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Analysis Of Physical Condition In Futsal Extracurricular Participants Of State Junior High School 9 Banjarbaru

Ilham Fahreza*¹, Lazuardy Akbar Fauzan², Rahmadi³

^{1,2,3}Physical Education Study Program, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarbaru, South Kalimantan, Indonesia

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Abstract

This study aims to analyze the physical condition of students participating in futsal extracurricular activities at State Junior High School 9 Banjarbaru. Physical condition is an important aspect in futsal because it directly affects the performance, endurance, speed, agility, and strength of players on the field. This study uses a quantitative descriptive approach with 21 students who actively participate in futsal extracurricular activities at the school. To measure the physical condition of the players, a series of standardized test instruments are used. The tests include muscle strength tests using hand dynamometer, back dynamometer, and leg dynamometer, muscle endurance tests using sit-ups, push-ups, and squat jumps; speed tests using a 30-meter run; agility tests using a beam side step, flexibility with a flexometer, and general endurance tests using a bleep test. The results show that most players are still in the category of lacking in some aspects of physical fitness, particularly in terms of muscle strength, speed, and agility. This study comprehensively evaluates all components of the main physical condition of futsal players of State Junior High School age and observes specific physical weaknesses in the futsal extracurricular population of State Junior High School. This research is an initial reference in the preparation of physical exercise programs to be more directed, which has not been carried out systematically in the formal education environment at the State Junior High School level, especially in Banjarbaru. With the improvement of a structured training program and according to needs, it is hoped that the physical condition of students can improve so that the performance and achievements of the futsal team of the State Junior High School 9 Banjarbaru will also increase.



*Corresponding email : ilhamfahreza2003@gmail.com

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INTRODUCTION

Efforts to improve achievements in futsal sports such as physical condition play a very important role (Erlangga & Subagio, 2021). Physical condition is the main foundation for futsal players to perform optimally on the field. Good physical condition not only improves technical and tactical skills, but also reduces the risk of injury, increases endurance, and supports consistency and final results (Muhammad Imran A, Fathoni M, 2022). Physical condition serves as the initial basis in the world of sports achievement and is one of the important factors that support efforts to improve an athlete's ability (Armawijaya et al., 2021). Physical exercise has a significant link in maintaining body condition, which is an essential aspect for individuals who wish to maintain and improve their physical fitness levels (Warni et al., 2024). Therefore, physical exercises need to be arranged in a planned and systematic manner, with the aim of optimizing body function and physical fitness, so that players are able to achieve maximum results (Erlangga & Subagio, 2021).

Futsal sports demand high-intensity activities that are carried out repeatedly and interspersed with short rest periods. Therefore, a futsal player needs to have good physical abilities (Suryadi & Rubiyatno, 2022). Futsal is a sport played by two teams, each consisting of five people, on a field smaller than football and usually indoors. The futsal match took place in two

rounds, each lasting 20 minutes of effective time. This game requires quick movement, ball handling skills, and solid cooperation between players. Therefore, futsal is very related to physical condition. During play, the body is trained to move fast, strong, agile, and balanced, which directly trains fitness components such as heart-lung endurance, muscle strength, agility, speed, coordination, and reflexes (Akbar et al., 2024). Basic techniques determine the extent to which a player can improve his or her game (Arifin & Warni, 2019). Futsal has different tactics, techniques, and demands on physical conditions compared to other sports. Some of the characteristics required in futsal include movement speed, physical strength, and agility, which are essential for mastering the game for a long duration. Intense physical activity in futsal leads to increased heart rate and respiratory rate, which shows the importance of excellent physical condition in this sport (Khalissyarif & Himawan, 2021).

The problem in this study arose during the Teaching Assistance program of the Physical Education Study Program, where several futsal players of State Junior High School 9 Banjarbaru were seen to quickly feel tired while undergoing futsal extracurricular training. This raises suspicions that the level of physical condition of the players is still not optimal. Good physical condition is an important factor in supporting technical skills and game strategy (Jeki et al., 2025). The need to know the necessary physical condition and how to optimize it

through training because in addition to techniques and tactics, physical condition factors also affect the performance of futsal players in achieving achievement (Majid & Jatmiko, 2022). If the level of physical condition of the players is low, then their performance will also be less than optimal, both during training and when participating in matches, so that championship achievements also decrease due to the difficulty of winning matches (Kurniawan & Roepajadi, 2022).

State Junior High School 9 Banjarbaru is one of the state junior high schools located in Banjarbaru City, South Kalimantan Province. This school is known as an educational institution that encourages the development of students' potential, both in academic and non-academic aspects, through the systematic implementation of a curriculum and the implementation of various extracurricular activities. Supported by adequate infrastructure and competent teaching staff, State Junior High School 9 Banjarbaru is committed to producing a generation that is intelligent, characterful, and able to compete in various fields.

In the field of sports, especially futsal, State Junior High School 9 Banjarbaru has shown proud achievements, as evidenced by the achievement of various championship titles at junior high school level competitions in the Banjarbaru and Banjarmasin areas. This achievement reflects the great potential of the athletes and a directed coaching process. However, there are still several obstacles that affect the player's performance,

especially related to physical conditions that are not optimal.

Based on the description in the introductory section above, the importance of the role of optimal physical condition can support the performance of futsal games. However, until now there has still been no research study that specifically evaluates the level of physical condition of students, especially those who participate in futsal extracurricular activities at State Junior High School 9 Banjarbaru. One of the causes of the decline in achievement in sports at the school level is suspected to be closely related to the low physical condition of the participants. Therefore, the researcher focused this study on futsal extracurricular participants at State Junior High School 9 Banjarbaru, which until now has not been the object of research on the level of physical condition of futsal extracurricular participants comprehensively.

This study aims to gain an understanding of the level of physical condition of male futsal extracurricular participants at State Junior High School 9 Banjarbaru, which includes various relevant physiological aspects. The higher the level of physical condition of the player, the more important things such as futsal game techniques and tactics will be better in their application.

This research can provide benefits in the form of a clear picture of the level of physical condition of futsal players at State Junior High School 9 Banjarbaru. With the data obtained, it is hoped that the school, especially sports teachers and

coaches, can evaluate and develop a training program that is more appropriate and in accordance with the physical needs of students in order to increase achievement in the field of sports, especially futsal sports. In addition, the results of this research are also expected to be a reference for future studies that want to discuss similar topics, both at different levels of education and in other sports, so that they can make a positive contribution to the development of sports science.

METHOD

This study uses a quantitative approach with a descriptive type of research. The purpose of this descriptive approach is to provide a systematic overview of the physical condition of futsal extracurricular players at State Junior High School 9 Banjarbaru. This research will be carried out on May 3, 2025. The place to collect data on the extracurricular participants of the men's futsal of State Junior High School 9 Banjarbaru at the Sport Center of the Department of Sports and Health Education, Lambung Mangkurat University, Banjarbaru.

Participants

According to (Suriani et al., 2023) A population is a set of objects or subjects that have certain properties and characteristics as determined by the researcher, which are further used as the basis in the process of drawing research conclusions. Meanwhile, according to (Ni'mah & Melisa, 2022) Population is a

group of objects or subjects that are within a scope relevant to the topic or object of research. The population in this study is the futsal extracurricular futsal participants of State Junior High School 9 Banjarbaru which amounted to 30 people and was used as a research subject.

Sampling Procedure

According to (Nur Fadilah Amin & Sabaruddin Garancang, 2017) Samples refer to a set of elements selected from the population as the primary source of data in the study. This sample acts as a representation that reflects the characteristics of the population as a whole. The sampling technique in this study was carried out using *the purposive sampling* technique. This technique selects samples based on specific pre-set objectives, according to the needs of the researcher. The number of samples in this study amounted to 21 people who participated in futsal extracurricular activities at State Junior High School 9 Banjarbaru.

Materials and Equipment

The instruments used in this study were taken from the book (Purba, 2018) entitled Procedure for Implementing Physical Condition Tests/Athlete Physiology Tests, the predominant physical component ability category for futsal athletes consists of several aspects that are measured by certain techniques and criteria.

The strength component is measured through a hand dynamometer for arm and shoulder muscles, a back

dynamometer for the back muscles, and a leg dynamometer for leg muscles. Previous research (Wahyuningsih et al., 2024) It shows that hand dynamometers and back-leg dynamometers are effective for measuring muscle strength in various population groups.

The components of muscle endurance are measured by *sit-ups* for the abdominal muscles, *push-ups* for arm and shoulder muscles and jump squats for leg muscles. The components of *speed*, agility, flexibility, leg muscle *power*, and general endurance (cardio vascular) were measured by running 30 meters, *beam side steps*, flexometer, *vertical jumps*, and *bleep test*. The Bleep Test or Multi-Stage Fitness Test is a widely used measuring tool to assess cardiorespiratory capacity and aerobic endurance (Novriansyah, 2023). Penelitian (Husein Allsabab & Sugito, 2021) using the Bleep Test to measure $VO_2\text{max}$ in male and female futsal players, it was found that the results of the Bleep Test can classify the player's cardiorespiratory fitness level. These results assist the trainee in designing appropriate exercises, especially aerobic exercises to improve $VO_2\text{max}$. The value of strength is categorized into perfect, very good, good, fair and poor.

This test was chosen as an instrument because it has been nationally standardized and is considered appropriate to measure physical condition in that age group (Rohman et al., 2021). The data obtained from the test results were then analyzed using descriptive statistical techniques, by categorizing

them into the classification of ability levels (Mardianto et al., 2024).

Procedure

This research uses an instrument in the form of a fitness test, namely a measurement test. This test is designed to measure the level of a person's physical condition. The subjects in this study were junior high school students between the ages of 13 to 15. In its implementation, participants must have excellent physical condition because each type of test is only carried out once repeated.

Data Design or Analysis

According to (Wanda Ajeng Ayunda et al., 2022) In the data collection process, the researcher used the method of recording the results of physical condition tests with the aim of finding out the level of physical condition of students intended for the age range of 13–15 years.

RESULT

The data that will be processed in this study is data on the analysis of the physical condition of futsal extracurricular students at State Junior High School 9 Banjarbaru. For more details, you can see the description below.

1. Data on arm and shoulder muscle strength test data, back muscles, and leg muscles in Futsal Extracurricular students at State Junior High School 9 Banjarbaru

Based on the norm of the muscle strength test of futsal extracurricular students at State Junior High School 9 Banjarbaru, it was obtained that 21 people

were obtained, for more details can be seen in the table below:

Table 1. Percentage of muscle strength tests
Hand Dynamometer

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	1	4.76%
Fair	0	0.00%
Poor	20	95.20%

In table 1. It can be noted that the percentage of futsal extracurricular participants of State Junior High School 9 Banjarbaru in the hand muscle strength category using hand dynamometer is as follows:

No student (0%) has the strength of the "perfect" category.

No student (0%) has strength in the "very good" category.

There was 1 student (4.76%) who had a speed in the "good" category.

No student (0%) has strength in the "fair" category.

There were 20 students (95.20%) who had strength in the "poor" category.

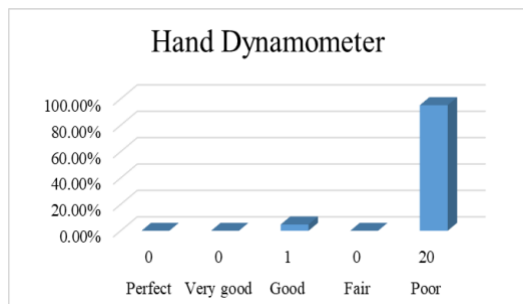


Figure 1. Graph of hand dynamometer test results of futsal extracurricular participants of State Junior High School 9 Banjarbaru

Table 2. Percentage of muscle strength tests Back
Dynamometer

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	0	0.00%
Fair	9	42.85%
Poor	12	57.14%

In table 2. It can be noted that the percentage of futsal extracurricular participants at State Junior High School 9 Banjarbaru in the hand muscle strength category using the back dynamometer is as follows:

No student (0%) has the strength of the "perfect" category.

No student (0%) has strength in the "very good" category.

No student (0%) had strength in the "good" category.

There were 9 students (42.85%) who had strength in the "fair" category.

There were 12 students (57.14%) who had strength in the "poor" category.

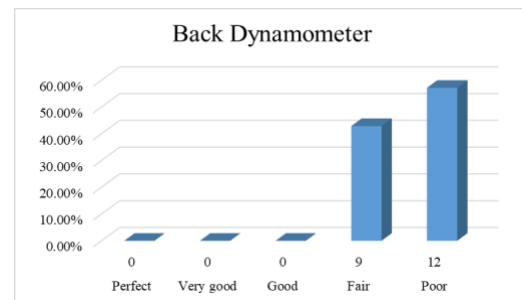


Figure 2. Graph of back dynamometer test results of futsal extracurricular participants of State Junior High School 9 Banjarbaru

Table 3. Percentage of muscle strength tests Leg
Dynamometer

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	0	0.00%
Fair	0	0.00%
Poor	21	100.00%

In table 3. It can be noted that the percentage of futsal extracurricular participants at State Junior High School 9 Banjarbaru in the hand muscle strength category using the leg dynamometer is as follows:

No student (0%) has the strength of the "perfect" category.

No student (0%) has strength in the "very good" category.

No student (0%) had strength in the "good" category.

No student (0%) has strength in the "fair" category.

There were 21 students (100%) who had strengths in the "poor" category.

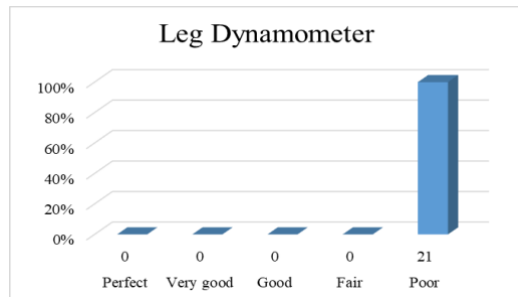


Figure 3. Graph of the results of the leg dynamometer test of futsal extracurricular participants of State Junior High School 9 Banjarbaru

2. Data on the endurance test of abdominal muscles, arm and shoulder muscles, and leg muscles in Futsal Extracurricular students in State Junior High School 9 Banjarbaru

Based on the norm of the test of muscular endurance of futsal extracurricular students at State Junior High School 9 Banjarbaru, it was obtained that 21 people were obtained, for more details can be seen in the table below:

Table 4. Percentage of abdominal muscle endurance test

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	3	14.28%
Fair	15	71.42%
Poor	3	0.00%

In table 4. It can be noted that the percentage of futsal extracurricular participants of State Junior High School 9 Banjarbaru in the hand muscle strength category uses *the sit-up* test as follows: None of the students (0%) had the endurance of the "perfect" category.

No student (0%) has endurance in the "very good" category.

There were 3 students (14.28%) who had endurance in the "good" category.

There were 15 students (71.42%) who had endurance in the "fair" category.

No students (0%) had endurance in the category of "poor".

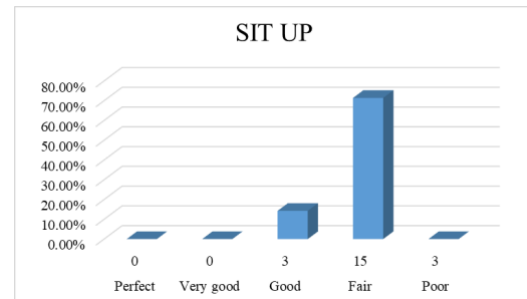


Figure 4. Graph of the results of the *sit-up* test of futsal extracurricular participants of State Junior High School 9 Banjarbaru

Table 5. Percentage of arm and shoulder muscle endurance tests

Norm	Frequency	Percentage
Perfect	2	9.52%
Very good	4	19.04%
Good	14	66.66%
Fair	1	4.76%
Poor	0	0.00%

In table 5. It can be noted that the percentage of futsal extracurricular participants at State Junior High School 9 Banjarbaru in the hand muscle strength category used *the push-up* test as follows: There were 2 students (9.52%) who had endurance in the "perfect" category. There were 4 students (19.04%) who had endurance in the category of "very good". There were 14 students (66.66%) who had endurance in the "good" category. There is 1 student (4.76%) who has endurance in the "fair" category. No student (0%) had endurance in the "poor" category.



Figure 5. Graph of *pusht-up* test results for futsal extracurricular participants of State Junior High School 9 Banjarbaru

Table 6. Percentage of leg muscle endurance test

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	8	38.09%
Good	10	47.61%
Fair	3	14.28%
Poor	0	0.00%

In table 6. It can be noted that the percentage of futsal extracurricular participants of State Junior High School 9 Banjarbaru in the hand muscle strength category using *the squat jumps* test is as follows:

None of the students (0%) had the endurance of the "perfect" category.
There were 8 students (38.09%) who had endurance in the "very good" category.
There were 10 students (47.61%) who had endurance in the "good" category.
There were 3 students (14.28%) who had endurance in the "fair" category.
No student (0%) had endurance in the "poor" category.

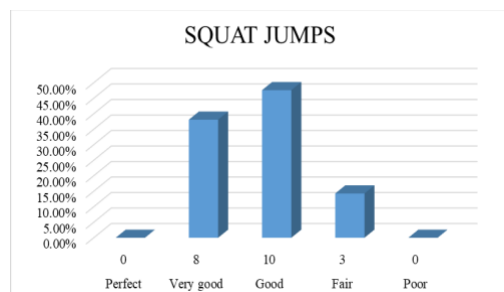


Figure 6. Graph of the results of *the squat jump* test for futsal extracurricular participants of State Junior High School 9 Banjarbaru

3. Data from *speed* tests on Futsal Extracurricular students at State Junior High School 9 Banjarbaru

Based on the speed test norms of futsal extracurricular students at State Junior High School 9 Banjarbaru, it was obtained that 21 people were obtained, for more details, you can see the table below:

Table 7. Percentage of speed tests

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	0	0.00%
Fair	2	9.52%
Poor	19	90.47%

In table 7. It can be seen that the percentage of futsal extracurricular participants of State Junior High School 9 Banjarbaru in the hand muscle strength category using the 30-meter running test is as follows:

None of the students (0%) had the endurance of the "perfect" category.
No student (0%) has endurance in the "very good" category.
No student (0%) had endurance in the "good" category.
There were 2 students (9.52%) who had endurance in the "fair" category.
There were 19 students (90.47%) who had endurance in the "poor" category.



Figure 7. Graph of the speed test results of futsal extracurricular participants of State Junior High School 9 Banjarbaru

4. Agility test data on Futsal Extracurricular students at State Junior High School 9 Banjarbaru

Based on the norms of the agility test for futsal extracurricular students at State Junior High School 9 Banjarbaru, it was obtained that 21 people were obtained, for more details can be seen in the table below:

Table 8. Percentage test *beam side step*

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	0	0.00%
Fair	1	4.76%
Poor	20	95.23%

In table 8. It can be seen that the percentage of futsal extracurricular participants at State Junior High School 9 Banjarbaru in the agility category using the *beam side step* test is as follows:
None of the students (0%) had the endurance of the "perfect" category.
No student (0%) has endurance in the "very good" category.
No student (0%) had endurance in the "good" category.
There is 1 student (4.76%) who has endurance in the "fair" category.
There were 20 students (95.23%) who had endurance in the "poor" category.

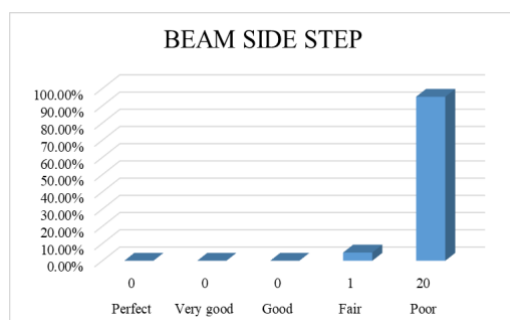


Figure 8. Graph of the results of the *beam side step* test of futsal extracurricular participants of State Junior High School 9 Banjarbaru

5. Flexibility test data on Futsal Extracurricular students at State Junior High School 9 Banjarbaru

Based on the norms of the futsal extracurricular student flexibility test at State Junior High School 9 Banjarbaru, it was obtained that 21 people were obtained, for more details can be seen in the table below:

Table 9. Percentage of the test *Flexometer*

Norm	Frequency	Percentage
Perfect	7	33.33%
Very good	9	42.85%
Good	4	19.04%
Fair	1	4.86%
Poor	0	0.00%

In table 9. It can be seen that the percentage of futsal extracurricular participants at State Junior High School 9 Banjarbaru in the flexibility category uses the *flexometer* test as follows:
There are 7 students (33.33%) who have flexibility in the "perfect" category.
There were 9 students (42.85%) who had flexibility in the "very good" category.
There are 4 students (19.04%) who have flexibility in the "good" category.
There is 1 student (4.86%) who has flexibility in the "fair" category.
No student (0%) has flexibility in the "poor" category.

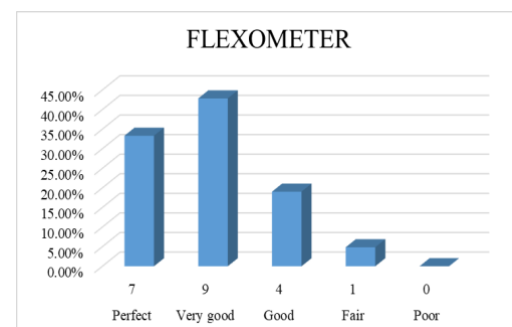


Figure 9. Graph of *flexometer* test results of futsal extracurricular participants of State Junior High School 9 Banjarbaru

6. Leg muscle power test data in Futsal Extracurricular students at State Junior High School 9 Banjarbaru

Based on the norm of the leg muscle power test of futsal extracurricular students at State Junior High School 9 Banjarbaru, it was obtained that 21 people were obtained, for more details can be seen in the table below:

Table 10. Percentage of power test (leg muscles)
Vertical Jump

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	2	9.52%
Good	4	19.04%
Fair	7	33.33%
Poor	7	33.33%

In table 10. It can be seen that the percentage of futsal extracurricular participants of State Junior High School 9 Banjarbaru in the leg muscle strength category used *the vertical jump* test as follows:

No student (0%) has the strength of the "perfect" category.

There were 2 students (9.52%) who had strength in the category of "very good".

There were 4 students (19.04%) who had strength in the "good" category.

There are 7 students (33.33%) who have strength in the "fair" category.

There were 7 students (33.33%) who had strength in the "poor" category.

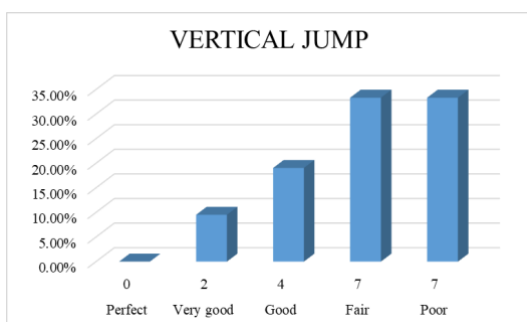


Figure 10. Graph of vertical jump test results of futsal extracurricular participants of State Junior High School 9 Banjarbaru

7. Data on general endurance test (Cardio Vascular) in Futsal Extracurricular students at State Junior High School 9 Banjarbaru

Based on the general endurance test (cardiovascular) norms of futsal extracurricular students at State Junior High School 9 Banjarbaru, it was obtained that 21 people were obtained, for more details can be seen in the table below:

Table 11. Percentage of general endurance tests
(cardio vascular) Bleep Test

Norm	Frequency	Percentage
Perfect	0	0.00%
Very good	0	0.00%
Good	2	9.52%
Fair	4	19.04%
Poor	15	71.42%

In table 11. It can be seen that the percentage of futsal extracurricular participants at State Junior High School 9 Banjarbaru *in the cardio vascular category* (general endurance) uses *the bleep test* as follows:

None of the students (0%) had a general endurance in the "perfect" category.

No student (0%) had general endurance in the "very good" category.

There were 2 students (9.52%) who had general endurance in the "good" category.

There were 4 students (19.04%) who had general endurance with the category of "fair".

There were 15 students (71.42%) who had general endurance in the "poor" category.

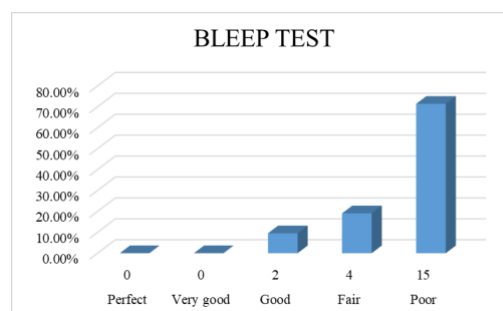


Figure 11. Graph of the results of the bleep test of futsal extracurricular participants of State Junior High School 9 Banjarbaru

DISCUSSION

In this study, a series of tests and measurements were carried out on seven components of physical condition related to futsal sports, especially in men's futsal extracurricular participants at State Junior High School 9 Banjarbaru.

Based on the data that has been displayed in table 1 related to the Handgrip Dynamometer test, as many as 95.20% of students are in the "poor" category, only 4.76% are "good", and none of them reach the category of "fair", "very good", or "perfect". These results show that the hand muscle strength of futsal players of State Junior High School 9 Banjarbaru is still very low. In fact, hand muscle strength is important for activities such as maintaining balance during physical duels on the futsal field. This condition indicates the need for muscle strength training. The function of this test in futsal is to have a physical duel, and maintain control of the ball when pressed by the opponent (Erlangga & Subagio, 2021).

Based on the data that has been displayed in table 2 related to the back dynamometer test, no students reached the "good" category or above, 42.85% "fair", and 57.14% "poor". These results show the need for back muscle strengthening exercises, for example with back extensions. This test serves to evaluate physical abilities that support posture when performing defensive activities in futsal games, help maintain body stability during physical contact with opponents, and increase endurance and muscle strength needed in sprints and when maintaining ball possession from opponents' pressure (Fatimah S et al., 2022).

Based on the data that has been shown in table 3 related to the leg dynamometer test, all students (100%) are in the "poor" category, without any of

them being "fair", "good", or more. This condition is very concerning and indicates the need to prioritize leg muscle strengthening exercises such as squats, lunges, and plyometrics. The function of this test is in futsal for hard kicks or shooting accuracy (Faozi et al., 2024). Participants' failure to meet these test standards may be due to a lack of physical preparation before the test and a lack of exercises focused on developing leg strength.

Based on the data that has been displayed in table 4 related to the endurance test of the abdominal muscles, namely the sit up test, which measures the strength of the abdominal muscles, shows more diverse results (Ramadhani & Amiq, 2024). Strong abdominal muscles support body stability, balance, and prevent injuries when moving fast (Muhammad Imran A, Fathoni M, 2022). From the data, the results of the sit up test showed that the majority of participants were in the "fair" category (71.42%), and only a few were "good" (14.28%). None of them reach the Perfect or Excellent category. This shows that the strength of the abdominal muscles in the participants is relatively lower than the strength of the upper body muscles. This is comparatively better than the strength component, but it still needs improvement to reach the "good" category evenly.

In table 5, it can be seen that the results of arm and shoulder muscle endurance are carried out by means of *push-up* tests. This test plays a role in futsal to aid in physical dueling, maintain balance during body contact, and support hand movements when falling or holding back (Khalissyarif & Himawan, 2021). The results of the push up measurement test showed that the majority of respondents had a good level of upper body muscle fitness, with 66.66% in the "good" category and 19.04% in the "very good" category. Only a few respondents

were in the perfect category, and very few were fair, and nothing was poor. This indicates that the futsal extracurricular participants State Junior High School 9 Banjarbaru has enough exercise or physical activity habits to maintain upper body muscle strength.

The other endurance test as shown in table 6 is the endurance of the leg muscles. Optimal physical condition, especially the strength and endurance of the leg muscles, is indispensable due to the high intensity and speed of the game (Nor Moh Ahyer et al., 2024). From the table, it can be seen that the good category has the highest number (10) with a proportion of 47.61%, followed by very good with a number of 8 (38.09%). The category of fair has only 3 data (14.28%), while perfect and poor have no data at all (0%). The majority of the data is concentrated in the good and very good categories, which cumulatively account for more than 85% of the total data. This indicates a relatively high level of satisfaction or quality in the context of the assessment used. Categories are fair to cover only a small part, no one judges on the perfect or lacking categories. Participants' perceptions were dominated by the categories of good and very good, indicating a high level of satisfaction. However, the absence of an assessment in the perfect category and lack is an important record that can be explored further, both in terms of data collection methodology and in terms of the quality of the objects being assessed. These findings can serve as a basis for the development of quality improvement strategies in the future.

Based on table 7 of the results of the speed test in futsal extracurricular students at State Junior High School 9 Banjarbaru, the results of the 30-meter running speed test conducted on 21 participants obtained the distribution of the following result categories: there were

no participants who were in the perfect category (0%), either very good (0%), or good (0%). A total of 2 participants (9.52%) were included in the fair category, while 19 participants (90.47%) were included in the poor category. This study shows that the majority of participants have a level of speed ability that is still below the expected standard. A high percentage in the underserved category indicates that the participants' running speed is still not optimal and requires special attention in the training process. The absence of participants who are able to achieve the good to perfect category also strengthens the indication that the speed aspect has not been the main focus in the training pattern applied. In the context of sports coaching, especially sports such as futsal that require the ability to accelerate and react quickly, these results are an important basis for coaches or coaches to evaluate the training programs that have been carried out. A more specific and structured approach to training is needed to improve speed skills, for example through short sprint exercises, rapid reaction exercises, and strengthening the leg muscles that play a role in explosive movements. According to Khilmi & Sudarmono (2023) Speed training significantly improves dribbling skills, as an important skill in futsal. In addition, this research is in line with research Putra et al (2024) most of the futsal players in the extracurricular of the State High School 7 South Bengkulu are in the "medium" category for speed, with none reaching the "very good" category, indicating the need for improvement in the speed aspect through more focused training. The test results show that speed is still a weakness that needs to be improved to improve physical performance, especially in competitive sports.

Based on table 8, the results of the beam side step agility test in futsal

extracurricular students at State Junior High School 9 Banjarbaru show a very unequal exposure to performance data. The majority of respondents, namely 20 people (95.23%) were in the "poor" category, while only 1 respondent (4.76%) was in the "fair" category. No respondents fell into the categories of "perfect", "very good", or "good". This study showed that the ability to balance and motor coordination measured through the *beam side step* test in this group was at a very low level. The dominance of the 'poor' category indicates significant weaknesses that need to be addressed through focused training or rehabilitation, given that data distribution tends to be low-performance and requires attention in advanced program planning. The reinforcement of this argument is supported by research Oliveira et al (2017) which concludes that balance training significantly improves motor coordination and reduces the risk of injury, particularly in activities that demand a rapid postural response to balance disorders.

Based on table 9 of the results of the flexibility test in futsal extracurricular students at State Junior High School 9 Banjarbaru, the performance distribution on the Flexometer test shows a much more diverse pattern and tends to be positive. The "very good" category dominated with 9 respondents (42.85%), followed by the "perfect" category with 7 respondents (33.33%). The "good" category was filled by 4 respondents (19.04%), and only 1 respondent (4.86%) was in the "fair" category. None of the respondents fell into the "poor" category. Respondents' muscle flexibility is generally good, with normal data distribution and high performance dominance, being the basis for evaluation and planning of advanced exercises. Ajcevic et al (2020) confirms that the use of IMU sensors is highly reliable for measuring joint range of motion and other

kinematic parameters in flexibility evaluation.

In the data of table 10 of the results of the leg muscle power test in futsal extracurricular students at State Junior High School 9 Banjarbaru, on the Vertical Jump measurement, none of the respondents reached the "perfect" category. The "very good" category was filled by 2 respondents (9.52%), the "good" category by 4 respondents (19.04%), and the "fair" category by 7 respondents (33.33%). Interestingly, there were also 7 respondents (33.33%) who were included in the "poor" category. The majority of respondents had moderate to low vertical jump performance, indicating the need to increase leg muscle strength. Statistically, vertical jump data shows a relatively even distribution between the "fair" and "poor" categories, indicating the need for interventions to encourage more respondents to achieve higher performance categories. (Tang & Indah, 2022) Confirms that structured muscle explosive training can significantly improve vertical jump performance in adolescent and young adult populations. The study also highlights that the use of sensor-based digital measuring tools provides reliable and valid results in the evaluation of vertical jumping ability. These findings are in line with the results of the analysis researched by (Ita & Guntoro, 2018) which showed variations in vertical jump performance among respondents, and emphasized the need for specific exercise interventions to improve performance in the middle to lower category.

Based on the data of table 11 general endurance tests in futsal extracurricular students at State Junior High School 9 Banjarbaru, the results of the bleep test showed that none of the respondents reached the "perfect" or "very good" categories. The "good" category was only filled by 2 respondents (9.52%),

the "fair" category by 4 respondents (19.04%), and the majority of respondents, namely 15 people (71.42%), were in the "poor" category. Further (Li et al., 2023) In his study, it was reported that a high-intensity interval training (HIIT) program can significantly improve Bleep Test performance and aerobic capacity in college students. These findings reinforce the argument that the majority of respondents who fall into the "poor" category in the Bleep Test need a structured and measurable aerobic exercise program to improve their heart-lung capacity. The majority of respondents had low cardiorespiratory fitness, indicating the need for an exercise program to increase aerobic capacity. Data distribution also tends to be low-performance.

This study has significant differences compared to previous studies, similar to research (Ridho Bahtra, 2019) and research (Jeki et al., 2025) especially in terms of covering the test material of the physical condition components analyzed. If previous studies generally only highlight aspects of general fitness, then in this study measurements were taken of various physical components in more detail and comprehensively. This makes this study a relatively new study, considering the lack of similar research conducted in the Banjarbaru area, especially on junior high school futsal extracurricular participants.

CONCLUSION

Based on the results of the research, it can be concluded that the physical condition of students participating in futsal extracurricular activities at State Junior High School 9 Banjarbaru is still not optimal. The majority of students are in the category of lacking in the strength components of the arms, back, and leg muscles, as well as in

the aspects of speed and agility. Meanwhile, in the muscle endurance test (sit-up, push-up, squat jump), some students showed quite good results, and in the flexibility test there were several students who were categorized as good to perfect. The results of this study show the need to improve physical exercise programs that are more focused on the aspects of strength, speed, and agility.

This study comprehensively evaluated all components of the main physical condition of junior high school-age futsal players using the national fitness test instrument, as well as observing specific physical weaknesses in the junior high school futsal extracurricular population. This research is an initial reference in the preparation of physical exercise programs to be more directed, which has not been carried out systematically in the formal education environment at the junior high school level, especially in Banjarbaru. Thus, the results of this research can be used as a basis for coaches and sports teachers to design more effective training programs, as well as as a reference for further research in the field of developing the physical condition of young athletes. With the improvement of a structured training program and according to needs, it is hoped that the physical condition of students can increase so that the performance and achievements of the futsal team of State Junior High School 9 Banjarbaru will also increase.

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