to the next level, participants must run faster to reach the end of the track. Each time they reach the 20-meter mark, one foot must cross the 20-meter boundary, then turn around and wait for the next signal to run in the opposite direction. Participants must strive to maintain the set speed.

If a participant cannot maintain this speed, they will stop or be stopped according to the applicable rules as follows: If a participant fails to reach two or more steps beyond the 20-meter boundary after the signal, there will be a tolerance of 1 x 20 meters to give the participant a chance to adjust their speed. If the participant cannot adjust their speed during the tolerance period, they will be stopped from the test. The data analysis technique used in this study is quantitative descriptive analysis. Using descriptive test, normality test, homogeneity test, and hyphotesis test.

RESULTS AND DISCUSSION

Results

Based on the calculation results through SPSS 26, the average values for each participant in the extracurricular activities show different results. Participants in the futsal extracurricular have an average result of 38.46, while participants in the basketball extracurricular have an average result of 35.87. In the processed data, both groups from these extracurricular activities do not have significantly different mean values. The Multistage Fitness Test (MFT) results for futsal participants on average can reach level 6 and above, considered good physical fitness. Meanwhile, basketball extracurricular participants can achieve an average level of 5 and above, categorized as sufficient physical fitness.

Table 1. VO2Max Results

No.	Futsal	Basket Ball
1	41.5	23.2
2	44.5	29.5
3	45.5	40.2
4	41.8	37.1
5	35.7	41.8
6	35.7	43.3
7	34.3	47.4
8	39.9	46.5

9	42.6	43.9
10	45.8	34.7
11	45.4	32.6
12	33.6	35.4
13	30.6	24.4
14	26.8	26.0
15	31.8	35.4
16	39.9	32.6

Table 2. Mean, Standar Deviation, Min and Max

Extracurricular	***Mean***	**Standar Deviasi**	***Min***	***Max***
Futsal	38,46	5,933	26,8	45,8
Basket	35,87	7,634	23,2	47,4

The normality test results for each group show normal distribution, as indicated by results >0.05, namely 0.283 and 0.615. The homogeneity test results, which assess whether the variances are equal, indicate homogeneity, with a Levene's test result >0.05, specifically 0.417. This implies that both groups are at an equivalent level in terms of physical fitness.

Table 3. Results of The Normality Test

Extracurricular	**Results**	**Description**
Futsal	0,283	Normal
Basket	0,615	Normal

In the final independent samples t-test, the results show no significant difference or a non-significant variation. Data set is considered to have a significant difference if the value of sig (2-tailed) is <0.05. However, in this study, the calculated value for sig (2-tailed) is 0.293, which is greater than 0.05. Therefore, both the null hypothesis (Ho) and the alternative hypothesis (Ha) are accepted, indicating that there is no significant difference in the level of physical fitness between participants in futsal and basketball extracurricular activities.

Table 4. Results of the homogeneity test

Homogenieity
0,417

Among the participants in these extracurricular activities, some show relatively high results in their Vo2max. In the futsal extracurricular, the highest Vo2max results are achieved by six students with values of 41.5, 44.5, 45.5, 41.8, 45.8, and 45.4, falling into the high category. This superiority is attributed to the fact that these students also participate in futsal clubs outside of school and engage in individual physical training such as jogging to enhance their endurance. In the basketball extracurricular, five students achieve high results, namely 40.2, 41.8, 43.3, 47.4, and 46.5. One of the basketball extracurricular students is also a swimmer, contributing to their higher Vo2max compared to other students. This research is relevant to Dwi Agus Prasetya's thesis (2018), which compares the physical fitness of basketball and futsal extracurricular participants. Dwi's study found differences in physical fitness levels between basketball and futsal

extracurricular participants. In that study, futsal extracurricular participants had superior physical fitness, with a t-value of 16.159, while basketball extracurricular participants had a t-value of 13.900, indicating a difference in physical fitness levels between the two groups. In contrast, this study finds no significant difference in physical fitness levels between the two groups. The independent samples t-test result shows a sig (2-tailed) value greater than 0.05. However, the variance in both groups is considered equivalent, as the homogeneity test result is homogeneous, with a Levene's test value of 0.417. The limitation of this study is the relatively small sample size of 16 participants in each extracurricular activity. Larger sample size would enhance the validity of the data. The advantage of this study is that coaches can assess the average good physical fitness level in both groups, reaching level 5 and above. This allows coaches in each extracurricular activity to further improve the physical fitness or strength of their participants for better overall quality.

Table 5. Results of Independent Samples Test

Independent Samples Test
Sig (2-tailed)
0,293

In research using SPSS 26, the average physical fitness of futsal (42) and basketball (35.87) extracurricular participants showed a significant difference. Although there are differences in average, the Mean Fitness Test (MFT) value shows that futsal participants reach level 6 and above, categorized as good, while basketball participants reach level 5 and above, in the quite good category. Normality results showed a normal data distribution in both groups (0.283 for futsal and 0.615 for basketball). The homogeneity of variance test with Levene's test showed homogeneous results 0.417, indicating that the variance between groups was equal.

Discussion

The independent t test showed that the difference was not significant between the two groups, with a p value of 0.293. Therefore, the null hypothesis (H0) is accepted, indicating there is no significant difference in physical fitness levels between futsal and basketball participants. Several students stood out with high Vo2max results, especially futsal students, with the highest scores reaching 41.5, 44.5, 45.5, 41.8, 45.8, and 45.4. Basketball students with the highest Vo2max reached 47.4, including swimming athletes.

Although the research results are not in line with previous research by Dwi Agus Prasetya (2018), which showed differences in fitness levels, these findings provide insight for trainers with good fitness levels (level 5 and above) for both groups. The limitation of the study lies in the limited sample size (16 participants per group), but the results provide valuable information for improving the fitness of extracurricular participants.

CONCLUSION

Based on the results of the research conducted by the author, it can be concluded that the independent samples t-test yielded results indicating that there is no significant difference between the two groups. The result was >0.05, which means there is no significant difference between the two groups in terms of physical fitness. The calculated result was 0.293. Both groups do not show a significant difference in physical fitness because the calculated result for proving the difference is >0.05.

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