

IMPLEMENTATION OF TACTICAL APPROACH: ITS INFLUENCE ON STUDENTS' PHYSICAL FITNESS IN PLAYING FUTSAL

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Abstract

The use of tactical approaches in physical education focuses on understanding strategy and decision-making in the game, beyond mere technical skills. This study was conducted at SMPN 1 Darma with the aim of analyzing the effect of tactical approaches on students' physical fitness. The method used was an experiment with a pretest-posttest design, involving 20 futsal extracurricular students as a saturated sample. The results showed that students who were trained with a tactical approach experienced a significant increase in physical fitness, especially in the aspects of endurance, agility, and coordination. This increase was due to the active involvement of students in activities that required problem solving and decision making during the game. The implications of this study indicate that the tactical approach is effective as an alternative to physical education learning that can improve students' overall physical fitness and increase student motivation and involvement in training because of its active, challenging nature, and encourage teamwork and problem solving.

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INTRODUCTION

Physical education plays a crucial role in developing individuals as a whole, covering physical, motoric, and health aspects through physical activity and sports. The main goal is to improve physical fitness, motor skills, and knowledge about the importance of a healthy lifestyle, in addition to building character, discipline, cooperation, and sportsmanship (Riyanto, 2020). Physical activities such as games, sports, and gymnastics play an important role in maintaining physical fitness. Physical fitness itself is defined as the body's ability to adapt to physical work that requires brain work (Lengkana & Sofa, 2017). A person with good physical fitness will be able to carry out daily tasks and sports efficiently, have high endurance, and recover quickly after activities. The importance of physical fitness is also seen in maintaining overall health, preventing disease, and improving quality of life, which is supported by regular exercise, a healthy diet, and adequate rest. In the context of futsal extracurricular activities at the Junior High School (SMP) level, physical fitness is a crucial aspect that supports performance. Futsal, a popular sport in Indonesia, involves dynamic movements such as running, kicking, maintaining balance, and requires muscle strength, cardiovascular endurance, agility, and balance to move quickly and avoid injury.

Success in futsal does not only depend on technical ability, but also on physical and tactical aspects. Measuring physical fitness is very important to determine the level of fitness of respondents (Kuncoro et al., 2024), so that if low results are found, solutions can be sought to overcome the problem. Futsal, which is played five against five on a small field, hones the technique, ball control, and speed of the players. This game also forms a player to always be ready to receive and pass the ball quickly under pressure from opponents, as well as build high ball control, cooperation, and team cohesion (Fauzan et al., 2024). This sport has grown rapidly in Indonesia since the 2000s and has become a fun medium for students because of its flexible player substitution system (Afandi et al., 2020).

In the midst of a modern lifestyle that tends to be sedentary, participation in extracurricular activities such as futsal is a solution to encourage physical activity. Physical education needs to emphasize the development of a tactical approach in futsal so that students not only master basic techniques but are also able to read the game and make the right decisions on the field. The tactical approach involves planning, decision-making, and adaptation to game situations (Adirahma, 2020). Sandra Elsafitri et al. (2025) explain that the tactical approach is a planned process to perfect game performance that combines elements of tactical conditions and skill execution. The application of a tactical approach in sports has significant benefits, such as increasing student engagement, teamwork skills, and problem-solving and adaptation skills. Players with a good tactical understanding will be able to read the game, anticipate opponent movements, and make the right decisions in a short time, so that they can optimize energy use, increase movement efficiency, and reduce the risk of injury. A good tactical approach can be an effective tool to improve players' physical fitness.

Observation results at SMPN 1 Darma showed that students experienced fatigue when playing futsal for 2 x 10 minutes, indicating a low level of physical fitness. This rapid fatigue can be caused by a lack of routine physical exercise, so that students' cardiorespiratory endurance and muscle strength have not been optimally trained. Physical fitness is very important for students in futsal games with a tactical approach because it supports physical performance and understanding of strategy. Good fitness allows students to play with high stamina, control fast movements, and think tactically throughout the match, while reducing the risk of injury and improving teamwork. Therefore, it is important to explore how a tactical approach can be applied effectively in improving physical fitness through futsal extracurricular programs. Based on the description above and the phenomena found at SMPN 1 Darma, this study is entitled "The Effect of Tactical Approaches on Physical Fitness in Futsal Extracurricular Students at SMPN 1 Darma".

RESEARCH METHOD

This study uses a quantitative method with an experimental approach and pre-test and post-test design Sugiyono (2016) to compare the

physical fitness levels of futsal extracurricular students at SMPN 1 Darma before and after the implementation of the tactical approach. The population of this study was all 20 futsal extracurricular students at SMPN 1 Darma, which due to their limited number, were used as the entire sample using the saturated sampling method (Suriani et al., 2023). The main instrument used was the Indonesian Physical Fitness Test (TKJI) for boys aged 13-15 years (Fathiyati et al., 2022), which includes a 50-meter running test, hanging body lift, 60-second sitting position, vertical jump, and 1000-meter run, where the results will be converted into values and classified using TKJI norms. Data processing was carried out descriptively using the percentage formula $Dp = (n/N) \times 100\%$ (Sholikhah, 2016) and assisted by the SPSS application, while data analysis included normality tests Sugiyono (2016), homogeneity tests, and t-tests to test the significance of the influence of tactical approaches on physical fitness.

FINDINGS AND DISCUSSION

Findings

Descriptive Test

Descriptive Statistics

	N	Mini mum	Maxi mum	Mean	Std. Deviation
Pretest	20	7	12	8.95	1.468
Posttest	20	17	22	19.60	1.501
Valid N (listwise)	20				

The descriptive statistics reveal that the pretest scores ranged from 7 to 12 with a mean of 8.95 and standard deviation of 1.468, while the posttest results showed significantly higher scores ranging from 17 to 22, with a mean of 19.60 and standard deviation of 1.501. This substantial improvement in both the score range and average values clearly demonstrates a meaningful enhancement in performance following the intervention, with the posttest mean score being markedly higher than the pretest average and the entire score distribution shifting to a significantly higher level.

Normality Test

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.141	20	.200*	.933	20	.174
Posttest	.155	20	.200*	.934	20	.185

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The normality tests for both pretest ($p=0.174$) and posttest ($p=0.185$) showed significance values above 0.05 in both Kolmogorov-Smirnov and Shapiro-Wilk tests, indicating normal distribution of data for both groups. Descriptive statistics demonstrate a significant improvement from pretest ($M=8.95$, $SD=1.468$) to posttest ($M=19.60$, $SD=1.501$), with the score range shifting substantially higher (from 7-12 to 17-22), clearly reflecting the intervention's effectiveness in enhancing participants' performance.

Homogeneity Test

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
PRETEST DAN POSTTEST	Based on Mean	on.022	1	38	.884
	Based on Median	on.033	1	38	.857
	Based on Median and with adjusted df	on.033	1	37.994	.857
	Based on trimmed mean	on.011	1	38	.918

The Levene's test results showed significance values (p-values) above 0.05 for all testing methods (based on mean, median, adjusted df, and trimmed mean), with the highest p-value being 0.918. This indicates no significant variance differences between pretest and posttest data, confirming that the homogeneity of variance assumption has been satisfied for subsequent parametric analyses.

Hypothesis Testing

Paired Samples Test

		Paired Differences		95% Confidence Interval of the Difference		Sig. (2-tailed)
		Mean	Std. Deviation	Lower Bound	Upper Bound	
Paired Sample 1	Pretest - Posttest	-10.650	.489	-10.879	-10.421	.000

The paired samples t-test revealed a statistically significant difference between pretest (M=8.95) and posttest (M=19.60) scores, with a mean difference of -10.65 (SD=0.489). The results showed a highly significant t-value of -97.328 (df=19, $p<0.001$), with the 95% confidence interval (-10.879 to -10.421) not including zero, providing strong evidence for the remarkable improvement in scores following the intervention. These findings clearly demonstrate the substantial and statistically significant impact of the treatment on participants' performance.

Discussion

The results of this study clearly show that the tactical approach has a significant influence on improving the physical fitness of extracurricular futsal students at SMP Negeri 1 Darma. This evidence is strengthened by the comparison of pretest and posttest values which produced a significant value ($p < 0.001$) from the t-test, indicating a very significant difference after treatment. The average posttest score which increased substantially compared to the pretest is clear evidence of increased physical fitness. The tactical approach itself is a learning method that focuses on understanding the concept of playing and decision making, not just mastering basic techniques. This is in line with the views of (Adirahma, 2020) who stated that the tactical approach is more effective in increasing students' learning motivation, physical fitness, and motor skills than the traditional approach, a finding that is consistent with the results of this study. The

increase in physical fitness includes endurance, muscle strength, and agility, as measured by the Indonesian Physical Fitness Test (TKJI), vital components in futsal that require fast movement, decision making under pressure, and teamwork. Thus, the tactical approach not only sharpens students' understanding of the game situation but also indirectly increases the intensity of their physical activity, thereby improving their overall physical condition. In addition, the tactical approach also encourages students to think critically, communicate effectively, and work together in teams (Lae et al., 2024). These factors play a role in increasing student engagement, which in turn increases the volume and quality of training. Student involvement in small-sided games through a tactical approach has been shown to be effective in increasing physical capacity as well as understanding of playing tactics (Al Fian et al., 2024). Overall, the tactical approach makes futsal training more meaningful, fun, and physically and mentally challenging, making it a very effective method for improving junior high school students' physical fitness in an extracurricular context, according to the findings of this study.

CONCLUSION

Based on the results of the research that has been conducted on the Influence of Tactical Approach on Physical Fitness in Futsal Extracurricular Students of SMP Negeri 1 Darma, it can be concluded that the tactical approach has a significant influence on improving students' physical fitness. This is supported by the results of the t-test which showed a very significant difference between the pretest and posttest values ($p < 0.001$), proving the effectiveness of this approach in improving fitness components such as endurance, muscle strength, agility, and coordination. The tactical approach has been proven to be able to create an active, fun, and meaningful learning environment, encouraging students to participate more optimally in physical activities.

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